



MOTOAMERICA AMA ROAD RACING SERIES
FIM NORTH AMERICA CHAMPIONSHIP

2023 REGULATIONS

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MOTOAMERICA AMA FIM NORTH AMERICA ROAD RACING CHAMPIONSHIP REGULATIONS

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**THIS BOOK PREVAILS OVER ALL OTHER AMA AND FIM NORTH AMERICA ROAD RACE
RULE BOOKS.**

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MOTOAMERICA AMA ROAD RACING SERIES FIM NORTH AMERICA CHAMPIONSHIP 2023 Calendar

<http://www.motoamerica.com/circuit-americas>

MAR 09-11	Daytona International Speedway
APR 21-23	Michelin Raceway Road Atlanta
May 19-21	Barber Motorsports Park
JUN 02-04	Road America
JUN 23-25	The Ridge Motorsports Park
JUL 07-09	WeatherTech Raceway Laguna Seca
JUL 28-30	Brainerd International Raceway
AUG 18-20	Pittsburg International Race Complex
SEP 08-10	Circuit of the Americas
SEP 22-24	New Jersey Motorsports Park

AMENDMENTS TO THE MOTOAMERICA AMA ROAD RACING REGULATIONS

The AMA, through the MotoAmerica Rules Commission and the MotoAmerica Permanent Bureau, may at any time amend any or all provisions of the Regulations.

Any subsequent changes that take place after the printed versions are completed will be made electronically, and the on-line versions would then be the prevailing versions.

The Permanent Bureau consists of:

- a. One (1) Representative of the Krave Group LLC
- b. One (1) Representative of MotoAmerica
- c. One (1) Representative of FIM North America (FIMNA) or the American Motorcyclist Association (AMA)

The Permanent Bureau shall meet on a regular basis to discuss and decide on all issues pertinent to the respective interests of the members.

The calling of meetings of the Permanent Bureau and the format of meetings must be mutually agreed by the members. A decision of the Permanent Bureau must be unanimous.

The MotoAmerica Rules Commission is competent to study any proposal of changes to the MotoAmerica AMA Road Racing Series Championship Regulations.

The MotoAmerica Rules Commission consists at a minimum of:

- a. One (1) representative appointed by MotoAmerica as the Chairman of the MotoAmerica Rules Commission.
- b. One (1) representative appointed by FIM North America (FIMNA) or the American Motorcyclist Association (AMA)
- c. One (1) representative appointed by KRAVE Group LLC
- d. **One (1) representative from Race Direction**
- e. **One (1) representative from MotoAmerica Technical for proposals regarding the technical regulations**

Any resolution voted by the MotoAmerica Rules Commission shall require a simple majority. The chairman will have the casting vote in case of a tie. The resolutions of the MotoAmerica Rules Commission are subject to the approval of the Permanent Bureau. The meetings of the MotoAmerica Rules Commission shall take place no later than fourteen (14) days following the request of any representative. **Participants requesting a modification to the regulations should email permanentbureau@motoamerica.com.**

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A. GENERAL UNDERTAKINGS AND CONDITIONS

All riders, team personnel, officials, promoters/organizers and all the persons involved in any capacity whatsoever participating in the MotoAmerica AMA Road Racing Series, an FIM North America Championship (hereinafter collectively referred to "Championship") undertake, on behalf of themselves, their employees, and agents, to observe all the provisions of:

- 1.0 SPORTING REGULATIONS
- 2.0 TECHNICAL REGULATIONS
- 3.0 DISCIPLINARY AND ARBITRATION CODE
- 4.0 CIRCUIT STANDARDS
- 5.0 MEDICAL CODE
- 6.0 ANTIDOPING CODE
- 7.0 FIM ENVIRONMENTAL CODE

These Regulations, Codes and Standards may be supplemented and amended from time to time (hereinafter collectively referred to as the "Regulations").

All the persons mentioned above may be penalized in accordance with the provisions of the Regulations.

It is the responsibility of the team to ensure that all persons concerned with its entry observe all the requirements of the Regulations. The responsibility of the rider or any other person having charge of an entered motorcycle during any part of the event with respect to observance of the regulations is joint and several with that of the team.

All persons concerned in any way with an entered motorcycle or present in any capacity whatsoever in the paddock, pits, pit lane or track, must wear an appropriate pass at all times during the event.

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1.0 SPORTING REGULATIONS

1.1 INTRODUCTION

The MotoAmerica/AMA Road Race Series will organize a series of motorcycle races counting toward a FIM North America Championship for riders and manufacturers.

1.2 EVENTS

- a. Each event shall be deemed to commence at the scheduled time for technical and sporting checks and finish after all the races at the expiry of the deadline for the lodging of a protest and the time, at which technical or sporting verifications have been concluded, whichever is the latest.
- b. Race control must remain operative with all equipment in place until the end of the period provided for the lodging of a protest, and all officials and marshals must remain at the circuit available to the Race Direction and FIM North America Stewards during that period.
- c. Events must be staged on race circuits that have been approved by the MotoAmerica, FIM North America and the AMA.
- d. Events must not include any other races except for races approved by MotoAmerica, FIM North America and the AMA.
- e. Any activity involving four (4) wheels racing vehicular use of the track during the event, including "demonstrations", displays or other activity must receive prior approval from AMA and MotoAmerica.
- f. MotoAmerica and the AMA will nominate organizers.
- g. The Organizer is responsible for providing the facilities and personnel to ensure the smooth and efficient running of the event.
- h. MotoAmerica shall require or arrange for the provision of each organizer to provide proof of insurance for third party liability at each event. This insurance must cover the MotoAmerica liability and that of all participants, manufacturers, competitors, sponsors, teams, service companies and officials in case of damage or injury.
 1. The insurance policy shall also cover any possible liability of FIM North America, the AMA and the organizer to third parties.
 2. A copy of the policy shall be made available to the organizer, MotoAmerica and to the AMA not later than 20 days prior to the event.
 3. The coverage provided for each event shall be a minimum of \$5,000,000 USD.
 4. The validity of the insurance will come into effect three (3) days before the first race and will terminate one (1) day after the last race day.
 5. In the case that the Organizer subscribes his own Third-Party Liability Insurance in full conformity with the above specification of the present (Article 1.2/h./1.-.4). The organizer must send the certificate of insurance duly filled in, signed, and stamped by an authorized representative of the insurance company, to MotoAmerica and to the AMA.
- i. This original declaration (form to be provided by MotoAmerica) shall be sent to the AMA by mail or courier at least 20 days before the event.
- j. At least 30 days prior to the Event, the Organizers of the event must submit the following information to the AMA and MotoAmerica:
 1. The location at the circuit where the rider information center and the official notice board can be found.

2. The name and address of the company providing the third-party liability insurance coverage and the policy number.
3. The name, address, and telephone number of the circuit Medical Representative.
4. MotoAmerica must publish the above information and Supplementary Regulations. This information must be available to all teams with an entry for the event.

1.3 THE PADDOCK

- a. The Paddock, pit boxes and all other facilities should be available to teams at least on the day prior to a race. This is subject to the MotoAmerica event schedule as notified in the Team Handbook.
- b. Access should be available for teams arriving to set up between the hours of 8:00 a.m. and 8:30 p.m. This is subject to the MotoAmerica event schedule.
- c. At all times that the Paddock is occupied there must be 24-hour attendance at the gates providing vehicular access to the circuit and paddock.
- d. When the paddock is occupied, there must be an adequate medical and fire- fighting service available to all riders, teams, manufacturers, sponsors, service companies, officials, AMA, MotoAmerica, etc. At minimum medical and fire services must be available from 8:00 a.m. to 6:00 p.m. on the day prior to the “move-in” day, and from one (1) hour before on-track activity begins and two (2) hours after on-track activity ceases.
- e. Full security must be supplied to the paddock area from at least 12:00 a.m. of the day prior to the event until 11:59 p.m. of the last day of the event.

1.4 OFFICIALS

- a. All the following Officials must be present and available at the time necessary to ensure smooth and efficient running of the event.
- b. All communications between the individual event officials must be made via the relevant permanent officials.

1.4.1 Permanent Officials

All permanent officials shall be appointed for the Championship by the Permanent Bureau.

The following officials will be appointed to perform supervisory and executive roles. Except in cases of illness or force majeure, these officials are expected to be present at each event.

a. Race Director

The Race Director is responsible for:

- Ensuring proper observance of the regulations.
- Communications between the Event Management Committee and the FIM North America Stewards.
- The control of practices, qualifying and races.
- The stopping of practice or the race in accordance with the Sporting Regulations if he deems it unsafe to continue and ensuring that the correct restart procedure is carried out.
- All versions of the starting procedures.
- Directing the use of medical cars/fast intervention vehicles.

- Immediate approval and signature with time of provisional results (practices, qualifying, warm-ups, starting grids and races) and presentation of reports to the Event Management Committee.
- b. MotoAmerica Representative
- The MotoAmerica representative is a member of Race Direction and is responsible for the timetable and, if deemed necessary, the making of any proposal to the Race Direction to modify the timetable in accordance with the Sporting Regulations.**
- c. Rider Representative
- The Rider representative is a member of the FIMNA Stewards Panel and is responsible for:
- Assisting riders with interpreting and clarifying sporting and technical regulations
 - Accepting rider input regarding safety issues
 - Accepting, evaluating, and making recommendations regarding rider concerns and requested exceptions.
 - Coordinating with the MotoAmerica CMO regarding rider fit/unfit status
 - Issuing penalties and adjudicating protests with the FIMNA Chief Steward
- d. FIM North America Safety Officer
- The FIM North America Safety Officer is a member of Race Direction and is responsible for the supervision of all aspects of safety.
- e. Technical Director
- The Technical Director is responsible for:
- Ensuring that technical regulations are correctly enforced
 - Supervising/scrutineering protests of a technical nature

1.4.2 Individual event officials appointed by FIM North America

All individual event officials shall be appointed for each event.

- a. FIM North America Chief Steward
- b. The FIM North America Chief Steward (with FIM Sporting Steward licenses) is responsible for ensuring that the event is conducted according to the regulations. The FIMNA Chief Steward and MotoAmerica Rider Representative are responsible for issuing penalties and adjudicating protests.**
- c. FIM North America Appeal Steward and FMNR Appeal Steward**
- The FIM North America Appeal Steward and FMNR Appeal Steward (with FIM Sporting Steward license) are responsible for adjudicating appeals.**
- d. FIM North America Safety Officer
1. The FIM North America Safety Officer is appointed in coordination with MotoAmerica and serves as a permanent official. The FIM North America Safety Officer is responsible for:
- Ensuring that the circuit is suitably prepared for and maintained during the event.
 - Ensure that all legal requirements applicable for the running of the event have been successfully completed.

- Ensuring that all officials and services are in place. The stationing of all track personnel and equipment (i.e. marshals, fire-fighting services, medical services, moto-taxi, recovery and intervention vehicles, flags, etc.) alongside the circuit no later than 30 minutes prior to all on track activity.
2. The Race director, the FIM North America Safety Officer, and the Medical Officer will make the final inspection of the circuit to ensure that regulations are being followed 30 minutes prior to the beginning of the day's first practice sessions and/or warm-up.
- During the final inspection lap, the yellow flag must be waved at each flag marshal post together with the display of other flags and equipment requested by the FIM North America Safety Officer.

1.4.3 Individual event officials appointed by the series or organizer

a. Secretaries

Secretaries are responsible for providing secretarial support for the Race Direction and the FIM North America Stewards. They are also responsible for effecting communications between various officials.

b. Other officials

Marshals, technical scrutineers, security personnel, medical staff, etc. required for the efficient running of the event.

1.4.4 The Race Direction

The Race Direction shall be appointed for the Championship by the Permanent Bureau.

1.4.5 The FIM North America Stewards

The FIM North America Stewards shall be appointed for each event by FIM North America.

1.5 MOTOAMERICA EVENT MANAGEMENT

- a. The management of the event will be carried out by the MotoAmerica Event Management Committee (EMC) which will be comprised of the following delegates:
- The MotoAmerica Race Director (who will chair the meetings)
 - Circuit representative
 - The delegate(s) appointed by MotoAmerica
 - The MotoAmerica Technical Director
 - The FIM North America Safety Officer
 - The FIM North America Chief Steward
- b. The duties of the members of the Event Management Committee are:
- To ensure the smooth and efficient running of the event.
 - To make recommendations to the Race Direction concerning any matter that is in contradiction to the regulations.
 - To report to the Race Direction any infringements of the regulations.
 - To receive reports from the various Officials concerning scrutineering, practice and races.
 - To make recommendations to the organizer to improve the smooth and efficient running of the event.

- c. The Event Management Committee will meet at any time required during the event, but at least:
 - Prior to the first practice session
 - At the end of each day during an event
 - At the end of the event
- d. The quorum for a meeting of the Event Management Committee is three (3) persons.
- e. All the Members have one vote. Decisions are based on a simple majority. In the case of a tie, then the MotoAmerica Race Director will exercise a casting vote.
- f. The Race Director may invite the participation of officials or other persons to assist in the meetings. However, these invited persons will have no right of vote.
- g. The duties of the Event Management Committee are:
 - To receive reports from the various Officials concerning scrutineering, practice, and races.
 - To make recommendations to the Organizer to improve the smooth and efficient running of the event.

1.6 MOTOAMERICA RACE DIRECTION

- a. The Race Direction will comprise the following persons:
 - The Race Director (who will chair the meetings)
 - The FIM North America Safety Officer
 - **The MotoAmerica Representative**
- b. The quorum for a meeting of the Race Direction is two (2) persons.
- c. Each member has one vote and decisions are based on a simple majority.
- d. The Race Direction will meet at any time required during the event.
- e. The duties of the Race Direction are:
 - To make decisions as provided in the regulations.
 - Race Direction may make change in the conduct and/or format of a race and/or a practice session based on safety considerations and provided that such a decision is necessary to resolve a situation not foreseen in the regulations. In such exceptional cases, such decision may prevail over specific provisions of the regulations.
 - Provided that it is absolutely necessary to resolve a situation not foreseen in the regulations, the Race Direction may issue pre-race instructions or clarifications and in specific cases even create pre-race regulations (e.g. to take into account the local conditions at a particular circuit). However, such actions may only be taken within the limits set out by the regulations.

1.7 FIM NORTH AMERICA STEWARDS

- a. **There will be a panel of an FIM North America Steward (with FIM Sporting Stewards license) and the MotoAmerica Rider Representative. The FIMNA Chief Steward will chair the meetings.**
- b. **The FIM North America Steward Panel is responsible for enforcing the regulations. All Stewards officiating at more than four events in any year shall be approved by the Permanent Bureau.**

- c. The quorum for a meeting of the FIM North America Stewards Panel is two (2) persons.
- d. Each member has one (1) vote. Decisions are based on a simple majority. In the case of a tie, the Chairman will exercise a casting vote.
- e. The FIM North America Stewards have no executive role in the running of the events.
- f. The FIM North America Stewards will meet at any time required during the event.
- g. The FIM North America Stewards are responsible for:
 - To impose penalties for any infringements of the regulations.
 - To adjudicate on any protest relating to infringements of the regulations.
 - All decisions of the FIM North America Stewards must be communicated in writing to all affected parties.

1.7.1 FIM NORTH AMERICA APPEAL STEWARDS

- a. There will be a panel of two (2) FIM North America Stewards (with FIM Sporting Stewards license).
- b. The second FIM North America Steward may be replaced by the FMNR steward or a selected FIM steward at events conducted in conjunction with World Championship events.
- c. The FIM North America Appeal Stewards have no executive role in the running of the events.
- d. The FIM North America Appeal Stewards are responsible for:
 - Adjudicating on any appeal against the decisions of the FIMNA Stewards Panel.
 - All decisions of the FIM North America Appeal Stewards must be communicated in writing to the Race Direction and all affected parties.

1.8 THE CALENDAR

- a. The calendar of races counting for the Championships will be, in principle, published by no later than 31st October of the preceding year.
- b. The MotoAmerica Rules Commission reserve the right to amend the calendar or change the number of races per event due to force majeure.

1.9 CLASSES

Class	License required	Cylinders
Superbike	Superbike	2, 3 or 4 cylinders
Superbike Cup	Superbike Cup	2, 3 or 4 cylinders
STK 1000	Stock 1000	2, 3 or 4 cylinders
Supersport	Supersport	2, 3 or 4 cylinders
Twins	Twins	2 cylinders
Junior Cup	Junior Cup	1 or 2 cylinders
King of the Baggers	Baggers	1 or 2 cylinders

Technical Regulations governing the six classes are provided under Chapter 2.0 of the regulations.

1.10 LICENSE REQUIREMENT AND ELIGIBLE COMPETITORS

- a. United States riders must be in possession of a license issued by the AMA, as defined in Article 1.9.
- b. Non-United States riders must be in possession of an FIM International or FIM Continental Union license and the appropriate start permission from their own federation to include personal accident insurance and repatriation. The AMA, MotoAmerica or the organizer will not be held responsible for repatriation.
- c. Non-United States riders may be issued an AMA license if they provide a release from their own federation, and they meet the minimum requirements.

License Type	Minimum Age	Maximum Age
Superbike	18 years	55 years
Superbike Cup	18 years	55 years
Supersport	16 years	55 years
Stock 1000	17 years	55 years
Twins Cup	15 years	55 years
Junior Cup	14 years	28 years
King of the Baggers	18 years	55 years

- d. The limit for the minimum age starts on the date of the rider's birthday.
- e. The limit for maximum age is the date of license issued.
- f. Each license will be valid until the end of the calendar year.
- g. An exception may be requested on an annual basis for riders (except the Superbike License) above 55 years of age who will be required to provide evidence of medical fitness.

1.11 ENTRIES

- a. The registration form and the entry fees are posted on the website:
 1. www.motoamericaregistration.com
 2. Riders shall not take part in more than three (3) classes on the same day.
 3. The withdrawal of entry from an event must be communicated to MotoAmerica no later than seven (7) days before the event takes place. The communication must be written and sent through e-mail to registration@motoamerica.com. Riders failing to communicate this circumstance may be penalized.
 4. AMA and MotoAmerica have the right not to accept or to reject an entry.
- b. A compulsory rider/entrant briefing will be held for all riders participating in the MotoAmerica AMA Championship prior to the first official practice session each event. An entrant or representative may represent more than one (1) rider.
 1. An additional compulsory riders briefing may be held for all new riders who will be participating in the event.
 2. Failure to attend the briefings in full may result in disqualification from the event or penalty.
 3. A waiver can be granted to a rider by Race Direction.
- c. A rider shall be deemed to have taken part in the event when the rider participates in, at least, one practice session.

- d. A rider shall be deemed to have started a race when the rider participates in, at least, the first lap of the race.

1.12 STARTING NUMBERS

- a. Each rider accepted for any class in the MotoAmerica Series will be allocated a specific starting number that will be valid for the entire Championship. AMA and MotoAmerica reserve the right to assign the number to a rider or team. In general, the starting number will be based on the results of the rider in the previous year's Championship. Requests will be taken into consideration.
- b. The number one (1) is reserved for the rider that finished in the first position in the previous year championship.

1.13 SCHEDULE

The schedule for the event should be posted no later than 30 days prior to the event at www.motoamericaregistration.com.

1.14 TECHNICAL CONTROL AND MEDICAL CONTROL

- a. All motorcycles should be checked by the technical stewards on the day preceding the event up to one (1) hour before the first practice session of the event according to the published schedule. At the discretion of the Technical Director, machines and protective clothing may be checked earlier than the schedule if the machines are ready.
- b. Teams may present for technical control one (1) motorcycle per rider for all classes, which will be specially identified by the technical controllers.
- c. Unless a waiver is granted by the Race Direction, teams who do not comply with the schedule for technical or any medical controls will not be allowed to take part in the event.
- d. The procedure for technical control is described in the Technical Regulations, articles 2.0 thru 2.13. The procedure for medical control and doping control is described in articles 5.0 and 6.0.

1.15 INSTRUCTIONS AND COMMUNICATIONS TO COMPETITORS

- a. Instructions may be given by the Race Director to teams and/or riders by means of special circulars in accordance with the regulations. Circulars must be posted on the official notice board and available to each team representative. Circulars that are posted on the official notice board and/or delivered to the team representative will be deemed as proof of delivery.
- b. All classifications and results of practice and the race, as well as all decisions issued by the officials, must be posted on the official notice board. Posting on the official notice board will be deemed as proof of delivery and official publication.
- c. Any official communication from the Race Direction or the Permanent Officials to a team or rider must be communicated in writing, by time keeping displays or radio. Similarly, any communication from a team or rider to the Race Direction or the Permanent Officials must also be made in writing.
- d. MotoAmerica Race Control communicates schedule, track, rider and motorcycle status information on the frequency published in the supplementary regulations and/or timing screens throughout each race event. It is mandatory that each team possess either a radio or scanner to monitor MotoAmerica Race Control. Radios must not be capable of broadcasting on the control frequency. Every team is required to bring an example of their equipment to tech inspection prior to the first on track activity, once a year, a log will be maintained to monitor rule compliance. All teams must have at least one crewmember monitor this "listen only" communications channel during all practice, qualifying, and race sessions. Teams

must also monitor timing screens similarly. Failure to comply may result in a penalty or fine by the FIMNA Stewards.

1.16 FLAGS AND LIGHTS

Marshals and other officials display flags or lights to provide information and/or convey instructions to the riders.

1.16.1 Flags and lights used to provide information:

a. Green Flag

The track is clear. This flag must be waved at each flag marshal post for the first lap of each practice and warm-up session also during the sighting lap and warm-up lap of a race. The green flag must be shown waved at the flag marshal post immediately after an incident that necessitated the use of one or more yellow flags. When the pit-lane exit is open, the green flag must be waved at the pit-lane exit.

b. Yellow and Red Striped Flag

The adhesion on this section of the track could be affected by any reason other than rain. This flag must be shown waved at the flag marshal post.

c. White Flag with diagonal red cross (stroke width of the cross between 10 and 13 cm)

Indicates drops of rain on this section of the track including rain affecting the track surface. This flag must be waved at the flag marshal post.

d. White Flag

Indicates the final lap of a race, waved at the finish line.

e. Checkered Black / White Flag

This flag will be waved at the finish line to indicate the finish of the race or practice session.

f. Checkered Black / White Flag and Blue Flag

The checkered black/white flag(s) will be waved together with the blue flag at the finish line when a rider(s) closely precedes the leader during the final lap before the finish line. **These riders must complete their final lap and take the checkered flag to be considered a race finisher. (See Article 1.29.a.3)**

g. Green Flag

If used this light must be switched on at the pit lane exit to signal the start of each practice and warm-up sessions, the start of the sighting lap(s) and the start of the warm-up lap.

1.16.2 Flags which convey information and instructions:

a. Yellow Flag

1. Waved at designated rows of the starting grid, this flag indicates that the start of the race is delayed.
2. A standing yellow flag at the flag marshal post indicates that there is a danger ahead beside the track.
3. A waving yellow flag at the flag marshal post indicates that there is a hazard wholly or partly blocking the track, or other high-risk situation.
4. For any yellow flag, riders must slow and proceed with caution during any session other than a race. Any Infringement of this rule will result in the cancellation of the lap time during which the infraction occurred.

5. For any yellow flag, during a race, overtaking is forbidden from the first yellow flag up until the point where the green flag is waved. In the case of any infringement of this rule the following will apply:
 - If immediately after having overtaken, the rider realizes that he made an infraction, he must raise his hand and let past the rider(s) that he has overtaken. In this case, there will be no action taken by the FIMNA Stewards, no penalty will be imposed.
 - The rider must go back the number of positions decided by the FIMNA Stewards. **The rider must indicate that he is voluntarily giving up the position(s) as opposed to being passed and the indication must be clear to the FIMNA Stewards. The FIMNA Stewards decision will be final.**
 - A board will be displayed for the rider on the finish line during **a maximum of three (3) laps**. If the rider does not go back after the board has been **presented three (3) times, he may be further penalized by FIMNA Stewards (such as penalty points, fine or suspension)**.
 - If the position change is not possible during the race, the number of positions re will be a position change applied to the results as decided by the FIMNA Stewards.
 6. During the final inspection lap, this flag must be waved at the exact place where the flag marshal will be positioned during the practices, qualifying, warm-ups and races.
- b. Red Flag and Red Lights
1. When the practice or race is being interrupted, the red flag will be waved at each flag marshal post and the red lights around the track will be switched on. Riders must return slowly to the pits.
 2. When the pit-lane exit is closed, this flag will be waved at the pit lane exit and the light will be switched on. Riders are not allowed to exit the pit lane. Any infringement of this rule may be penalized by FIMNA Stewards.
 3. The red flag will be shown motionless on the starting grid at the end of the warm-up lap. This will indicate that you must stop in your grid position and cannot pass the official holding the red flag.
 4. The red flag may also be used to indicate the track is closed.
 5. The red lights will be switched on at the start line for between two (2) and five (5) seconds to start each race. When the red light has extinguished, the race has begun.
- c. Blue Flag
1. This flag indicates to a rider that he is about to be overtaken and will be waved at the flag marshal post. During the qualifying sessions, the rider concerned must keep his line and slow down gradually to allow the faster rider to pass him. During the race, the rider concerned is about to be lapped and must allow the following rider(s) to pass at the earliest opportunity. Overtaking within a group of lapped riders is forbidden under the blue flag.
 2. Any Infringement of this rule may be penalized by the FIMNA Stewards.
- d. Black Flag
1. This flag is used to convey instructions to one (1) rider only and is waved at selected flag marshal post together with the rider's number. The rider must stop at the pits at the end of the current lap and cannot restart when this flag results from a penalty.

2. This flag can also be presented to a rider for a reason other than a penalty (e.g. to rectify a non-dangerous technical problem such as a transponder issue).
 3. Any infringement of this rule may be penalized by the FIMNA Stewards.
- e. Black Flag with orange disk (40 cm)
1. This flag is used to convey instructions to one (1) rider only and is waved at selected flag marshal posts together with the rider's number. This flag informs the rider that his motorcycle has mechanical problems likely to endanger himself or others, and that he must immediately leave the track.
 2. Any infringement of this rule may be penalized by the FIMNA Stewards.

1.16.3 Flag dimension

The flag dimension should be 80 cm vertically and 100 cm horizontally. The flag dimension will be checked the day before the first practice session.

1.16.4 Flag Marshals posts

The location will be assigned during the circuit homologation.

1.16.5 Marshal's uniforms

It is strongly recommended the marshals' uniforms to be in white or orange and raincoats be transparent.

1.17 SAFETY CARS

The safety cars should be equipped with flashing lights.

1.18 PRACTICE AND QUALIFYING

1.18.1 Practice and testing restrictions

- a. **No practice or testing activity may take place at a circuit hosting a championship event in the thirty (30) days preceding the first official practice day at that venue for riders participating in Superbike (excluding Superbike Cup) or Supersport.**
- b. **For the King of the Baggers class, riders may nominate one MotoAmerica circuit that they wish to test but may not test within thirty (30) days of a MotoAmerica event. Except for the nominated circuit, no practice or testing activity may take place at ANY circuit found on the MotoAmerica calendar from thirty (30) days before the first race until the end of the season.**
- c. Riders participating in Superbike Cup, Stock 1000, Junior Cup and Twins may participate in any publicly listed practice until four (4) days prior to the first official practice day at the venue. (Example: Practice or test may take place on Monday if the first official practice day is Friday.)
- d. Practice Restriction Exceptions:
 1. Official practice sessions organized by MotoAmerica.
 2. Any activity allowed by Race Direction.
 3. Non-permanent riders are not subject to the practice and testing restrictions noted above.
 - A non-permanent rider is defined as: A rider that is not a MotoAmerica season entrant. In addition, the rider has not participated in more than three (3) events (maximum of six (6) races) at any time during the season. Should a rider participate in additional events after taking advantage of the non-permanent rider status as it pertains to Section 1.18.1/a, the rider shall be subject to penalties for each non-compliant occasion at the discretion of Race Direction.

4. Riders acting as coaches for an approved school on a motorcycle of different displacement from their competition motorcycle and deemed to not be a competitive advantage. Requests must be submitted in writing prior to on track activity and approved by the MotoAmerica Permanent Bureau.
 5. Teams may apply for testing exemptions in writing to MotoAmerica for consideration. The test must be open to all licensed riders and be publicly listed as a MotoAmerica Approved Test. Requests should be made 90 days prior to the planned test.
 6. Exceptions to this rule may be granted, with the approval of the MotoAmerica Permanent Bureau, due to reasons of force majeure. For example, where a team recruits a qualified rider to replace an injured rider, the qualified rider could possibly have practiced unwittingly at a circuit included in the Championships.
- e. Riders found to be in violation may be fined, subject to grid penalties and/or subject to suspension from participation in part or whole of a MotoAmerica Championship event. Riders who are found to be in violation of this policy a second time may be subject to a penalty as decided by the FIMNA Stewards or the MotoAmerica Permanent Bureau, including but not limited to suspension for the remainder of the season.

1.18.2 Race restrictions

- a. **Excepting the top ten (10) Superbike, Supersport or any King of the Baggers riders, participation in AMA-sanctioned race events may take place at a circuit hosting a championship event up to seven (7) days preceding the first official practice day at that venue. (Example: A MotoAmerica event is scheduled to take place April 3/4/5, 2020. The first day of the event is Friday April 3, accordingly no AMA-sanctioned race activity would be permitted after 23:59 on Thursday March 26.)**
- b. **Riders participating in Superbike Cup, Stock 1000, Junior Cup and Twins may participate in an AMA-sanctioned race until four (4) days prior to the first official practice day at the venue. (Example: Practice or test may take place on Monday if the first official practice day is Friday.)**
- c. **Participation in non-AMA-sanctioned race events may only take place up to thirty (30) days preceding the first official practice day at that venue. King of the Baggers participation in non-AMA-sanctioned race events is further restricted to only the venue nominated as a test track by the rider per Article 1.18.1b. (Example: A MotoAmerica event is scheduled to take place April 3/4/5, 2020. The first day of the event is Friday April 3, accordingly no non-AMA-sanctioned activity would be permitted after 23:59 on Wednesday March 3.)**
- d. **Endurance race participation is not restricted excepting the top ten (10) Superbike, Supersport or King of the Baggers riders. Endurance races are defined as races scheduled to be four (4) hours or more. The top ten (10) Superbike, Supersport or King of the Baggers riders may ONLY participate in races outside of thirty (30) days preceding the first official practice day at the venue. Participants can petition the permanent bureau and exceptions could be made for participants competing in an Endurance championship full-time. The rider (s) must have demonstrated participation in all previous endurance races within that series schedule.**
- e. **In all cases, the championship points position for the first race of the season refers to the previous year championship points standings and all subsequent race eligibility will be determined by current year point standings. Being listed in the championship points standing as a top 10 rider in any of the categories listed above applies to all categories listed above. Riders returning from an FIM, or other international series may be deemed ineligible in addition to the top ten (10) in championship points standing based on previous performance at the discretion of the Permanent Bureau.**

- f. Riders found to be in violation may be fined, subject to grid penalties and/or subject to suspension from participation in part or whole of a MotoAmerica Championship event. Riders who are found to be in violation of this policy a second time may be subject to a penalty as decided by the FIMNA Stewards or the MotoAmerica Permanent Bureau, including but not limited to suspension for the remainder of the season.

1.18.3 Practice sessions (warm-up inclusive)

- a. Practice sessions may be conducted as practice or qualifying practice and in all cases, are timed.
- b. Except for Superbike, competitors must participate in a minimum of one (1) practice session prior to the qualifying session. Exceptions may be approved by Race Direction due to extenuating circumstances.
- c. Riders will commence practice from the pit lane when the green light and/or the green flag is displayed at the exit of the pit lane.
- d. A visible board or count-down will be shown in the pit lane to indicate the minutes of practice remaining.
- e. The end of practice will be indicated by the waving of a checkered flag, at which time the pit exit will be closed. A rider's time will continue to be recorded until he passes the official checkered flag at the finish line after the allotted time has elapsed. After the checkered flag riders may complete the lap to the pit entry.
- f. If practice is interrupted due to an incident or any other reason, then a red flag will be displayed at the start line and at all flag marshal's posts. All riders must return at a safe and controlled pace to the pit lane. If practice is restarted, the time remaining will be shown on the count-down device.
- g. After practice has started, the condition of the racing surface of the circuit should not be altered except on instruction from the Race Director or the FIM North America Safety Officer in response to a localized change in conditions.
- h. Refueling is allowed in the pit lane.
 - 1. Riders must be off the bike during refueling.
 - 2. The ignition must be off, and the motorcycle must be on a rear stand before refueling is permitted to start.
 - 3. A crew member must be standing by with a fire extinguisher with the pin pulled and the nozzle aimed at the motorcycle.
 - 4. No electrical devices such as battery chargers, fans, or tire warmers may be plugged in during any refueling operations.
- i. Warm-up sessions are only available to riders that have qualified for the race and will not be used to qualify a rider for a race.

1.18.4 Motorcycle use

- a. During the event, a rider may only use a motorcycle that has been presented for technical control, according to the procedures described in articles 2.4.10, 2.5.10, 2.6.10, 2.8.10 and 2.9.10 of the Technical Regulations.
- b. **Riders may use the primary motorcycle presented for technical control at any time during the event. Riders are allowed one (1) complete spare motorcycle. Only one (1) motorcycle may be presented for preliminary technical checks, and it will be the only motorcycle allowed on the track and in the pit box during the practices, qualifying, and races. If the Technical Director declares the primary motorcycle unrepairable, the spare motorcycle may then be presented for scrutineering before the next session.**

1.18.5 Lap Times

All laps for all sessions will be timed. A new lap record for a circuit can only be established by a rider during a race. Both for practice and for races, the lap time is the subtraction of the time between two consecutive crossings of the plane of the finish line indicated by the line painted on the track.

1.18.6 Qualifying Results

The results will be based on the fastest time recorded by the riders in qualifying practice and qualifying sessions. In the case where all qualifying sessions have been cancelled, the results will be based on the fastest time recorded by the riders in all practices. In the event of a tie, riders' second and subsequent best times will be considered.

1.18.7 Qualification for the Race

a. Junior Cup, Twins, and Stock 1000

To qualify for the race, a rider must achieve a time at least equal to 110% of the time recorded by the fastest rider of any qualifying session. Any rider who fails to achieve a qualifying time may be permitted to take part in the race provided that in any of the free practice sessions he has achieved a time at least equal to 110% of the fastest rider in the same session. Any decision made to permit a rider to take place in a race is dependent on the space available as determined by Race Direction. Provisional starts may be applied for and approved by Race Direction. **Provisional start applications should be made as soon as possible after the posting of the Qualifying Results but no later than one (1) hour after the posting of the Qualifying Results.**

b. King of the Baggers

To qualify for the race, a rider must achieve a time at least equal to 115% of the time recorded by the fifth-place rider of any qualifying session. Any rider who fails to achieve a qualifying time may be permitted to take part in the race provided that in any of the free practice sessions he has achieved a time at least equal to 115% of the fifth-place rider in the same session. Any decision made to permit a rider to take place in a race is dependent on the space available as determined by Race Direction. Provisional starts may be applied for and approved by Race Direction. **Provisional start applications should be made as soon as possible after the posting of the Qualifying Results but no later than one (1) hour after the posting of the Qualifying Results.**

c. Superbike Cup

Superbike Cup riders are required to participate in the Stock 1000 practice sessions and the Stock 1000 race. To qualify for the Superbike Cup race, a rider must follow the process described in MotoAmerica Competitor Bulletin 05-2022.

d. Superbike and Supersport

To qualify for the Superbike and Supersport races a rider must achieve a time at least equal to 108% of the time recorded by the fastest rider of any qualifying session. Any rider who fails to achieve a qualifying time may take part in the race if he has achieved a time at least equal to 108% of the fastest rider in any of the practice sessions, dependent on space available as determined by Race Direction. Provisional starts may be applied for and must be approved by Race Direction. **Provisional start applications should be made as soon as possible after the posting of the Qualifying Results but no later than one (1) hour after the posting of the Qualifying Results.**

1.19 GRID POSITIONS

- a. The pole position, allocated to the fastest rider, will be determined during the homologation of the circuit.

- b. For all classes, the grid will be arranged in the "in echelon" 3-3-3 configuration. Each line will be offset. There will be approximately nine (9) meters between each row.
- c. In the event of a tie, riders' second and subsequent best times will be considered.
- d. The final grid will be published after the warm-up session for that class has been completed.

1.19.1 Grid positions (Except Superbike Cup and King of the Baggers)

- a. Grid positions will be based on the fastest time recorded by the riders in the combined qualifying practices. In the case where all qualifying practices have been cancelled, the grid position will be based on the fastest time recorded by the riders in all free practices.
- b. Riders that have been given a provisional start by Race Direction will go to the back of the grid regardless of lap times. In the case that multiple riders are given a provisional start their position will be determined by lap time at the back of the grid.

1.19.2 Grid positions for Superbike Cup

- a. **Grid position process for Superbike Cup is described in MotoAmerica Bulletin 05-2022.**

1.19.3 Grid positions for King of the Baggers

- a. **Grid position process for King of the Baggers is described in MotoAmerica Bulletin 08-2022.**

1.20 RACES

- a. Race Classes

Class	Min Distance	Max Distance
Superbike	40 miles	60 miles
Supersport	35 miles	55 miles
Supersport Extended	70 Miles	110 miles
Twins/Stock 1000	25 miles	40 miles
Junior Cup	20 miles	40 miles
King of the Baggers	15 miles	30 miles

- b. Race distance will be determined by the AMA and MotoAmerica after publication of the calendar. Races declared wet may be reduced by a certain number of laps (at the discretion of Race Direction).
- c. The length of a race may only be varied by Race Direction.
- d. A visible countdown board will be shown at the finish line to indicate the number of remaining laps in the race.

1.21 BEHAVIOR DURING PRACTICE AND RACE

- a. Riders must obey the flag signals, the light signals, and the boards which convey instructions. Any infringement to this rule may be penalized according to the provisions of article 1.21/b.
- b. Riders must ride in a responsible manner which does not cause danger to other competitors or participants, **or gain an unfair advantage**, either on the track or in the pit lane. Any infringement of this rule may be penalized.

- c. Riders must not tour the track. Touring is defined as riding in a manner not compatible with general safety. This includes being on the racing line and not attempting to produce a fast lap time. A penalty may be imposed on any rider found to be touring. If marshals report that a rider is touring and this is corroborated by video or comparing consecutive sector times, then automatic penalties will apply as follows:
1. During practice or qualifying:
 - First offence: official warning
 - Second offence: fastest qualifying session time disallowed
 - Third offence and subsequent offenses: next fastest qualifying session times disallowed in sequence.
 2. During a race:
 - exclusion
 - ride through
 - time penalty and/or fine, depending on the circumstances.
 3. Persistent acts of touring will be deemed more serious and will be penalized accordingly.
- d. Riders should use only the track and the pit lane. However, if a rider accidentally leaves the track, then he may rejoin it at the place indicated by the officials or at a place which does not provide an advantage. Any infringement of this rule during the practices or warm-up will be penalized by the cancellation of the lap time concerned and during the race, by a drop of position(s) decided by the FIMNA Stewards. A board will be displayed for the rider on the finish line during a maximum of five (5) laps. If the rider did not go back after the board has been presented five (5) times, he will be penalized at the discretion of the FIMNA Stewards.
- e. Any repairs or adjustments along the race track must be made by the rider working alone with absolutely no outside assistance. The marshals may assist the rider to the extent of helping him to lift the motorcycle and holding it while any repairs or adjustments are made. The marshal may then assist him to re-start the motorcycle.
- f. If the rider intends to retire, then he must park his motorcycle in a safe area as indicated by the marshals.
- g. If the rider encounters a problem with the motorcycle, which will result in his retirement from the practice or the race, then he should not attempt to tour at reduced speed to the pits but should pull off the track and park his motorcycle in a safe place as indicated by the marshals.
- h. Riders who are returning slowly to the pits for remedial work should ensure that they travel as far as possible off the racing line.
- i. Riders who stop their engines in the pits may be assisted to re-start their motorcycle by the mechanics.
- j. Riders are not allowed to transport another person on their motorcycle or to be transported by another rider on his motorcycle (exception: Another rider or by another rider after the checkered flag or red flag).
- k. Riders must not ride or push their motorcycles in the opposite direction of the circuit, either on the track or in the pit lane, unless doing so under the direction of an official.
- l. No signal of any kind may pass between a moving motorcycle and the rider's team, or anyone connected with the motorcycle's team, entrant, or rider, except for the signals of the timekeeping transponder, lap trigger, GPS, legible messages on a pit board, or body movements by the rider or team. Onboard TV camera signals are allowed, but only when such signals are for the purposes of and managed by the Championship

- promoter.
- m. Riders may be required to carry "on-board" cameras on their motorcycle. The cameras and associated equipment must be carried during entirety of the practice or race sessions.
 1. Riders required to carry "on-board" cameras will receive an adjustment to the minimum weight equal to the weight of the camera and any mounting equipment.
 2. Teams must give reasonable access and assistance to the company designated for the supply of the camera equipment to facilitate the mounting of the equipment.
 3. The video recorded on the cameras is the sole property of MotoAmerica and must not be downloaded or copied.
 - n. A speed limit of 60 km/h (approximately 37 mph) will be enforced in the pit lane at all times during the event. Riders must respect the speed limit from where the sign 60 km/h is placed up to where the sign 60 Km/h crossed out is placed.
 1. Any rider found to have exceeded the limit during the practice will be subject to a fine of 150 USD.
 2. Any rider who exceeds the pit lane speed limit during a race will be penalized with a ride through.
 3. The Race Direction must communicate the offence to the pit of the rider after having received the information from the official in charge.
 - o. Stopping on the track during any session is forbidden except for a practice start outlined in article 1.21/p.
 - p. Practice Starts:
 1. During the practice and warm-up sessions, practice starts are permitted.
 2. When it is safe to do so, at the pit lane exit before joining the track.
 3. After passing the checkered flag at the end of practice and warm-up sessions, when it is safe to do so. The rider must be off the racing line in the designated Practice Start Zone(s) and following the procedure, as communicated to teams prior to the first practice session.
 4. Any rider found to have infringed this rule may be subject to an instant fine of 150 USD. Further penalties may be applied.
 - q. If the winning rider wishes to parade a flag, he must ride to the side of the racing surface to collect the flag and then rejoin the circuit when it is safe to do so.
 - r. After the checkered flag, riders riding on the track must wear a safety helmet until they stop on the pit lane / parc fermé.
 - s. It is not permitted to ride racing motorcycles within the circuit other than in the pit lane or on the track.
 - t. Any rider or team whose motorcycle spills oil on the track causing interruption of practice, qualifying, warm-up or race may be penalized with one (1) of the following penalties:
 - fine
 - disqualification
 - withdrawal of Championship points
 - suspension or any other penalty at the discretion of the FIMNA Stewards.
 - u. Any motorcycle that enters the paddock or the cold side of pit lane during a race will be considered to have withdrawn from the race and may NOT re-enter the race.

- v. All riders and team members must conduct himself or herself at all times in an appropriate, morally correct manner and in a manner to advance the positive goodwill and image of the AMA, FIM North America and MotoAmerica.
- w. All riders and team members must follow policies and procedures presented in the Teams Handbook and Entrant Agreement.

1.22 START PROCEDURE

1.22.1 Normal start procedure

- a. Approximately twenty (20) minutes before the start of a Superbike race or approximately fifteen (15) minutes before the start of all other races:**
 - 1. Pit lane exit opens for sighting laps.
 - 2. Count-down boards of five (5), four (4), three (3), two (2), and one (1) minute are shown at the pit exit.
 - 3. Green light on and/or green flag waved at the pit lane exit.
 - Riders may complete more than one (1) sighting lap by passing through the pit lane.
 - Riders may make adjustments or refuel in pit lane.
 - 4. Only riders who have completed at least one (1) sighting lap and started the warm-up lap from the grid will be permitted to start the race from their position published on the final grid.
 - 5. Under no circumstances may they push their motorcycle onto the grid from the pit lane.
- b. Fifteen (15) minutes before the start of Superbike races or Ten (10) minutes before the start of all other races:**
 - 1. Pit lane exit closes, red light on and/or red flag waved at the pit lane exit.
 - 2. Riders who did not make it out of pit lane before closure may start the warm-up lap from the pit lane under the instructions of the marshal positioned at the pit lane exit.
 - 3. Riders starting the warm-up lap from the pit lane must start the race from the back of the grid.
- c.** When riders reach the grid after the sighting lap(s) they must take up their positions and may be attended by up to five (5) persons, one (1) of whom may hold an umbrella. All riders must remove their helmets, except in the case of a restarted or wet race. Officials may display panels or cones, at the side of the track, indicating the row of the grid, to assist riders in locating their grid position.
- d.** Following participation in the sighting lap, if a rider does not join the grid due to mechanical issues or otherwise, they may elect to repair their motorcycle.
 - 1. Repairs can only be made in the hot pit
 - 2. Under no circumstances may they push their motorcycle onto the grid from the pit lane or ride counter course to proceed to the grid. In this case, riders must start the warm-up lap from pit exit and start the race from the back of the grid.
- e.** The Race Director may choose at this time to declare the race as "wet" or "dry". The starter will indicate this to the riders on the grid and those who may still be in the pit lane by the display of a wet/dry board.
 - 1. If no board is displayed the race will automatically be declared "dry".
- f.** Riders on the grid may, at this stage, make adjustments to the motorcycle or change tires to suit the track conditions.

1. Trolleys are allowed on the grid.
 2. Two (2) air blowers are allowed on the grid.
 3. Tire warmers may be used on the grid.
 4. Riders may use a generator to power tire warmers and air blowers on the grid.
 5. Only one (1) generator per motorcycle may be used.
 6. The generator must be of the "hand carried" type and have a maximum output capacity of two (2) kilowatts. The noise limit of the generator is 65 dB/A.
 7. Starter motors may also be used on the grid.
 8. Generators and starter motors should be located to the rear of the motorcycles.
 9. Refueling or changing a fuel tank on the grid is forbidden.
- g. Five (5) minutes before the start of the warm-up lap:**
1. Five (5) minute board is displayed on the grid.
- h. Three (3) minutes before the start of the warm-up lap:**
1. Three (3) minute board is displayed on the grid
 2. Immediate removal of tire warmers from motorcycles on the grid
 3. Generators, trolleys and air blowers must be disconnected and removed from the grid as quickly as possible.
 4. All persons except two (2) mechanics per motorcycle, one (1) person holding the umbrella for each rider, television crew of the host broadcaster and essential officials must leave the grid.
 5. Riders must put their helmets on.
 6. No person (except essential officials) is allowed to enter the grid area at this point.
 7. All adjustments must be completed by the display of the three (3) minute board.
 8. After this board is displayed, riders who still wish to make adjustments must push their motorcycle to the pit lane where accessible.
 9. If pit lane is not accessible from the grid the machine will be moved to a safe area. If the machine cannot be brought back to pit lane the team will be withdrawn from the race at the one (1) minute board.
 10. Such riders and their motorcycles must be clear of the grid and in the pit lane before the display of the one (1) minute board, where they may continue to make adjustments. Such riders will start the warm-up lap from the pit lane and may start the race from the back of the grid.
 11. Working on the machine on the grid after the three (3) minute board is presented may result in a penalty.
- i. One (1) minute before the start of the warm-up lap:**
1. One (1) minute board will be displayed on the grid
 2. All team personnel will leave the grid
 3. The mechanics will, as quickly as possible, assist the rider to start the machine and will then vacate the grid.
- j. Thirty (30) seconds before the start of the warm-up lap:**
1. Thirty (30) second board is displayed on the grid.

2. All riders must be in position on the grid with engines running. No further assistance from mechanics is permitted.
 3. Any rider who is unable to start his motorcycle must remove it to the pit lane, where accessible, under the control of the grid marshals.
 4. Any rider moved to pit lane may take further attempts to start it.
 5. Such riders may start the warm-up lap from the pit lane and must start the race from the back of the grid.
 6. If pit lane is not accessible from the grid the machine will be moved to a safe area and the rider will be withdrawn from the race.
- k. Approximately two (2) minutes before the start of the race:**
1. Green flag waved to start warm-up lap
 2. In the interest of safety, should a rider stall his motorcycle, he may be assisted to restart by an official. If, after a reasonable period, the engine does not start then the rider will be pushed into the pit lane, where accessible, so his mechanics may provide assistance.
 3. The riders will make one (1) lap, at unrestricted speed, followed by a safety car. The safety car will overtake slow riders.
 4. As soon as the riders have passed the pit lane exit, the pit lane exit light will be turned green, and any rider waiting in the pit lane will be permitted to join the warm-up lap. Thirty (30) seconds later the pit lane is closed, and a marshal will display a red flag and/or red light.
- l.** On returning to the grid the riders must take up their positions with the front wheel of their motorcycle up to or behind the front line and between the side lines defining the grid position and keep their engines running.
1. If two (2) or more riders must start from the back of the grid, they will take up position in the order in which they qualified for the race.
- m.** An official will stand at the front of the grid holding a red flag motionless.
- n.** Any rider who arrives after the safety car has taken up its position at the back of the grid, must enter the pit lane and unless directed otherwise will start the race from pit out.
1. Any rider who encounters a problem with his motorcycle on the warm-up lap may return to the pit lane and make repairs in the pit lane only.
 2. Any rider who stalls his engine on the grid or who has other difficulties must remain on the motorcycle and raise an arm. It is not permitted to attempt to delay the start by any other means.
 3. As each row of the grid is completed, the officials will lower the panels indicating that their row is complete. Panels will not be lowered when a rider in that row has indicated that he has stalled his motorcycle or has other difficulties. When all panels have been lowered an official at the rear of the grid will wave a green flag. The Starter will then instruct the official at the front of the grid, displaying the red flag, to clear the grid.
- o. Start of the race:**
1. A red light will be displayed for between two (2) and five (5) seconds.
 2. The red light will go out to start the race.
 - If the red lights' device is fed by normal power (electricity) supply, it should also be connected to a U.P.S. (Uninterruptable Power System) to provide power to

the starting lights' device in the event the primary electric power fails at the moment of the start.

- p. Any rider who anticipates the start or who is deliberately not placed in his starting box will be issued a time penalty after the race as described in article 1.25.
 - 1. **The motorcycle must be stationary at the time the red lights are turned off. Anticipation of the start (jump start) is defined by the motorcycle moving forward at the time the red lights are turned off indicating an advantage gained. FIMNA Stewards will be the sole judge of whether the motorcycle was moving forward at the time the red lights are turned off, this decision is considered a statement of fact and is final with no appeal available. In the case of minor movement and if the motorcycle stops while the red lights are on, the FIMNA Stewards will be the sole judge if the subsequent start was from a position that provided an advantage gained and decide if a penalty will be imposed. The team will be informed of such penalty as soon as possible, the notification of a jump start on the timing monitor is official notification to the team. A board will be displayed to the rider.**
 - 2. If, after the start of the race, a rider stalls his motorcycle, then he may be assisted by being pushed along the track until the engine starts by an official. If, after a reasonable period, the engine does not start, then the rider will, where accessible, be pushed into the pit lane where his mechanics may provide assistance.
- q. After the start signal has been given and the last rider has passed the pit exit, the pit exit will be opened.
 - 1. Any riders still in the pit lane may then start the race.
 - 2. Riders still in pit lane may not start the race after the lead rider has crossed the finish line to complete the first racing lap.
- r. Should there be a problem that might compromise safety for the start of the warm-up lap or the race the Starter will invoke either the "Start Delayed" procedure or the "Extended Start Delayed" procedure.

1.22.2 "Start Delayed" procedure

- a. A red flag is waved from the Starter's rostrum and the red light stays on:
 - 1. The "Start Delayed" board is displayed from the Starter's rostrum and marshals will wave a yellow flag at designated rows of the starting grid.
 - 2. Riders must stay in their grid position with helmets on, engines may be switched off.
 - 3. If a machine caused the start delay it will be removed to the pit lane, where accessible, regardless of what work is needed to restart the machine. If it can be restarted the rider may start the warm-up lap and will start the race from the back of the grid.
 - 4. Only essential officials may be allowed on the grid, no media, guests, umbrella-holders, or other team personnel will be permitted, with the exception of camera crew(s) authorized by the organizers.
- b. The start procedure will be re-commenced by a board displayed as soon as possible (normally as soon as all riders on the grid).
- c. If the five (5) minute board or three (3) minute board is displayed, riders may be attended by a maximum of two (2) mechanics per rider.
 - 1. Only tire warmers, stands, and hand-carried tools are allowed, no generators are allowed on the grid. The start procedure will re-commence as described in section 1.22.1/g-r.

- d. If the one (1) minute board is displayed, riders may be attended by a maximum of two (2) mechanics per rider to assist the rider with starting the machine as quickly as possible and then immediately vacate the grid. The start procedure will re-commence as described in section 1.22.1/i-r.
- e. If the thirty (30) second board is displayed, riders may not be attended to by mechanics. Any rider who is unable to start his machine must remove it to the pit lane, where accessible, under the control of the grid marshals so he may make further attempts to start it. Such riders may start the warm-up lap from the pit lane and will start the race from the back of the grid. The start procedure will re-commence as described in section 1.22.1/j-r.
- f. Approximately two (2) minutes before the start of the race:
 1. Green flag waved to start warm-up lap.
 2. In the interest of safety, should a rider stall his machine, he may be assisted to restart. If, after a reasonable period, the engine does not start, then the rider, where accessible, be pushed into the pit lane where his mechanics may provide assistance.
 - g. The race distance will be reduced by one (1) lap if the Start Delayed signal is after the warm-up lap only. Any person who, due to his behavior on the grid is responsible for a "Start Delayed" may be further penalized.

1.22.3 "Extended Start Delayed" procedure

- a. A red flag is waved from the Starter's rostrum and the red light stays on.
- b. The "Start Delayed" board is displayed from the Starter's rostrum and marshals will wave a yellow flag at designated rows of the starting grid.
- c. Engines must be switched off.
- d. After display of the Start Delayed, a maximum of two (2) mechanics per rider are allowed on the grid to assist riders in removing their bike to the pit area.
 1. Refueling is allowed in the pit lane.
 - Riders must be off the bike during refueling.
 - The ignition must be off, and the motorcycle must be on a rear stand before refueling is permitted to start.
 - A crew member must be standing by with a fire extinguisher with the pin pulled and the nozzle aimed at the motorcycle.
- e. No electrical devices such as battery chargers, fans, or tire warmers may be plugged in during any re-fueling operations.

1.22.4 Quick Start Procedure

A quick start procedure may be used at the discretion of Race Direction. A quick start procedure will always be used for a restart of a race.

- a. The pit lane exit will be opened for Sixty (60) Seconds.
- b. Any rider that does not exit pit lane during the open period will be required to start the warm-up lap from pit lane and start the race from the back of the grid.
- c. Riders will make one (1) lap at unrestricted speed to the starting grid, followed by a Safety Car.
- d. All riders will arrive back on the starting grid, and stop, with engines running, no adjustments may be made. Any rider encountering difficulties on the sighting lap must enter the pit lane.

- e. Upon arrival back at the starting grid each rider may be directed to their grid position by ONE mechanic only (without tools) and the normal start procedure will be followed from 1.22.1 (n) as described above with the start signal given in the normal manner.
- f. Any rider delaying the progress of the sighting lap will be overtaken by the Safety Car.
- g. Any rider arriving behind the Safety Car must go into the pit lane. Such riders will have to start the warm-up lap from the pit lane.

1.22.5 Re-Started Race Procedure

When a race is stopped, riders must return to the pit lane, unless otherwise instructed by officials. If the race is to be re-started, minor repairs may be carried out. The following procedure will take place:

- a. The quick start procedure will be used.
- b. Upon arrival in the pit lane, riders may make adjustments to their motorcycle, refueling is permitted in the pit lane. (Prior to the start of the race, teams should ensure that all necessary equipment is in the pit lane service area in a safe position). Tire changes are not permitted unless the Race Director announces a change to the race status (i.e. Dry/Wet), or the Technical Director authorizes an exceptional tire change due to a verifiable technical problem. In the case of an exceptional tire change, the rider must start the restarted race from the back of the grid.
- c. When all riders have entered the pit lane the Race Director will announce the time remaining to the re-opening of the pit lane and the race distance.
 - 1. The duration between the announcement and the actual opening of the pit exit will be a minimum of five (5) minutes.
 - 2. The time remaining to the opening of the pit exit will be displayed on timing screens and on the starting grid countdown clock.
 - 3. The rider should avail himself of his new grid position from the classification displayed on the timing screen or from officials.

1.22.6 Accelerated Start Procedure

The start procedure may be accelerated by the Race Direction. This will be notified to teams on the timing monitor and by the display of the boards indicating the time remaining to the closure of the pit lane exit and to the start of the warm-up lap. This will be used in principle when there are time restraints due to television coverage or the circuit has limitations on time.

1.23 “WET” AND “DRY” RACE PROCEDURES

All races will be categorized as either wet or dry. A board may be displayed on the grid to indicate the status of the race. If no board is displayed, the race is automatically declared dry. The purpose of this classification is to indicate to riders the consequence of varying climatic conditions during a race.

1.23.1 Dry Races

A race classified as dry will be interrupted by the Race Director if he considers that climatic conditions affecting the surface of the track makes it likely that riders will wish to change tires.

1.23.2 Wet Races

- a. A race classified as wet, usually commenced in varying or wet conditions, will not be interrupted for climatic reasons except for extraordinary events. Riders who wish to change tires or make adjustment must enter the pits and do so during the actual race.

- b. In all cases where the first race is stopped for climatic reasons, then the restart will, automatically, be a "wet" race.

1.23.3 Wet Conditions Familiarization

- a. **If all the official practices, the race day warm-up (and any previous races for the class during the event) are dry and the race is declared wet prior to the starting procedure:**
 - 1. Race Direction will institute a seven (7) minute session where riders will be allowed to go through the front straight.
 - 2. There will be a checkered flag to end the session and simultaneously a Seven (7) minute call made for pit lane opening for a quick start. Refer to 1.22.4 (Quick Start Procedure).
- b. **If all the official practices, the race day warm-up (and any previous races for the class during the event) are dry and the race is declared wet during the grid procedure:**
 - 1. "Wet Familiarization" board will be displayed.
 - 2. Riders will return to the pit lane and a countdown of a minimum of seven (7) minutes will be given to the start of the wet familiarization.
 - 3. Race Direction will institute a seven (7) minute session where riders will be allowed to go through the front straight.
 - 4. There will be a checkered flag to end the session and simultaneously a Seven (7) minute call made for pit lane opening for a quick start. Refer to 1.22.4 (Quick Start Procedure).

1.24 RIDE THROUGH PROCEDURE

- a. During the race, the rider will be requested to ride through the pit lane, stopping is not permitted. He may then rejoin the race.
- b. The rider must respect the speed limit (article 1.21/n) in the pit lane. In case of infraction of this speed limit, the ride through procedure will be repeated; in case of a second infraction of this speed limit, the rider will be shown the black flag and will be disqualified.
- c. In the case of a race interrupted prior to the penalty being complied with, and if there is a second part, the rider will be required to ride through after the start of the second part of the race.
- d. A yellow board (100cm horizontal x 80 cm vertical) displaying the rider's number (black color) will be shown at the finish line and the information will also be displayed on the time keeping monitors.
- e. Failure by the relevant rider to ride through, having been shown the board five (5) times, will result in that rider being shown the black flag.
- f. In the case where the organization has been unable to carry out the ride through penalty before the end of the race, the relevant rider will be inflicted with a time penalty of twenty (20) seconds.

1.25 TIME PENALTY PROCEDURE

- a. **Any rider who anticipates the start will be penalized by the FIMNA Stewards.** The rider will be notified by an Official board as soon as practical. **The board will be displayed for three laps.** The team will also be notified of the infraction and pending penalty. **The notification of a jump start on the timing monitor is official notification to the team.**

- b. The standard minimum penalty is a time penalty of five (5) seconds which will be immediately added to the rider's total time. This will affect the riders total time and will be reflected in the results after the race. However, other penalties may be imposed for an infraction that is deemed to have provided a significant advantage or for repeated offences during the season at the discretion of the FIMNA Stewards.
- c. In the case of a race interrupted, and if there is a second part, the time penalty will be added to the results used to calculate the grid position for the start of the second part of the race.

1.26 PIT STOPS DURING A RACE

- a. Riders may enter the pit lane (but must not cross the line into the rider's paddock area) during the race.
- b. Refueling is strictly prohibited. Any infringement of this rule will be penalized with a disqualification.
- c. Any rider who enters the paddock, the garage or cold side of the pit lane will be considered to have withdrawn from the race and may not re-enter the race or take part in any re-started race.

1.27 INTERRUPTION OF A RACE

If the Race Direction decides to interrupt a race, then red flags will be displayed at the finish line and at all marshals' posts and the red lights will be switched on around the circuit. Riders must immediately slow down and return to the pit lane.

- a. Any rider who enters the paddock, the garage or cold side of the pit lane will be considered to have withdrawn from the race and may not re-enter the race.
- b. **If the results calculated show that two-thirds of the race distance rounded down to the nearest whole number of laps have been completed by the leader of the race, then the race will be deemed to have been completed and full Championship points will be awarded.**
- c. The results will be based on the order of last crossing the finish line prior to the showing of the red flag.
- d. **If a rider crashes between the last crossing of the finish line and the red flag, the following applies:**
 - 1. Riders found to have not experienced a disadvantage during a crash, mechanical, or other event as determined by Race Direction, after applying the scoring protocol in section 1.27.c, the rider should have a time adjustment applied by the FIMNA Stewards.
 - 2. FIMNA Stewards may apply a time adjustment, a position adjustment or a penalty if deemed necessary.
 - 3. The decision will be based on video footage, sector crossing data, or an official's observation and will be matter of fact, final and not subject to appeal.
- e. Exception: If the race is interrupted after the checkered flag, the following procedure will apply:
 - 1. For all the riders to whom the checkered flag was shown before the interruption, a partial classification will be established at the end of the last lap of the race.
 - 2. For all the riders to whom the checkered flag was not shown before the interruption, a partial classification will be established at the end of the penultimate lap of the race.

3. The complete classification will be established by combining both partial classifications as per the lap/time procedure.

f. If less than 2/3 distance is complete, follow procedures in 1.28 to restart the race.

1.28 RE-STARTING A RACE THAT HAS BEEN INTERRUPTED

1.28.1 If a race must be re-started, then it will be done as quickly as possible, consistent with track conditions allowing. As soon as the riders have returned to the pits, the Race Director will announce a time to begin, which, conditions permitting, should not be later than 10 minutes after the initial display of the red flag.

1.28.2 The results of the first race must be available to teams before the second part of a race can be started.

1.28.3 The Race Director will decide and announce whether the Normal Start procedure (1.22.1) or the Quick Start Procedure (1.22.4) will be used.

1.28.4 Conditions for the re-started race will be as follows:

a. In the case of less than three (3) laps completed by the leader of the race:

1. All riders on the original grid may re-start.
2. Motorcycles may be repaired and refueling is permitted.
3. Tire changes are not permitted unless the Race Director announces a change to the race status (i.e. Dry/Wet), the race is declared wet, or the Technical Director authorizes an exceptional tire change due to a verifiable technical problem. In the case of an exceptional tire change, the rider must start the restarted race from the back of the grid.
4. **Riders receiving a time penalty for a jump start or passing under a yellow flag in the first race will not have the penalty carried forward. Riders with a time penalty for another reason will have the penalty applied to the restarted race.**
5. The number of laps will be at the discretion of Race Direction respecting schedules with a minimum of two-thirds of the original race distance rounded down to the nearest whole number of laps.
6. The grid positions will be as for the original race.

b. In the case of three (3) laps or more and less than two-thirds (2/3) completed by the leader of the race:

1. Only riders who are classified as finishers (have completed 75% of the first race distance in the first race) may re-start.
 - i. **Riders must be actively participating at the time the red flag is displayed. For the purposes of these regulations “actively competing” is defined as the rider riding on track, or attempting to repair/restart the machine, or to rejoin the track or return to pit lane. Race Direction will be the sole judge of whether a rider is actively competing with the decision including safety considerations.**
2. Any rider who has crashed in the first part of the race who is eligible to take part in the re-start must be determined fit by a Medical Officer if there is suspicion that an injury has been sustained. The Race Director’s decision is final in requiring any rider to undertake a check to ascertain fitness to ride.
3. Motorcycles may be repaired; a Technical Official must clear repaired motorcycles.
4. Refueling is permitted.

5. Tire changes are not permitted unless the Race Director announces a change to the race status (i.e. Dry/Wet), or the Technical Director authorizes an exceptional tire change due to a verifiable technical problem. In the case of an exceptional tire change, the rider must start the restarted race from the back of the grid.
6. **The number of laps of the second race will be the number of laps required to complete two-thirds of the original race distance rounded down to the nearest whole number of laps with a minimum of one-third (1/3) of the original race distance rounded up. There will be an effort to ensure each race is a minimum of five (5) laps respecting schedules with the decision being at the discretion of Race Direction.**
7. The grid position will be based on the finishing order of the first race.
8. **Riders receiving a time penalty in the first race will have the penalty added to the results used to calculate the grid position for the restarted race.**
9. The final race classification will be established according to the position and the number of laps of each rider at the time he crossed the finish line at the end of the last part of the race.

1.28.5 Should a re-started race be interrupted, and Race Direction deems it possible to re-start, then the conditions for a further re-start will follow Art. 1.28.4, with the race distance and results defined as follows:

- a. **If the re-started race is interrupted when one third (1/3) race distance or more has been completed by the race leader**, the race will be deemed to have been completed and full Championship points awarded.
- b. If the re-started race is interrupted when less than one third (1/3) race distance has been completed by the leader of the race, the race would be re-started a further time, if possible, for the same number of laps as the first re-start.
- c. If that further re-started race (third race) is interrupted when less than one third (1/3) race distance has been completed by the leader of the race, Race Direction will determine if it is practical to re-start the race and will define the number of laps to be completed. If it is not possible to re-schedule the race the results will then be determined by the first part of the race and full Championship points awarded, provided that in the first part of the race one third (1/3) race distance or more had been completed by the race leader.
- d. If the first race is re-started and none of the races (original or subsequent re-starts) have completed one third (1/3) race distance or more by the race leader, then the race is deemed to be cancelled and no Championship points will be awarded.
- e. Race Direction may reschedule re-started races in the race program as necessary.

1.29 FINISH OF A RACE AND RACE RESULTS

- a. When the leading rider has completed the designated number of laps for the race, a checkered flag will be shown by an official standing at the finish line, behind the first line of protection. The checkered flag will continue to be displayed to the subsequent riders.
 1. When the checkered flag is shown to the leading rider, no other rider will be permitted to enter the track from the pit lane.
 2. As soon as the checkered flag is shown to the leading rider, the red light will be switched on at the pit lane exit and a marshal showing a red flag will stand in the pit lane exit.
 3. If a rider(s) closely precedes the leader during the final lap before the finish line, the official will show to the rider(s) and to the leader simultaneously the checkered

flag and the blue flag. That means that the race is finished for the leader while the rider(s) closely preceding the leader has (have) to complete the final lap and take the checkered flag.

- b. In the case of a photo-finish between two (2), or more, riders, the decision shall be taken in favor of the competitor whose front wheel leading edge crosses the plane of the finish line first. In the case of ties, the riders concerned will be ranked in the order of the best lap time made during the race.
- c. The results will be based on the order in which the riders cross the line and the number of laps completed, **in the case of a restarted race the number of laps will be based ONLY on laps completed in the restarted race.**
- d. To be counted as a finisher in the race and be included in the results a rider must:
 1. Complete 75% of the race distance.
 2. In the case of a race interrupted after two thirds (2/3) distance completed (art. 1.26 f), a rider must be actively participating at the time the red flag is displayed. For the purposes of these regulations “actively competing” is defined as the rider riding on track, or attempting to repair/restart the machine, or to rejoin the track or return to pit lane. Race Direction will be the sole judge of whether a rider is actively competing with the decision including safety considerations.
 3. Cross the finish line on the race track (not in the pit lane) within five (5) minutes of the race winner. The rider must be in contact with his motorcycle.
- e. The riders classified in the first three (3) positions in the race will be escorted by officials, as quickly as possible, to the podium for the awards ceremony. Participation in the podium ceremony by these riders is compulsory.

1.30 CHECK AREA

- a. At the end of the race, or the final part of a race that has been interrupted, all the classified motorcycles will be directed to a compulsory check area (parc fermé) pending inspection by the Technical Stewards or potential protests. It is the responsibility of the riders to ensure that the machine is in the parc fermé.
 1. Motorcycles will normally be released from the parc fermé 30 minutes after the finish of the race.
- b. For all races, the top three (3) classified finishers will be held at the podium area, the remaining machines will be directed to the parc fermé.
- c. In rare cases following race one of a double header that takes place on the same day, the remaining riders will return to their pit areas where the tire stickers will be inspected by the MotoAmerica Technical Director or his appointed staff, once confirmed correct the teams will be allowed to remove the wheels from the machines. Data can be downloaded from the data logger. No other work may be carried out until the time for a technical protest notification has expired (15 minutes after the end of Race 1) (see art 3.4.5). Machine must remain fully visible during this period.
 1. Should a team have a technical protest lodged against them after Race 1 (in a same day double header event) then they have three options:
 - Immediate examination time allowing.
 - Replacement of suspected parts, with the replaced parts impounded for examination later.
 - Protested parts may be sealed by the Technical Director and use the machine ‘as is’ in Race 2 and for any infractions found then penalties will be applied to both races.

1.31 CHAMPIONSHIP POINTS AND CLASSIFICATION

- a. Riders and manufacturers will compete for the FIM North America MotoAmerica AMA Road Racing Championship.
- b. For riders, the points will be those awarded to finishers in each race.
- c. For manufacturers, only the highest placed motorcycle of a manufacturer will gain points, according to the position in the race.
- d. All races will count for the FIM North America MotoAmerica AMA Road Racing Championship classification.
- e. In the event of a tie in the number of points, the final positions will be decided based on the number of best results in the races (number of first places, number of second places etc.). If there is still a tie then, the date in the Championships at which the highest place was achieved will be considered with precedence going to the latest result.
- f. In the case where a rider participates on different motorcycles, it is the make of the motorcycle with which he obtained the most points that will appear next to his name in the final classification, without, however, modifying the calculation for the manufacturers' classification.
- g. The Champions in each category are obliged to attend an official awards ceremony.

1.31.1 Championship Points

All class championship points awarded for the race will be awarded based on the finishing position listed on the scale below. **Supersport Extended Race will receive double points.**

Position	Points
1st	25 points
2nd	20 points
3rd	16 points
4th	13 points
5th	11 points
6th	10 points
7th	9 points
8th	8 points
9th	7 points
10 th	6 points
11th	5 points
12th	4 points
13th	3 points
14th	2 points
15th	1 point

1.32 DEPOSITS IN CASE OF MOTORCYCLE CONTROL FOLLOWING A PROTEST

- a. The deposit in case of dismantling and reassembling a motorcycle to measure the cylinder capacity, following a protest, is 200 USD (material included). The deposit in case of partial or complete dismantling of an engine or gearbox is 350 USD.
- b. If the party who makes the protest is the losing party, the deposit shall be paid to the winning party.

- c. If the party who makes the protest is the winning party, the deposit shall be reimbursed.

1.33 DEPOSITS FOR FUEL CONTROLS FOLLOWING A PROTEST

- a. All requests for fuel control following a protest or an appeal must be accompanied by a deposit of 750 USD paid to FIM North America.
- b. After the last control:
 - 1. the winning party will have its deposit reimbursed.
 - 2. the losing party will have to pay the costs of all the controls carried out after deduction of deposits which it has already paid.

1.34 NON-PARTICIPATION IN AN EVENT

- a. Any rider who enters an event must inform the organizer if, subsequently, he decides not to participate in the event. A rider who has submitted an entry form and fails to participate must and inform MotoAmerica seven (7) days prior to the event. Failure to inform MotoAmerica may result in a fine from FIM North America up to 500 USD.
- b. If a rider fails to participate after entering an event and is found to have participated in another event on the same day may be subject to suspension.
- c. Riders may participate in a maximum of three (3) classes if they hold the required license(s), must attempt to qualify and participate in the race(s).
- d. Riders are prohibited from participating in a second class for the sole purpose of obtaining additional practice time. If Race Direction deems this to have occurred, the rider may be subject to suspension.

1.35 RULES UNDER CONSIDERATION FOR 2024

No Sporting rules are under consideration.

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2.0 TECHNICAL REGULATIONS

Amendments to the technical regulations may be made by the MotoAmerica Permanent Bureau at any time.

During free practices, qualifying practices, and warm-up sessions: If a motorcycle is found not to be in conformity with the technical regulations during or after the session, its rider will be given a penalty for the event such as a ride-through, a drop of any number of grid positions for the next race, suspension and/or withdrawal of championship or cup points.

Races: If a motorcycle is found not to be in conformity with the technical regulations during or after a race, its rider will be given a penalty such as a time penalty or disqualification.

2.1 INTRODUCTION

Motorcycles for the MotoAmerica Superbike Championships must be motorcycles with a valid road homologation in one of the following areas: USA, EU or Japan.

These motorcycles must be available for sale to the public in the shops and the dealerships representing the manufacturer in at least one of the above areas before the third event of the current championship to be allowed to be used in the remaining championship events.

2.2 CLASSES

2.2.1 The production-based racing classes will be designated by engine capacity and level of technical freedom.

2.3 GENERAL ITEMS

2.3.1 Main Frame

- a. The main frame is considered as any structure that joins the steering tube, engine, and swing-arm pivot. If the steering tube, engine mounts or swing-arm is connected through a removable bracket (with engine removed) then those brackets will be considered as part of the main frame. If the steering tube, engine mounts and rear swing-arm pivot connect to the main frame without removable brackets, then any additional brackets will not be considered as part of the main frame. If there is any part in question the Technical Directors decision is final.
- b. If the rear section (rearward of the engine, meant for the riders seating) of a frame is not removable then there is no rear sub-frame and only a main frame. Regulations applying to the rear sub-frame will not apply to main frames.

2.3.2 Materials

The use of titanium in the construction of the frame, front forks, handlebars, swing arm, swing arm spindles and the wheel spindles is forbidden. For wheel spindles, the use of light weight alloys is also forbidden. The use of titanium alloy nuts and bolts are allowed in certain classes specified in their respective sections.

2.3.3 Handlebars and Control Levers

- a. Exposed handlebar ends must be plugged with a solid material or rubber covered.
- b. The minimum angle of rotation of the steering on each side of the center line or mid position must be of 15° for all motorcycles.
- c. The front wheel, tire and the mudguard must maintain a minimum gap of 10 mm from any part of the machine that can cause binding, regardless of the handlebar position.

- d. Solid stops, other than steering dampers, must be fitted to ensure a minimum clearance of 30 mm between the handlebar with levers and the tank, frame and/or other bodywork when on full lock to prevent trapping of the rider's fingers (see diagrams A, B, C).
- e. Repair by welding of light weight alloy handlebars is prohibited.
- f. Composite handlebars are not allowed in any class.
- g. All handlebar levers (clutch, brake, etc.) must be ball ended. The diameter of this ball is to be at least 16 mm. This ball can also be flattened in any case but the edges must be rounded. The minimum thickness of this flattened part is to be 14 mm. These ends must be permanently fixed and form an integral part of the lever.
- h. Each control lever (hand and foot levers) must be mounted on an independent pivot.
- i. The brake lever, if pivoted on the footrest axis, must work under all circumstances, such as the footrest being bent or deformed.
- j. Modified rider controls will be considered for the mobility challenged subject to a report by the Medical Director, the Technical Directors decision is final.
- k. Clutch lever may have a guard fitted equivalent to a brake lever guard.

2.3.4 Compulsory Safety Items

- a. All drain plugs must be lock wired (safety wired). The use of clips is not permitted. External oil filter(s), screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases) or have a secondary retention mechanism.
- b. Brake caliper bolts must be safety wired or have a secondary retention method. The use of clips is permitted.
- c. Motorcycles must be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle.
 - i. Composite brake lever guards are not permitted, however, FIM approved guards will be permitted without regard to the material. Only composite guards need FIM approval.
 - ii. The Technical Director has the right to refuse any guard not satisfying this safety purpose.
- d. A solid protective cover (shark fin) shall be securely fixed (bolted or riveted, bonding permitted with the approval of the Technical Director) 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. All fasteners must meet factory torque specification. If any fasteners (i.e. axles, pinch bolts, brake calipers, etc.) are found to be loose while on the race course the competitor will be subject to penalties.
- f. 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.
- g. Motorcycles must be equipped with a red light on the instrument panel that will illuminate in the event of oil pressure drop.

2.3.5 Wheels and rims

- a. Any modification to the rim or spokes of an integral wheel (cast, molded, riveted) as supplied by the manufacturer or of a traditional detachable rim other than for spokes, air valve or security bolts is prohibited.
- b. Tire retention screws may be used to prevent tire movement relative to the rim. If the rim is modified for these purposes, bolts and/or screws must be fitted.
- c. The distance between the rim walls is measured inside the flange walls in accordance with ETRTO.
- d. A non-slip coating/treatment may be applied to the bead area of the rim.
- e. Wheel balance weights may be discarded, changed or added to.
- f. Aluminum or steel inflation valves are compulsory. Angled valves are recommended.

2.3.6 Tires

Tires must be replaced from those fitted to the homologated motorcycle.

- a. The tread pattern must be made exclusively by the manufacturer when producing the tire.
- b. As a safe minimum, the depth of the tire tread over the whole pattern at pre-race control must be at least 2.5 mm.
- c. Tires which at the preliminary examination have a tread depth of less than 1.5 mm are considered as non-treaded tires and the restrictions applying to slick tires will then apply to them.
- d. The surface of a slick tire must contain three (3) or more hollows at 120° intervals or less, indicating the limit of wear on the center and muster areas of the tire. The rider shall not enter the track if at least two (2) of these indicator hollows are worn on different parts of the periphery.

2.3.7 Tire warmers

- a. The use of tires warmers and suspension pre-heaters is allowed.

2.3.8 Use of tires

- a. The competitors shall only use tires listed on the allocation sheet provided by the official supplier.
- b. For each event, all tires must be made of the same quality and shall be strictly identical.
- c. All tires to be used must be easily identifiable with a color marking or a numerical system, to be applied by the official supplier at the time of manufacturing.
- d. The official supplier shall provide the Technical Director with a written description of the markings and the general characteristics of the different types of tires.
- e. At the beginning of the event, the official supplier may be requested by the Technical Director to deliver to him four (4) samples of each type of tire to be used at the event.
- f. Any modification of the tread pattern by the official supplier is not permitted after the start of the practices.
- g. Any modification or treatment (cutting, grooving) is forbidden.
- h. Every tire used during the event must be marked with an adhesive sticker with a number allocated by the Technical Director.

- i. Tire allocation stickers must be applied on the left side of each tire by the entrant.
- j. The tire stickers will be given to the teams in a sealed envelope before the first practice after the rider's machine has passed technical pre-inspection. The rider is solely responsible for the use and safe keeping of the tire stickers.
- k. The use of motorcycles without the official stickers will be immediately reported to the Race Direction who will take appropriate action.
- l. The allocation of individual tires will be made on a random basis, with no involvement of any representative from the tire supplier, teams, or riders. Those tires will be individually identified and may not be exchanged between riders, including between teammates, and may not be exchanged by the tire supplier after the allocation, except with the permission of the Race Direction.
- m. In exceptional cases, should the sticker be damaged or applied in the wrong way, up to two (2) extra stickers may be provided at the sole discretion of the Technical Director. However, the damaged sticker must be returned to the Technical Director and/or the tire it was applied to and must be intact and unused.
- n. The Technical Director may, at his discretion, require the exchange of one (1) or more competitors' tire(s) for a tire sample under his control. The tires exchanged remain under his control and he can exchange them for the tires of another competitor.

2.3.8.1 Tire allocations by class

- a. The Technical Director and/or Race Direction has the ability to modify the tire allotments based on the official schedule; this modification will be noted in the event supplementary regulations. During a normally scheduled event, the tire allotments will be as follows:

Class	Single Race Event	Two-Race Events And Extended	Three-Race Events
Superbike	N/A	14	16
Supersport	N/A	12	N/A
Stock 1000	N/A	12	N/A
Twins Cup	N/A	10	N/A
Junior Cup	N/A	8	N/A

2.3.9 Engine Sealing

- a. The total number of engines that a rider may use during the entire championship is Free.
- b. The Technical Director or his appointed staff must be notified of all engine changes and therefore always know which engine is in current use.
- c. Engines may be sealed by the Technical Director or by his appointed staff at any time during an event.
- d. Seals will bear a serial number, which will be recorded.
- e. Any attempt made to remove the seal will damage it irreparably. All seals, including the seals on an engine that has completed its life cycle or is in need of repair can only be broken by the Technical Director or his appointed staff. At the time of the breaking of the seals the Technical Director may ask for this engine to be disassembled to check for compliance with the technical rules for the relevant class.

- f. The crankcases will be sealed in such a way not to allow the disassembly for repair, replacement, or adjustment of the crankshaft, connecting rods and/or associated bearings, pistons, piston pins or piston rings.
- g. The cylinder, cylinder head(s) and head cover/cam cover will be sealed to prevent repairs, replacement or adjustment on the cylinder head, valve, valve seats or any other repairs or service work on the valve train.
- h. The cassette gearbox door and/or crankcases will be sealed to control the gearbox use.
- i. The right and left engine side covers will not be sealed to allow repair or adjustment to the ACG, clutch system, water pump or other accessory systems located behind these covers.
- j. If an engine is found not to be in compliance with the regulations, any penalties imposed will apply retrospectively to each race this engine was used in.
- k. The sealed engine will be granted 3 race weekends for use.
- l. The technical director can adjust the timeframe for extraordinary circumstances.

2.3.10 Ballast

- a. The use of ballast is allowed to comply with the minimum weight limit. The use of ballast must be declared to the Technical Director at the preliminary checks.
- b. The ballast must be made of (a) solid metallic piece(s) firmly and securely connected either through an adapter or directly to the main frame or engine with a minimum of two (2) steel bolts (min. 8 mm diameter, 8.8 grade or over). Other equivalent technical solutions must be submitted to the Technical Director for his approval.
- c. Fuel in the fuel tank can be used as ballast. Nevertheless, the verified weight may never fall below the required minimum weight.

2.3.11 Timekeeping instruments

All motorcycles must have a correctly positioned timekeeping transponder.

- a. Teams must provide their own transponder. MotoAmerica will not provide transponders.
- b. The transponder must be approved by the official timekeeper. See Team Handbook for compatible models.
- c. The transponder should be fitted centrally on the machine and as low to the ground as possible avoiding being shielded by bodywork. The manufacture suggested direction of the transponder should also be respected.
- d. It is the team's responsibility to ensure that the transponder is in an optimal position and working properly. Any machine without a working transponder is not allowed on the circuit.

Correct attachment of the transponder bracket consists of a minimum of tie-wraps but preferably consists of screws or rivets. Any transponder retaining clip must also be secured by a tie-wrap. Velcro or adhesive alone will not be accepted. The transponder must be always working during practices, qualifying, and races, also when the engine is switched off.

2.3.12 Wings and Aerodynamic Aids

Wings and other aerodynamic aids will only be considered legal if originally fitted to the homologated road specification machine in all of Europe, Japan and North America. For race use the wings must follow the dimensions, profiles, and positions of the homologated shapes exactly (+/-1mm). For copies of the OEM parts the leading edges

(including end plates) must have a minimum circumference of 4mm and must have a rounded end (8mm radius) or be enclosed / integrated into the fairing.

The OEM parts may be used 'as is' with the exception that the wing root and 10mm from the end face maybe be modified to allow mounting to the (race) fairing. This may not be in the form of an extension and the size of the wing will be measured with reference to the face of the wing root.

The wing must be fitted in the same 'relative' position (accepting the tolerance allowed for the fairing) and the angle of attack must be within +/-4° of the original angle of attack relative to the chassis.

For active or dynamic aerodynamic parts, ONLY the standard homologated mechanism may be used. The range of movement must be the same as that used by the homologated road machine in normal use - not the mechanical maximum.

The Technical Directors decision will be final.

2.3.13 Crash Protection

Crash protection may be fitted to the frame, using existing mounting points, or pressed into the ends of the wheel axles. Wheel axles may not be modified for the fitment of crash protection. (this does not apply to SBK or Twins Cup). Crash protection (frame sliders) may not provide an aerodynamic advantage unless originally fitted to the homologated machine see art. 2.3.10.

2.3.14 Homologated Parts

Homologated parts are the OEM parts supplied fitted to the machine during manufacture and as delivered. Unless stated otherwise these parts may not be remade, refinished, treated, coated, or modified in any way.

Parts from different homologations may not be used on machines from another homologation including when sharing the model name but excepting when the part is superseded for production reasons and also accepted by the FIM.

See FIM homologation rules for details.

2.3.15 Approved Parts

All approved parts must be approved by the Technical Director before they are allowed to be used. The approved part list can be found at:
<http://www.motoamericaregistration.com/competitor-info/>

2.4 SUPERBIKE TECHNICAL SPECIFICATIONS

The following rules are intended to give freedom to modify or replace some parts in the interest of safety, research and development and improved competition between various motorcycle concepts.

EVERYTHING THAT IS NOT AUTHORIZED AND PRESCRIBED IN THIS RULEBOOK IS STRICTLY FORBIDDEN

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

Superbike motorcycles require an FIM homologation (see FIM homologation procedure for Superstock, Supersport and Superbike motorcycles). 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.

Once a motorcycle has obtained the homologation, it may be used for racing in the corresponding class for a maximum period of 8 years (see Homologation art 1.4.4), or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

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

2.4.1 **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.

2.4.2 **Engine configurations and displacement capacities**

The following engine configurations comprise the Superbike class.

Over 750cc up to 1000cc	4 stroke	3- and 4-cylinder
Over 850cc up to 1200cc	4 stroke	2- cylinder

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

2.4.3 **Balancing various motorcycle concepts**

To equalize the performance of motorcycles with different engine configurations, an air restrictor may be applied according to their respective racing performances.

This handicap is applied only to the '1200cc 2-cylinder' motorcycles.

A new 2-cylinder entry will not be included in the 'Balancing various motorcycle concepts' rules until the performance is proven during the first two years of use

in the MotoAmerica Superbike Championship. In the case that a new 2-cylinder entry wins a race in the Dry in the first year, restrictors will be applied from the start of the second year.

A new 2-cylinder entry is considered an entry by a new manufacturer to the championship, not a new model of machine from an existing manufacturer.

The air restrictor handicap will be applied according to the relevant provisions described in Art 2.4.3.3: the size of the intake ports will be changed by means of air restrictors. These changes to the size of the air restrictor diameter will be applied in 2 mm steps.

Each racing season will begin with the same balancing level as the preceding season finished.

The MotoAmerica Permanent Bureau can at any time modify the handicap system to ensure fair competition.

2.4.3.1 Balancing calculation

a. After three events, the best manufacturers of the 1000cc 4-cylinders and 1200cc 2-cylinders will be selected according to the sum of the points of the best two riders for each manufacturer.

b. By taking the race points of the riders of the selected 1000cc 4-cylinder manufacturer and of the selected 1200cc 2-cylinder manufacturer in each race, an average will be calculated after every event, the '*event average*'.

If in any of the races there is only one finisher from one of the selected manufacturers, the '*event average*' will be calculated from the first rider of each selected manufacturer in each race.

No '*event average*' points will be calculated if one of the selected manufacturers has no finishers. The '*event average*' will then be calculated based on the results of the other race from the same event.

If neither race has any finishers from one of the selected manufacturers, the event will not be considered.

c. 'Wet' races (as declared by the Race Direction) are not taken in account for the calculation of an '*event average*'.

2.4.3.2 Air restrictors for 1200cc 2-cylinders

Application: Only the 1200cc 2-cylinder engines may be fitted with air restrictors. Should a restrictor be required, then the first restrictor size to be installed will be equivalent to a Ø52mm circular area. Air restrictor size will be adjusted in steps equivalent to a change of 2mm in diameter, between Ø52mm and to a minimum of Ø46mm (None <> Ø52mm <> Ø50mm <> Ø48mm <> Ø46mm), if needed during the Championship, as described below in Art. 2.4.3.4

Definition: An air restrictor is a metallic device with a tract of constant controlled section which is placed in the induction tract between the 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 part of the fuel injection system (injector, needle, slide, etc.) shall extend through the restrictor.

The manufacturer must supply the FIM/MotoAmerica with 10 sets of plug-calibers (-gauges) to check the diameter of the air restrictor when using one of the prescribed sizes (Ø52, Ø50, Ø48, Ø46 mm).

A manufacturer may have a non-circular air restrictor, provided that the area of this restrictor is equivalent to the area of a nominal circular restrictor. In this case, the manufacturer must supply the FIM/MotoAmerica with 10 sets of plug-calibers (-gauges) for measuring the restrictor during the technical verifications.

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

2.4.3.3 Air restrictor adjustment

The minimum air restrictor size is increased or decreased in 2 mm steps in diameter of equivalent circular area, according to the following procedure:

a. If the gap in the average value of '*event averages*', calculated as described in article 2.4.3.1 is more than 5 points in favor of the 1000cc 4-cylinder manufacturer, and

If a rider of a 1000cc 4-cylinder motorcycle is leading the riders' MotoAmerica Superbike Championship standings at that time, then the initial air restrictor size of all the 1200cc 2-cylinder motorcycles will be increased by one size, or as a last step, the air restrictor will be withdrawn.

- b. If the resulting gap of the average value of 'event averages', calculated as described in article 2.4.3.1, is more than 5 points in favor of the 1200cc 2-cylinder manufacturer, and

If a rider of a 1200cc 2-cylinder motorcycle is leading the riders' MotoAmerica Superbike Championship standings at that time, then

The initial air restrictor size of the 1200cc 2-cylinder manufacturers will be reduced by one size, or as a last step, to a minimum of Ø46 mm (or the equivalent area 1661.9 mm²).

If the air restrictor size is not updated, then the results of three more events will be considered and the best manufacturers for each engine configuration will be updated considering the sum of points of the best two riders from each selected manufacturer over six events and updated every third event. A new average value of the 'event averages' will be calculated over six events, until the points gap of the average value of the 'event averages' from the last minimum weight update is higher than 5 points.

The MotoAmerica Technical Director will inform all the teams about the possible air restrictor size adjustments, within 24 hours from the end of the last event, where the average value of the 'event averages' was calculated. The new air restrictor size adjustments must be applied from the first following event.

2.4.4 Minimum weight

All machines 168kg (370.5lbs)

At any time during the event, the weight of the whole motorcycle (including the tank and its contents) must not be less than the minimum weight.

There is no tolerance on the minimum weight of the motorcycle.

During the final technical inspection at the end of each 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 ballast and weight handicap must be declared to the Technical Director at the preliminary checks.

2.4.5 Numbers and number plates

Numbers must be easily legible, in a clear simple font and contrast strongly with the background color. Backgrounds must be of one single color over an area large enough to provide a minimum clear area of 25 mm around the numbers.

The sizes for all the front numbers are:	Minimum height:	140 mm
	Minimum width:	80 mm
	Minimum stroke:	25 mm
	Minimum space	
	between numbers:	10 mm

The sizes for all the side numbers are:	Minimum height:	120 mm
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Minimum width:	70 mm
Minimum stroke:	20 mm
Minimum space between numbers:	10 mm

The allocated number (& plate) for the rider must be affixed on the motorcycle as follows:

- a. Once on the front, either in the center of the fairing or slightly off to one side; the number must be on a strongly contrasting background. No advertising is allowed within 25mm in all directions.
- b. Once on each side of the lower rear portion of the lower fairing. The number must be on a strongly contrasting background with no advertising within 25mm in all directions.
- c. Any outlines must be of a contrasting color and the maximum width of the outline is 3mm. The background color must be clearly visible around all edges of the number (including outline). Reflective or mirror type numbers are not permitted.
- d. Numbers cannot overlap

In case of a dispute concerning the legibility of numbers, the decision of the Technical Director will be final.

2.4.6 Fuel

- a. The designated fuel is VP Racing Fuels MGP.
- b. Please refer to Article: 2.10 for additional details

2.4.7 Tires

- a. The maximum number of tires, of any type, available to each rider during the event will be specified in Article: 2.3.7.1
- b. A maximum of 11 tires per rider can be mounted at any time.
- c. For Superbike races only, wet tires will not need to be marked with a tire sticker. They will not be considered in the total number of tires available for use; however normal allocation limits still apply.
- d. Qualifying tires will be allocated and can only be used during the session designated on the official tire allocation document. If the qualifying tire is used during any other session, the rider will lose his qualifying time and must start from the back of the grid.
- e. During free practices, qualifying practices, warm-up sessions and races, front and rear tires are required to be marked with tire stickers.
- f. See article. 2.3.7

2.4.8 Engine

The following engine specifications and components may not be altered from the homologated motorcycle except as noted:

- a. The homologated engine design model cannot be changed.
- b. The method of cam drive must remain as homologated.
- c. The method of valve retention must remain the same as the homologated model. No pneumatic valve retention devices are allowed unless fitted to the homologated model.
- d. 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 two (2) cylinders is also forbidden if not adopted on the homologated motorcycle. Up to five (5) degrees firing difference in two (2) cylinders is regarded as 'simultaneous' firing.

2.4.8.1 Fuel injection systems

'Fuel injection systems' refers to the throttle bodies, fuel injectors, variable length intake tract devices, fuel pump, and fuel pressure regulator.

- 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 may be altered or replaced.
- d. Primary throttle valves cannot be changed or modified.
- e. Secondary throttle valves and shafts may be removed or fixed in the open position and the electronics may be disconnected or removed.
- f. Variable intake tract devices cannot be added if they are not present on the homologated motorcycle, and they must remain identical and operate in the same way as the homologated system. All the parts of the variable intake tract device must remain exactly as homologated (except the air funnels). Variable intake tract devices may be replaced with fixed air funnels.
- g. Air and air-fuel mixture must go to the combustion chamber exclusively through the throttle bodies.
- h. Electronically controlled throttle valves, known as 'ride-by-wire', may be only used if the homologated model is equipped with the same system.
- i. If the variable intake tract actuation mechanism mounts or fuel injector mount is an integrated part of the air funnel, then those parts alone may be redesigned maintaining the exact geometry of the original parts.

2.4.8.2 Cylinder head

The cylinder head must be the originally fitted and a homologated part. The following modifications are allowed:

- a. The cylinder head must begin as a finished production part using homologated materials and castings. Material may only be added by epoxy or removed by machining. No machining or modification is allowed in the cam box / valve mechanism area.
- b. The intake and exhaust system including the number of valves and/or ports (intake and exhaust) must be as homologated.
- c. Porting and polishing of the cylinder head normally associated with individual tuning such as gas flowing of the cylinder head, including the combustion chamber, is allowed. Epoxy may be used to shape the ports.
- d. The throttle body intake insulators may be modified.
- e. The compression ratio is free.
- f. The combustion chamber may be modified.
- g. Valves must remain as homologated.
- h. Valve seats can be modified or replaced for repair. The material must remain as homologated.
- i. Valve guides must remain as homologated. Modifications in the port area are

allowed by machining.

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

2.4.8.3 Camshaft

- a. Camshafts may be altered or replaced from those fitted to the homologated motorcycle.
- b. Offsetting the camshaft is not allowed. The camshaft must remain in the homologated location.

2.4.8.4 Cam sprockets or cam gears

- a. Camshaft sprockets, pulleys or gears may be altered or replaced to allow degreeing of the camshafts.
- b. The cam chain or cam belt tensioning device(s) can be modified or changed.
- c. The cam chain may be altered or replaced but must remain the same type.

2.4.8.5 Cylinders

- a. Cylinders must be the originally fitted and homologated part with no modification allowed.
- b. The cylinder base gasket(s) may be changed.
- c. The top face of the cylinder may be ground to adjust deck height.

2.4.8.6 Pistons

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

2.4.8.7 Piston rings

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

2.4.8.8 Piston pins and clips

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

2.4.8.9 Connecting rods

- a. Connecting rods may be altered or replaced from those fitted to the homologated motorcycle. The weight must be the same or greater than the original homologated part.
- b. The material must be the same type as the homologated item (e.g. steel, titanium, alloy) or steel.
- c. If the original connecting rod is fitted with a little end insert, then the replacement

connecting rods may also have an insert of the same material as fitted in the original homologated connecting rod.

- d. If the original homologated connecting rod is not fitted with a little end insert, then the replacement connecting rods may be fitted with an insert of the same material as the connecting rod or steel.
- e. The center to center (little end to big end) length of the rod must be the same as the original homologated item.
- f. Connecting rod bolts are free
- g. From 2019 for any newly homologated machine the following applies:
 - i. The connecting rod must be the originally fitted and homologated part with no modification allowed.
 - ii. Connecting rod big end bolts may be changed but must be of the same weight or heavier, same material or of higher specific weight material.
 - iii. The weight of the connecting rod assembly is the homologated weight (normally the weight of the middle weight rod) with a tolerance of +/-3%.

2.4.8.10 Crankshaft

Only the following modifications are allowed to the homologated crankshaft:

- a. Bearing surfaces may be polished.
- b. Surface treatments may be applied to the crankshaft.
- c. Balancing is allowed but only by the same method as the homologated crankshaft. For example, heavy metal (i.e. Mallory metal inserts), is not permitted unless originally specified in the homologated crankshaft.
- d. The addition or reduction in weight of the crankshaft to reach a racing balance can be no higher than **3%** of the homologated weight without the tolerance as shown on the homologation specification of the crankshaft.
- e. The balancing must be performed by the original method (e.g. drilling or machining) and in the same position (e.g. edge of flywheels).
- f. Polishing of the crankshaft is not allowed.
- g. Balance shaft must remain as homologated. No modifications are allowed.

2.4.8.11 Crankcase / Gearbox housing

- a. Crankcases must be the originally fitted and homologated part with no modification allowed. If the crankcases have integral cylinders, then the top face of the cylinder may be machined to adjust deck height. Oil spray nozzles may be modified. No other modifications are allowed (including painting, polishing and lightening).
- b. It is not allowed to add a pump used to create a vacuum in the crankcase. If a vacuum pump is installed on the homologated motorcycle, then it may be used only as homologated.
- c. Oil-pan (sump) may be altered or replaced, and oil pick up may be altered or replaced.
- d. One threaded port may be altered for direct oil pressure/temperature sensor fitting in the crankcases or engine covers. See 2.4.10.1/k./iv.
- e. The oil breather cover must remain as homologated, but the internal breather/damper plate can be modified or replaced.

2.4.8.11.1 Lateral covers and protection

- a. Lateral (side) covers may be altered, modified, or replaced (excluding pump covers). If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of the same or higher specific weight and the total weight of the cover must not be less than the original one.
- b. Titanium bolts may be used to fasten lateral covers.
- c. Oil containing engine covers cannot be secured with aluminum bolts.
- d. 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 metal such as aluminum alloy, stainless steel, steel or titanium. Each side (left and right) of the engine must have at least one (1) protective cover installed on the farthest protruding engine cover containing oil. Composite covers are not permitted. FIM approved covers will be permitted without regard of the material or dimensions.
 - i. The secondary cover must cover a minimum of 1/3 of the original cover. It must not have sharp edges that could damage the track surface. Covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcases.
 - ii. Heavy duty engine case covers may be used in lieu of secondary case covers.
 - iii. The Technical Director has the right to refuse any cover not satisfying this safety purpose.
- e. Plates or crash bars from aluminum or steel also are permitted in addition to these covers. All of these devices must be designed to be resistant against sudden shocks, abrasions and crash damage.

2.4.8.12 Transmission / Gearbox

- a. **Only one (1) set of gearbox ratios will be allowed for the whole season. The ratios can be freely chosen.**
 - i. **The ratios chosen by the team (individually and separately for each entry) must be declared before the start of the first event of the season for permanent entries.**
 - ii. **For wildcard or one-event entries, the ratios must be chosen prior to the participant's first event.**
 - iii. **In all cases, the ratios chosen are per rider for a specific homologated motorcycle and cannot be changed during the season. Switching between sub models of the same manufacturer will not allow a new nominated ratio. The decision of the technical director is final.**
 - iv. **If a rider changes the homologated motorcycle during the season, the ratios must be chosen prior to the first event.**
- b. **Only the homologated primary gear ratio may be used (see Art. 2.4.8.13).**
- c. **The layout of the transmission shafts must be the same as on the homologated motorcycle.**
- d. **The gear design and material are free.**
- e. **The selector drum and complete gear index mechanism are free.**
- f. **The selector forks may be changed. However, the forks must engage with the same gears and function in the same way as on the**

homologated motorcycle (i.e. no dog boxes if not fitted as standard).

- g. **Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.**
- h. **The sprocket cover may be modified or eliminated.**
- i. **An external neutral selection mechanism may be fitted.**
- j. **Seamless shift gearboxes are not allowed. Should the homologated base model be originally fitted with a seamless shift gearbox then the complete homologated gearbox assembly may be used with no modifications allowed excepting surface finish.**

2.4.8.13 Clutch

- a. **Aftermarket or modified clutches are permitted (including plates/springs etc).**
- b. **Back torque limiter is permitted.**
- c. **No power source (i.e. hydraulic or electric) can be used for clutch operation, if not installed in the homologated model for road use. Human power is excluded from the ban.**
- d. **Clutch system (wet or dry type), type (multiplate) and method of operation (cable/hydraulic) must remain as homologated.**
- e. **Clutch basket may be changed. If the clutch basket has the primary gear integrated, then the primary gear must retain the original number of teeth and tooth form.**

2.4.8.14 Oil pumps and oil lines

- a. The originally fitted and homologated oil pump must be used. The oil pressure relief spring is free.
- b. Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of braided reinforced construction with swaged or treaded connectors.

2.4.8.15 Cooling System

- a. The only liquid engine coolant permitted is water.
- b. The water pump must remain as homologated.
- c. The original radiator or oil cooler may be altered or replaced from those fitted to the homologated motorcycle.
- d. Additional radiators or oil coolers may be added.
- e. The original oil/water heat exchanger may be modified, replaced or removed.
- f. The cooling system hoses and catch tanks may be changed.
- g. The radiator fan and wiring may be changed, modified or removed.
- h. The oil cooler must not be mounted on or above the rear mudguard.
- i. The appearance from the front, rear and profile of the motorcycle must in principle conform to the homologated shape after the addition of additional radiators or oil coolers.

2.4.8.16 Air box

- a. The air box must be the originally fitted and homologated part with no modification

allowed except as noted in the following:

- i. If the homologated air box is used to mount top type fuel injectors, then the air box and the attached systems must remain as homologated.
 - ii. If the homologated air box is used to mount variable intake tract devices, then the air box and the attached systems must remain as homologated and function in the same way (excepting the air funnels – see article 2.4.8.1).
 - iii. If used, variable intake tract devices must function in the same way as on the homologated system (see article 2.4.8.1).
- b. Air filters, internal flap type valves, sensors and vacuum fittings may be removed, modified or replaced with aftermarket parts. Should any modification be required for the fitment of these parts it will be at the discretion of the Technical Director.
 - c. Any holes in the air box to the outside atmosphere resulting from the removal of components must be completely sealed from incoming air.
 - d. The air box drains must be sealed.
 - e. Ram air tubes or ducts running from the fairing to the air box may be modified, replaced, or removed. If tubes/ducts are utilized, they must be attached to the original, unmodified air box inlets.
 - f. All motorcycles must have a closed breather system. All the oil breather lines must be connected (may pass through an oil catch tank) and exclusively discharge in the air box.
 - g. If the top of the air box is formed by the bottom of the tank, then that part of the tank will be considered as the air box and must conform to its homologated shape excepting two (2) mm variance in corner radii and must be the same volume. A dry-break / quick-release connector may be fitted (see article 2.4.8.17).
 - h. Additional heat shielding is allowed to be applied to the lower face / side of the air box (i.e. foil heat tape).

2.4.8.17 Fuel Supply

- a. The 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. The pressure tolerance at the technical control is +/- 0.5 bar in respect to the maximum pressure of the homologated motorcycle. All motorcycles must have a special device on the fuel line in accordance with FIM specifications for fuel pressure checks, or teams must provide a temporary adaptor to allow checks.
- c. Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced and must be located in such a way that they are protected from crash damage.
- d. Quick connectors or dry break connectors may be used.
- e. Fuel vent lines may be replaced.
- f. Fuel filters may be added.

2.4.8.18 Exhaust system

- a. Exhaust pipes, catalytic converters and silencers may be altered or replaced from those fitted to the homologated motorcycle. 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) as on the homologated model.
- c. For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) 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.

The noise limit for Superbikes will be 115 dB/A (with a 3 dB/A tolerance after the race only) measured at 6000rpm (4-cylinder) and 5500rpm (2-, 3- cylinder).

The test will be carried out according to the details noted in Article 2.14

2.4.9 Electronic control system

- a. The engine control system (including ECU) must be either:
 - i. A DWO/FIM approved "Superbike Kit" system (See art 2.4.9.1)
 - ii. A MotoAmerica approved "Superbike Kit" system (See art 2.4.9.2)
 - iii. The homologated ECU with or without software changes (See art 2.4.9.3)
 - iv. DWO/FIM approved "Superstock 1000" kit model
- b. The central unit (ECU) may be relocated.
- c. The original speedometer and tachometer may be altered or replaced.
- d. The wiring harness is free.
 - i. Each team must provide a download connection lead to the Technical Director.
- e. Telemetry (remote signals to or from the bike) is not allowed.
- f. 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.
- g. Spark plugs, spark plug caps and HT leads (if applicable) are free.
- h. Battery is free.

2.4.9.1 The DWO/FIM approved "Superbike Kit" system must meet the following:

- a. The system must be a complete package including all electrical / electronic parts not supplied on the homologated motorcycle required for full operation of all strategies – except the wiring harness.
- b. Only the machine manufacturer or one approved partner can submit a single system for approval.
- c. The total price of the complete system including ECU, dashboard/display, all additional sensors essential for full operation of all strategies, IMU, software, enable codes, data logging, analysis software, ECU 'tuning' or 'setting' software, data logger, download/connection cable, example harness design, manual for use, (not a complete list), is €8000 Euro (excluding taxes). Data logging only sensors are excluded from the price cap.
- d. There must be at least 50 "Superbike Kit" systems (currently approved system) available worldwide per season, if ordered, through authorized distributors or dealers. The "Superbike Kit" system must be marked and considered as for race use only.
- e. Lead time less than 8 weeks
- f. No other external ignition/injection controllers, traction control modules or other active expansion modules or calculation units may be fitted.
- g. The ECU must be from the FIM/DWO approved superbike ECU list.
- h. The following sensors may be used:
 - 1. Throttle position (multiple)

2. Map sensor, map sync (pressure sensor on the intake port used to synchronize the engine during the start)
 3. Air box pressure
 4. Engine pick-ups (cam, crank) (Crank trigger may be replaced.)
 5. Lambda
 6. Exhaust valve/motor position/feedback
 7. Twist grip position
 8. Front speed
 9. Rear speed
 10. Gearbox output shaft speed
 11. Gear position
 12. Gear shift load cell
 13. Front brake pressure
 14. Rear brake pressure
 15. Oil pressure
 16. Air pressure
 17. Water temperature
 18. Air temperature
 19. IMU (various signals)
 20. Transponder / lap time signal
 21. Knock sensor
 22. Fuel pressure
 23. Oil temperature
 24. Fork position
 25. Shock position
 26. Tilt / tip-over switch
 27. GPS unit
 28. Rear tire temperature (external) (multiple)
 29. Rear tire monitor (temperature and pressure)
 30. Front tire monitor (temperature and pressure)
- i. Sensors on the above list that are originally fitted to the standard machine may be replaced with alternative sensors, however they must be included in the Superbike Kit System and inside the total price (article 2.4.9.1.c).
 - j. Two (2) additional sensor channels (that are not included in the above list) may be added to the machine. These sensors must be declared to the Technical Director, they may be changed only between meetings and if changed a new declaration must be made.
 - k. Redundant/doubled sensors are allowed but must be included in the "Superbike Kit" system if they are required for safe operation.
 - l. Analog/logic to CAN sensors are allowed.

- m. The sensors originally fitted to the homologated machine and used as homologated, will not be included in the price limit.
- n. When the following sensors are damaged through crashes, they may be replaced by parts of the same function but do not have to be the same specific part from the “Superbike Kit” system:
 - i. Fork and shock potentiometers
 - ii. Brake pressure sensors
 - iii. Gear shift sensor (but must remain the same type included with the kit – i.e. load cell, switch, etc.)
- o. Before the pre-season test, before the mid-season test(s) or at the season midpoint and within three hours of the last race of the season any firmware / software updates being used by the factory teams must be made available to all same manufacturer customer SBK teams (more frequent updates are allowed).
- p. The manufacturer must provide current strategies but may remove the ability to change or see these settings. Base mapping must be provided.
- q. Only firmware and software from the FIM/DWO approved software and firmware list may be used.
- r. Factory teams may use any development firmware and software which will be made available to teams according to the update schedule.
- s. Any essential hardware updates required must be made available to customer teams from the same race as the factory team and available free of charge to update those “Superbike Kit” systems purchased in the current season.
- t. The transponder is NOT included in the “Superbike Kit” system.
- u. The selection of logged channels is free.
- v. Coils and coil drivers are free and must be included in the “Superbike Kit” system if altered.
- w. No other external ignition/injection controllers, traction control modules or other active expansion modules or calculation units may be fitted unless included in the Superbike System.
- x. The factory teams must use the current season’s “Superbike Kit System”. No backdated parts may be used.
- y. Superbike kit systems remain approved for three (3) seasons (first season inclusive).

Manufacturer nominated “Superbike Kit” system suppliers please also see “Superbike Kit System Approval Requirements” documentation.

2.4.9.2 The MotoAmerica approved “Superbike Kit” system must meet the following:

- a. The system must be the MoTec M130 spec system with MotoAmerica approved activations. See Technical Bulletin 01-2019.
- b. There must be at least 50 “Superbike Kit” systems (currently approved system) available worldwide per season, if ordered, through authorized distributors or dealers. The “Superbike Kit” system must be marked and considered as for race use only.
- c. Lead time less than 8 weeks
- d. No other external ignition/injection controllers, traction control modules or other active expansion modules or calculation units may be fitted.

- e. The ECU must be from the MotoAmerica approved superbike ECU list.
- f. The following sensors may be used:
 - 1. Throttle position (multiple)
 - 2. Map sensor, map sync (pressure sensor on the intake port used to synchronize the engine during the start)
 - 3. Air box pressure
 - 4. Engine pick-ups (cam, crank) (Crank trigger may be replaced.)
 - 5. Lambda
 - 6. Exhaust valve/motor position/feedback
 - 7. Twist grip position
 - 8. Front speed
 - 9. Rear speed
 - 10. Gearbox output shaft speed
 - 11. Gear position
 - 12. Gear shift load cell
 - 13. Front brake pressure
 - 14. Rear brake pressure
 - 15. Oil pressure
 - 16. Air pressure
 - 17. Water temperature
 - 18. Air temperature
 - 19. IMU (various signals)
 - 20. Transponder / lap time signal
 - 21. Knock sensor
 - 22. Fuel pressure
 - 23. Oil temperature
 - 24. Fork position
 - 25. Shock position
 - 26. Tilt / tip-over switch
 - 27. GPS unit
 - 28. Rear tire temperature (external) (multiple)
 - 29. Rear tire monitor (temperature and pressure)
 - 30. Front tire monitor (temperature and pressure)
- g. Sensors on the above list that are originally fitted to the standard machine may be replaced with alternative sensors, however they must be included in the Superbike Kit System and inside the total price (article 2.4.9.2.b).
- h. Two (2) additional sensor channels (that are not included in the above list) may be added to the machine. These sensors must be declared to the Technical Director, they may be changed only between meetings and if changed a new declaration must be made.

- i. Redundant/doubled sensors are allowed but must be included in the “Superbike Kit” system if they are required for safe operation.
- j. Analog/logic to CAN sensors are allowed.
- k. The sensors originally fitted to the homologated machine and used as homologated, will not be included in the price limit.
- l. When the following sensors are damaged through crashes, they may be replaced by parts of the same function but do not have to be the same specific part from the “Superbike Kit” system:
 - i. Fork and shock potentiometers
 - ii. Brake pressure sensors
 - iii. Gear shift sensor (but must remain the same type included with the kit – (i.e. load cell, switch, etc.)
- m. Before the pre-season test, before the mid-season test(s) or at the season midpoint and within three hours of the last race of the season any firmware / software updates being used by the factory teams must be made available to all same manufacturer customer SBK teams (more frequent updates are allowed).
- n. The manufacturer must provide current strategies but may remove the ability to change or see these settings. Base mapping must be provided.
- o. Only firmware and software from the MotoAmerica approved software and firmware list may be used.
- p. Any essential hardware updates required must be made available to customer teams from the same race as the factory team and available free of charge to update those “Superbike Kit” systems purchased in the current season.
- q. The transponder is NOT included in the “Superbike Kit” system.
- r. The selection of logged channels is free.
- s. Coils and coil drivers are free and must be included in the “Superbike Kit” system if altered.
- t. No other external ignition/injection controllers, traction control modules or other active expansion modules or calculation units may be fitted unless included in the Superbike System.
- u. The factory teams must use the current season’s “Superbike Kit System”. No backdated parts may be used.
- v. Superbike kit systems remain approved for three (3) seasons (first season inclusive).

2.4.9.3 Homologated ECU and DWO/FIM approved ‘Superstock 1000’ kit model.

- a. The originally fitted and homologated ECU may be used with or without software changes.
 - i. The homologated ECU cannot have any hardware or physical modifications.
 - ii. No extra sensors may be added for control strategies except for shift rod sensors and lambda sensors.
 - iii. Software changes may include, but are limited to, the same control strategies as the “Superbike Kit” system. (See 2.4.9.1)
 - iv. Maximum retail price of the ECU, software and combined or separate data logging systems must meet the same requirements as the DWO/FIM Superstock 1000 kit. (See Article 2.6.9.1-)

- b. For complete DWO/FIM approved Superstock 1000 kit requirements, see article 2.6.9.1

2.4.9.4 Generator, alternator, electric starter

- a. The stator/coils must be the originally fitted and homologated parts with no modification allowed.
- b. The flywheel may be modified or replaced.
- c. The ACG must generate sufficiently to maintain battery charge.
- d. The use of a 'booster' battery is permitted except during parc fermé.
- e. The electric starter must operate normally and always attempt to start the engine during the event.
- f. The starter motor gear system must be the originally fitted and homologated parts. Surface and hardening treatments are allowed.
- g. Motorcycles should self-start on the starting grid in neutral. Push-starting on the starting grid is not allowed, however start line officials may push start the motorcycle if necessary (in gear).
- h. 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.

2.4.10 Main frame and spare motorcycle

- a. During the entire duration of the event each rider may only use one (1) complete motorcycle, as presented for technical control, with the frame clearly identified with a seal.
- b. In case the frame needs to be replaced, the rider or the team must request the use of a spare frame to the Technical Director. **The participants recognize the need for Technical Director to make decisions that require judgment and the exercise of discretion. The decision of the Technical Director is final.**
- c. One (1) spare complete motorcycle is allowed per rider. **The spare motorcycle may only be used once your original frame has been deemed unusable by the Technical Director. (For example, you may not go to your spare motorcycle for a complete engine failure.)**
- d. **The spare motorcycle will not be allowed in the pit box before the rider, or the team has received authorization from the Technical Director.**
- e. **The motorcycle must be inspected before its use by the technical stewards for safety checks and a new seal will be placed on the motorcycle frame.**
- f. A team may opt to have one (1) spare machine shared by two or more riders.

Explanation of Procedures

Only one (1) complete motorcycle may be presented for the preliminary technical checks, and it will be the only motorcycle allowed on the track and in the front of pit box during the practices, qualifying, and races.

The frame of this motorcycle will be officially sealed by the Technical Director or by his appointed staff. The seal will bear a serial number, which will be recorded. Any attempt made to remove the seal will damage it irreparably.

At any time during the event the technical stewards, under the direction of the Technical Director, may check the seal and verify that it conforms to the motorcycle and rider it was assigned to. For cross reference, every frame must have a unique number (VIN)

punched on the steering-head.

If the primary or active motorcycle is damaged in a crash or in any other incident and is declared unrepairable (safely and in the available time) by the Technical Director or his appointed staff, then the seal on the damaged motorcycle will be destroyed by the technical staff and the chassis of this motorcycle must not be used for the remainder of the event. The new serial number will be recorded by the Technical Director.

The spare motorcycle must be of the same manufacturer and same displacement, changes to manufacturer or displacement may be allowed at the discretion of race direction and may be accompanied by grid position penalties.

During set up day (usually the day before first official practice session) no restrictions apply regarding the location of the spare motorcycle. From the start of the first practice session, any spare motorcycle must be kept out of view. It is recommended that team working areas incorporate an area for this purpose. During an event, minor adjustments may be made to the spare motorcycle, the intent being to allow teams to maintain parity with the primary bike.

In the event the spare motorcycle is used in competition, the primary machine is taken out of competition. At that time, the damaged machine must be kept out of view.

The spare machine can only be used in the next session in which the incident occurred rendering the primary bike not able to be used. In a race situation the first opportunity to use the spare machine is the next session or race. A race will be deemed to have begun when the rider exits pit lane for the sighting laps. All restarts, including those three laps or less, are considered a continuation of the original race for determining spare machine eligibility.

The team may rebuild the original primary machine, however only in the case of TOTAL PROVEN WRECKAGE with the spare bike can an application be made to utilize the original machine. The decision of the Technical Director regarding this is final.

The damaged frame may be impounded by the Technical Director for later examination.

2.4.10.1 Frame body and rear sub-frame

- a. The main frame must be the originally manufactured, fitted, and homologated part with only the following modifications allowed.
- b. In all the following cases the main frame may only be altered by the addition of gussets, tubes or plates unless stated otherwise. The additions may be welded or bonded. No gussets or tubes may be removed, other allowed modifications are detailed within the following section of these rules. These additions must be documented by the reference team (or manufacturer).
- c. Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount).
- d. The homologated position (of engine, steering stem or pivots) is considered as the position in which the production motorcycle is supplied. (Fore and aft is considered along the bottom plane of the original bearing seat).
- e. Suspension linkage mounting points on the frame must remain as homologated.
- f. If the original chassis includes adjustable inserts for the engine mounting position then:
 - i. The inserts are free BUT the chassis cannot be modified further (except as mentioned in b).
 - ii. There is no limit to the range of adjustment.
- g. If the original chassis has fixed engine mounts, then the engine must be mounted in the homologated position.

Steering Stem Position:

- h. if the homologated machine has adjustable/exchangeable bearing inserts/bushes for the steering stem position then:
 - i. The inserts/bushes can be used to adjust the fore and aft position of each bearing.
 - ii. No part of these bushings may protrude axially more than 3 mm from the original steering head pipe location, nor may the bearing be inset.
 - iii. A slot and clamp may be machined/added to allow easier bushing exchange. Other positive retention mechanism may be allowed at the discretion of the Technical Director.
 - iv. The chassis cannot be modified further except as mentioned in point b.
- i. If the original chassis has a fixed steering stem position, then the steering stem axis/position may be adjusted by moving the steering head bearings.
 - i. The fore and aft position of each bearing can be a maximum +/-6 mm in respect to the original bearing location (excluding tolerances).
 - ii. The original bearing seats may be modified (ovaled) or increased in diameter to insert special bushings.
 - iii. No part of these special bushings may protrude axially more than 3 mm from the original steering head pipe location, nor may the bearing be inset.
 - iv. The steering head pipe can be reinforced in the area of the bearing seats.
 - v. Welding and machining is allowed for the purpose of making these modifications.

Swingarm Pivot Position:

- j. If the original chassis includes adjustable inserts for the swinging arm pivot axis, then:
 - i. Inserts/bushings are free
 - ii. The chassis cannot be modified further (except as mentioned in b).
 - iii. There is no limit to the range of adjustment.
- k. If the original chassis has a fixed swingarm mounting pivot axis:
 - i. The swing arm pivot axis may be moved a maximum of 5 mm radially (excluding tolerances) measured from the homologated axis.
 - ii. Modifications may be made to the frame at the swing arm pivot area to allow this. Welding and machining is allowed for the purpose of making this modification, regardless of the technology used and the dimensions of the component or section of the frame (i.e.: cast, fabricated, etc.).
 - iii. The method of adjustment is free - e.g. bushings, inserts, offset axles. For machines fitted with exchangeable inserts as standard then the homologated position is considered as the position in which the production motorcycle is supplied.
 - iv. Should this pivot / axle pass through the crankcases then the relevant crankcase mounting hole may be machined larger, no welding or other modifications will be permitted. Crankcases may be machined for swingarm clearance only.
- l. The original lock stops may be removed from the frame body by grinding or machining. However, another form of lock stop must be fitted.

- m. All motorcycles must display a vehicle identification number punched on the frame body (a proper 'legal VIN' or a unique designation by the team to which the Technical Director may choose to append). No detachable plates are permitted.
- n. No polishing or surface refinishing is allowed but the paint scheme is not restricted.
- o. Fairing brackets may be altered or replaced.
- p. Front and rear sub frame may be changed altered or removed.
- q. 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).

2.4.10.2 Suspension - General

- a. Participants in the Superbike class must only use the approved and listed suspension units for that season.
- b. The approved products from the manufacturers must be available to all participants at least one month before the first round of the Superbike season and remain available all season. The products must be available within six (6) weeks of a confirmed order.
- c. Setting parts and tuning parts must be provided by the suspension manufacturers to all customers/teams/participants using the manufacturer's products. These parts can be used by all participants during the season. These parts shall be available for immediate delivery to all teams/customers.
- d. Teams may not modify any part of the forks or shock absorber. All setting parts must be supplied by the suspension manufacturer and available to all teams/riders.
- e. The suspension manufacturers are allowed to offer service contracts when a team is using the approved and listed suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant in order to obtain a suspension product.
- f. Electronic suspension cannot be used.
- g. An electronic controlled steering damper can only be used if installed on the homologated model for road use. However, it must be completely standard (any mechanical or electronic part must remain as homologated).

2.4.10.3 Front Suspension

- a. The front fork in whole or part may be changed but must be the same type homologated (e.g. leading link, telescopic, etc.).
- b. The upper and lower fork clamps (triple clamp, fork bridges) and stem may be changed or modified.
- c. A steering damper may be added or replaced with an 'after-market' damper.
- d. The steering damper cannot act as a steering lock limiting device.

2.4.10.4 Swing-arm (rear fork)

- a. The rear fork may be altered or replaced from those fitted to the homologated motorcycle. However, the type (single or double sided) must remain as homologated.
- b. The use of carbon fiber or Kevlar materials is not allowed if not homologated on the original motorcycle.
- c. Rear wheel stand brackets may be added to the rear fork by welding or by bolts.
- d. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed.

- e. Swing arm spindle (pivot) may be modified or replaced.

2.4.10.5 Rear suspension unit

- a. Rear suspension unit may be changed but a similar system must be used (i.e. dual or mono).
- b. The rear suspension linkage may be modified or replaced.
- c. The original fixing points on the frame (if any) must be used to mount the shock absorber, linkage and/or rod assembly fulcrum (pivot points).
- d. Removable top shock mounts may be replaced. If replaced, they must retain their homologated geometry.

2.4.10.6 Wheels

- a. Wheels may be replaced but not modified (see article 2.3.4) and associated parts may be altered or replaced from those fitted to the homologated motorcycle.
- b. Aftermarket wheels must be made from aluminum (aluminum) alloys.
- c. The use of the following alloy materials for the wheels is not allowed: Beryllium ($\geq 5\%$), Scandium ($\geq 2\%$), Lithium ($\geq 1\%$).
- d. Each specific racing wheel model must be approved and certified according to JASO (Japanese Automotive Standards Organization) T 203-85 where W (maximum design load) of art. 11.1.3 is 195 kg for front wheel and 195 kg for rear wheel, K = 1.5 for front and rear wheels. Static radius of tire: front 0.301 m, rear 0.331 m.
- e. Wheel manufacturers must provide copy of the certificate for their wheel(s) as proof of compliance to the Technical Director when requested.
- f. The homologated road bike wheel and sprocket carrier assembly may be used with no modification irrespective of material. They must meet article 2.4.10.6(d)(e). Bearings and spacers may be changed.
- g. On motorcycles equipped with a double-sided swing arm (rear fork), the rear sprocket and brake rotor must remain on the rear wheel when the wheel is removed.
- h. 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 rim diameter size (front and rear)	17 inches
Front wheel rim width:	3.50 inches
Rear wheel rim width:	6.00 inches

2.4.10.7 Brakes

- a. Participants in the Superbike season must only use the approved and listed front brake parts (calipers, master cylinders, brake discs, brake pads and dry break systems) for that season.
- b. The approved products from the manufacturers must be available to all participants at least one month before the first round of the MotoAmerica Superbike season and remain available all season. The products must be available within four (4) weeks of a confirmed order.
- c. No parts can be added to the approved list during the current season. Performance related updates are not allowed. Any product changes due to manufacturing or material supply issues must be approved in advance.
- d. Front brake master cylinders may be altered or replaced from those fitted to the homologated motorcycle.

- e. Front brake calipers may be altered or replaced from those fitted to the homologated motorcycle.
- f. Rear brake master cylinders may be altered or replaced from those fitted to the homologated motorcycle.
- g. Rear brake calipers may be altered or replaced from those fitted to the homologated motorcycle.
- h. Brake pads or shoes may be altered or replaced from those fitted to the homologated motorcycle.
- i. 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 calipers must be made above the lower fork bridge (lower triple clamp).
- j. Hydraulic anti-knockback systems may be fitted to the brake lines/caliper.
- k. Brake discs may be altered or replaced from those fitted to the homologated motorcycle. Only steel (max. carbon content 2.1 wt. %) is allowed for brake discs. Alloys containing beryllium are not allowed to be used for brake calipers.
- l. The Anti-Lock Brake System (ABS) cannot be used.
- m. The Anti-Lock Brake System (ABS) ECU can be disconnected or dismantled. The ABS rotor wheel can be deleted, modified, or replaced.
- n. Front brake system cooling ducts are allowed.

2.4.10.8 Handlebars and hand controls

- a. Handlebars, hand controls (subject to Art 2.4.8.1) and cables may be altered or replaced from those fitted to the homologated motorcycle.
- b. Cable operated throttles (grip assembly) must be equipped with both an opening and a closing cable including when actuating a remote ride by wire grip/demand sensor.
- c. 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/switch must be red.

2.4.10.9 Footrest and foot controls

- a. Footrests, 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: gearshift and rear brake must remain operated manually by foot.
- c. Footrests 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 footrest must have at least an eight (8) mm solid spherical radius.
- e. Non-folding footrests must have an end (plug) which is permanently fixed, made of aluminum, plastic, Teflon or equivalent type of material (min. radius of eight (8) mm). 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 purpose.

2.4.10.10 Fuel tank

- a. The fuel tank must conform in principle to the homologated appearance and location of the original tank; however, its actual shape can be slightly changed to suit the rider's preference and increased fuel volume. The tank may also be modified below the upper frame line and under the seat.

- b. The tank may be replaced by a fuel cell and a structural cover.
- c. The material of construction of the fuel tank may be altered from the one of the tank fitted to the homologated motorcycle.
- d. All fuel tanks must be filled with fire retardant material (e.g. fuel cell foam), or be fitted with a fuel cell bladder.
- e. Fuel tanks made of composite materials (carbon fiber, aramid fiber, glass fiber, etc.) must have passed the FIM Standards for fuel tanks or be lined with a fuel cell bladder.
- f. Tanks made of composite material must bear the label certifying conformity with FIM Fuel Tank Test Standards. Fuel tanks without a fuel cell bladder must bear a label certifying conformity with FIM Fuel Tank Test Standards. Such labels must include the fuel tank manufacturer's name, date of tank manufacture and name of testing laboratory.
- g. Each manufacturer is required to inform the FIM/CCR Secretariat of its fuel tank model(s) which have passed the FIM test standards, together with a copy of the fuel tank label. Full details of the FIM Fuel Tank Test Standards and Procedures are available from the FIM (See 'Fuel Tank Test Standards' below).
- h. All fuel bladders must conform to the FIA Standard FT3.5-1999, specifically for the chapters 2 (Fuel bladder lifetime), 3 (General requirements), 4 (Fittings and connections), 5 (Sampling and pretreatment), 6 (Testing) and 7 (Performance requirements).

This also includes that, as stated in 3, all fuel bladders should be supplied with a suitable fuel resistant polyurethane foam baffling, conforming to Mil Spec MIL-B-83054, SAE-AIR-4170 or equivalent. This foam shall fill a minimum of 80 % of the volume of the fuel bladder. Where rapid refueling is expected, an anti-static foam conforming to Mil-Spec MIL-F-87260 (USAF) should be employed.

- i. 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.
- j. The original tank may be modified to achieve the maximum capacity of 24 liters, provided the original profile is as homologated.
- k. A cross over line between each side of the tank is allowed (maximum inside diameter 10 mm).
- l. 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.
- m. 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.
- n. The same size fuel tank used in practice must be used during the entire event.

2.4.10.10.1 Fuel tank homologation

- a. Any fuel tanks, made of non-ferrous materials (except for aluminum) must be tested according to the test procedure prescribed by the FIM.
- b. Each manufacturer is responsible for testing its own fuel tank model(s) and will certify that the fuel tank exceeds the FIM test standard, if it has passed the FIM test procedure for fuel tanks.

- c. Each manufacturer must affix a quality and test label on each fuel tank type that is produced for competition use. This quality and test label will be the recognition of a fuel tank model which has passed the FIM test procedure.
- d. All fuel tanks that are made to the same design, dimensions, number of fiber layers, grade of fiber, percentage of resin, etc., must be identified with the same quality and test label.
- e. The quality and test label will include the following information on each label affixed to each fuel tank: name of the fuel tank manufacturer, date of fabrication, code or part number, name of testing laboratory, fuel capacity.
- f. Each manufacturer is requested to inform the FIM/CCR Secretariat of its fuel tank model(s) which have passed the FIM test procedure, with a copy of the quality and test label.
- g. Only fuel tanks that have passed the FIM test procedure will be accepted.

2.4.10.11 Fairing / Bodywork

- a. The fairing, mudguards and body work must conform in principle to the homologated shape as originally produced by the manufacturer. Headlights must be included even when considered external.
- b. The fairing has a tolerance of +/-15mm from the original homologated road fairing, respecting the design and features of the homologated fairing, except for the oil containing portion of the lower fairing, seat area and the area supporting the screen. The front upper fairing section (cowling) above the area of the front wheel cavity (front view) may have its frontal area increased in width by up to 30 mm per side (60 mm overall). It must still conform to the style of the original machine (scaled +/-15 mm planar) incorporating all included design features; however, it may not exceed the homologated maximum width of the fairing side panels (excluding wings). The decision of the Technical Director will be final.
- c. The windscreen may be replaced.
- d. The ram-air intake must maintain the originally homologated shape and dimensions.
- e. The original air ducts running between the fairing to the air box may be altered or replaced from those fitted to the homologated motorcycle. Particle grilles or “wire-meshes” originally installed in the openings for the air ducts may be removed.
- f. The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (min. 5 liters). The lower edge of openings in the fairing must be positioned at least 70 mm above the bottom of the fairing.
- g. There may not be exit air vents in the front half of the lower fairing 40mm below a horizontal centerline between the wheel axles of the machine. The Technical Director may give permission for the lower fairing to have additional vents added if vents have been fitted to meet this and the oil containment requirements.
- h. Any added vents will not allow the exit of air in the front half of the fairing lower if they are behind a water or oil radiator.
- i. Exceptions may be made to 2.4.10.11.f/g with the sole agreement of the Technical Director if a manufacturer produced an FIM approved close fitting, oil containing engine shroud and it is fitted in addition to the belly pan. In this case, OEM shaped air vents will be allowed in the front lower half of the fairing.
- j. Any vents in the fairing lower must have their inner surface leading edge in-line with the trailing edge or overlap to reduce the risk of liquid spraying from the machine.
- k. 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 opened only in wet race conditions, as declared by the race director.

- l. A feature may be built into the shape of the belly pan on its rear lower section. It may not extend around the tire. The maximum dimensions when viewed from below (normally z-minus axis) are 120mm front to rear and 200mm in width. The feature may project 30mm from the bottom of the original belly pan shape. The feature must have rounded edges and must not create a 'plough' action (for safety and to stop issues in the gravel traps). The only aerodynamic effect must be to redirect the airflow laterally around the rear tire. No downforce may be created. If there is any doubt about the aerodynamic effects, then a CFD run of the whole machine (with rider) must be submitted to the Technical Director with and without the feature indicating the resultant forces. The Technical Director's decision on suitability is final.
- m. Minimal changes are allowed in the fairing to permit the use of an elevator (front stand) for wheel changes and to add plastic protective cones to the frame or the engine.
- n. Holes may be drilled or cut in the fairing or bodywork to allow additional increased intake air to the oil cooler. Holes bigger than 10 mm must be covered with a particle grill or fine wire mesh. Grill/mesh must be painted to match the surrounding material.
- o. 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(s). The material is free but the distance between all opening centers, circle centers and their diameters must be constant. Holes or perforations must have an open area ratio > 60%.
- p. If the upper fairing has a rear edge/section that returns to the frame, reducing airflow between the fairing and frame (or sealing the fairing to the frame), then slots/notches may be removed from that area only. No material can be removed from the lateral (side) surfaces of the fairing. A maximum of 50% of the rear face may be removed.
- q. A Gurney flap (lip/deflector) may be fitted at the edge of the lateral air vents or the rear edge of the fairing to increase vent effectiveness. The Gurney flap may project a maximum of four (4) mm from the lateral surface of the fairing and must have a rounded end. It should be formed from the same material and be a molded part of the fairing. The Technical Director's decision on suitability is final.
- r. **The front fender may be replaced with a cosmetic duplicate of the shape of the originally produced part by the manufacturer and may be spaced upward for tire clearance. Front fender mounting points may be altered. The technical Director's decision is final.**
- s. Holes may be drilled in the front mudguard to allow additional cooling. Holes bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- t. A rear fender may be added or removed.
- u. Material of construction of the front mudguard, rear mudguard and fairing is free.

2.4.10.12 Seat

- a. The seat may be altered or replaced from those fitted to the homologated motorcycle. The appearance from front, rear and profile must conform in principle to the homologated shape.

- b. The top portion of the rear body work around the seat may be modified to a solo seat.
- c. Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- d. Material of construction of the seat is free.
- e. All exposed edges must be rounded.

2.4.10.13 Rear safety light

All motorcycles must have a functioning red light mounted at the rear of the machine. This light must be switched on any time the motorcycle is on the track or being ridden in the pit lane and the session is declared WET. All lights must comply with the following:

- a. Lighting direction must be parallel to the machine center line (motorcycle running direction) and be clearly visible from the rear at least 15 degrees to both left and right sides of the machine center line.
- b. The rear light must be mounted near the end of the seat/rear bodywork and approximately on the machine center line, in a position approved by the Technical Director. In case of dispute over the mounting position or visibility, the decision of the Technical Director will be final.
- c. Power output/luminosity equivalent to approximately: 10 – 15 (incandescent), 0.6 – 1.8 W (LED).
- d. The output must be continuous, no flashing safety light is allowed while on track. Flashing is allowed in the pit lane when the pit limiter is active.
- e. The safety light power supply may be separated from the motorcycle.
- f. The Technical Director has the right to refuse any light system not satisfying this safety purpose.

2.4.11 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, seals, and gasket material
- c. Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- d. Fasteners (nuts, bolts, screws, etc.) may be altered or replaced. Internal engine bolts must remain of standard homologated materials or materials of higher specific weight.
- e. Thread repair may be made using inserts of different material such as Helicoils and Timeserts.
- f. External surface finishes and decals

2.4.12 The following items MAY BE removed

- a. Instrument and instrument bracket and associated cables
- b. Tachometer
- c. Speedometer and associated wheel spacers
- d. Chain guard

2.4.13 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. Tool box
- f. Helmet hooks and luggage carrier hooks
- g. Passenger footrests
- h. Passenger grab rails
- i. Safety bars, center and side stand brackets welded to the main frame may be removed.

2.5 SUPERSPORT AND SUPERSPORT NEXT GENERATION TECHNICAL SPECIFICATIONS

The following rules are intended to give freedom to modify or replace some parts in the interest of safety, research and development and improved competition between various motorcycle concepts.

MotoAmerica Supersport Extended Races will follow the Daytona 200 Supplemental Regulations.

EVERYTHING THAT IS NOT AUTHORIZED AND PRESCRIBED IN THIS RULEBOOK IS STRICTLY FORBIDDEN

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

Supersport motorcycles require the relevant FIM Phase 2 homologation (see Appendix FIM homologation procedure). All machines must be normally aspirated. All motorcycles must comply in every respect with all the requirements for road racing as specified in these technical regulations unless they are already equipped as such on the homologated model.

Once a motorcycle has obtained the homologation, it may be used for racing in the corresponding class for a maximum period of 8 years (see Homologation art 1.4.4), or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

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

2.5.1 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.

2.5.2 Engine configurations and displacement capacities

The following engine configurations comprise the Supersport class.

Over 400cc up to 636cc	4 stroke	4 cylinders
Over 500cc up to 800cc	4 stroke	3 cylinders
Over 600cc up to 955cc	4 stroke	2 cylinders

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

Machines outside of these classifications will be considered upon application by the FIM and DWO. They must be equipped with a Ride by Wire throttle system (OEM or as part of a compulsory kit). If approved these machines will be known as Supersport Next Generation Machines. Manufacturers may resubmit currently homologated machines as Supersport Next Generation.

2024: All machines must meet requirements of the Supersport Next Generation regulations

2.5.3 Balancing various motorcycle concepts

- a. To equalize the performance of motorcycles used in the Supersport Championship, a system of performance enhancements or restrictions “balancing factors” may be applied, including but not limited to:

- Concession Parts
 - Torque limited map with Rev Limit
 - Minimum Weight
 - Air restrictor
 - Modifications
- b. The eligible concession parts (and modifications) supersede all the following regulations (Supersport). The range of concession parts are decided by mutual agreement of SBK Commission These agreed concession parts will be documented in the Eligible Parts for Competition.
 - c. The specification of Supersport Next Generation machines will be agreed between the machine manufacturer and the Technical Director. The specification will be published in the Eligible Parts for Competition List and will supersede all of the following regulations. The specification will be fixed for the entire season.
 - d. Balancing level will be continued between seasons.

2.5.3.1 Balancing Calculation

- a. The DWO algorithm will be used to analyse the performance of the machines relative to one another.
- b. The algorithm may include but not be limited to the following signals:
 - Lap time relative to all other competitors
 - Speed traps
 - Number of riders per brand
 - Anticipated individual rider performance
 - Per track
 - Considering preceding rounds
 - Race results
 - Laps led
 - Overall race time
 - Change in balance following any rpm limiter changes
 - Bias towards recent results reflecting current performance
 - Any concession part updates being applied
- c. The balancing factors may be updated at the end of every 3rd event provided at least 3 events remain in the season. The balance will be weighted to the data collected during the previous 6 events. The balancing factors may also be updated at the end of the season.
- d. The primary method of balancing will be torque limited maps updated in increments of +- x %
- e. FIM/DWO/MotoAmerica reserves the right to update the balance at their discretion in the case of an imbalance. **The balance criteria are considered a “Statement of Fact”.**

2.5.4 Minimum weight

Brand	Bike Weight		Combined Minimum Bike and Rider Weight*
	Hard Minimum	Soft Maximum	
Ducati Panigale V2	166 kg	175 kg	244 kg
Honda CBR600RR	161 kg	170 kg	239 kg
Kawasaki ZX-6R (636)	161 kg	173 kg	242 kg
MV Agusta F3	161 kg	170 kg	239 kg
MV Agusta F3 800	161 kg	170 kg	239 kg
MV Agusta Superveloce	161 kg	170 kg	239 kg
Suzuki GSX-R600	161 kg	170 kg	239 kg
Suzuki GSX-R750	161 kg	170 kg	239 kg
Triumph Daytona 675R	161 kg	170 kg	239 kg
Triumph ST765RS	161 kg	170 kg	239 kg
Yamaha YZF-R6	161 kg	170 kg	239 kg

- a. Combined weight is the weight of the rider (in full racing equipment) and bike, as used on track.
- b. IF the bike has achieved or exceeded the 'Soft Maximum Weight' then the combined minimum weight does not need to be reached. The bike alone may never at any time be below the 'Hard Minimum Weight'.
- c. At any time during the event, the weight of the whole motorcycle (including the tank and its contents) must not be less than the minimum weight.
- d. There is no tolerance on the minimum weight of the motorcycle or rider.
- e. 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.
- f. 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.
- g. 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 ballast and weight handicap must be declared to the Technical Director at the preliminary checks.

2.5.5 Numbers and number plates

Numbers must be easily legible, in a clear simple font and contrast strongly with the background color. Backgrounds must be white.

The sizes for all the front numbers are:

Minimum height:	140 mm
Minimum width:	80 mm
Minimum stroke:	25 mm
Minimum space between numbers:	10 mm

The sizes for all the side numbers are:

Minimum height:	120 mm
Minimum width:	70 mm
Minimum stroke:	20 mm

Minimum space
between numbers: 10 mm

The allocated number (& plate) for the rider must be affixed on the motorcycle as follows:

- a. Once on the front, either in the center of the fairing or slightly off to one side. The number must be centered on the white background with no advertising within 25 mm in all directions.
- b. Once on each side of the lower rear portion of the lower fairing. The number must be centered on the white background. Any change to this position must be pre-approved a minimum of two (2) weeks before the first race by the Technical Director.
- c. The numbers must use the fonts as detailed after Art 2. Any numbers not using these fonts must have the design of the numbers and the layout pre-approved by the Technical Director a minimum of two (2) weeks before the first race. All digits must be of standard form.
- d. Any outlines must be of a contrasting color and the maximum width of the outline is three (3) mm. The background color must be clearly visible around all edges of the number (including outline). Reflective or mirror type numbers are not permitted.
- e. Numbers cannot overlap.

2.5.6 Fuel

- a. The designated fuel is VP Racing Fuels MGP.
- b. Please refer to Article 2.10 for additional details.

2.5.7 Tires

- a. The maximum number of tires, of any type, available to each rider during the event will be specified in Article 2.3.7.1.
- b. A maximum of ten (10) tires per rider can be mounted at any time.
- c. For both Supersport races only, wet tires will not need to be marked with a tire sticker. They will not be considered in the total number of tires available for use; however, normal allocation limits still apply.
- d. During free practices, qualifying practices, warm-up sessions and races, front and rear tires are required to be marked with tire stickers.
- e. See article 2.3.7

2.5.8 Engine

- a. For Supersport Next Generation: No modifications may be made to the engine (all of 2.5.8 and 2.5.9) unless noted in the text or in the Eligible Parts for Competition List.
- b. There is no limit to the number of engines that may be used. If the Technical Director wishes to inspect an engine at the current or future rounds then the engine may be sealed for future inspection. If the engine is not presented when arranged then all points that were earned by this engine will be removed from the rider, team and manufacturer standings. See Art. 2.3.9 for Sealing and Usage Details
- c. Engines may be chosen and impounded for Dyno testing (during events, between events or after the season) on track or at an approved balancing facility for comparison to the reference engine (see homologation). One team representative may attend the test.

2.5.8.1 Fuel injection system (Not Applicable to SuperSport Next Generation)

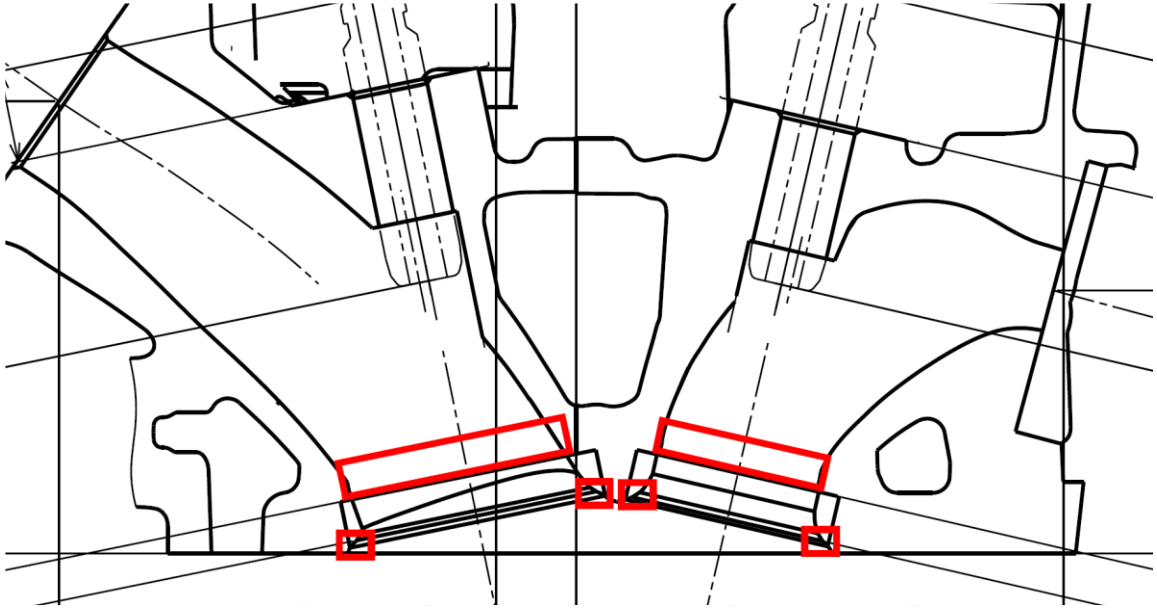
Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices, fuel pump and fuel pressure regulator.

- 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 (including their fixing points) may be altered or replaced. (See eligibility list)
- d. Butterfly valves cannot be changed or modified.
- e. All parts of the variable intake tract device must remain exactly as homologated. Variable intake tract devices cannot be added if they are not present on the homologated motorcycle.
- f. Secondary throttle valves and shafts may be removed or fixed in the open position and the electronics may be disconnected or removed.
- g. Air and air/fuel mixture must 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 be modified but all the safety systems and procedures designed by the original manufacturer must be maintained.

2.5.8.2 Cylinder head (Not Applicable to SuperSport Next Generation)

- a. Cylinder head must be the originally fitted and homologated part. The following modifications are allowed:
 - i. Surface grinding of the cylinder head surface on the head gasket side
 - ii. Polishing of the combustion chamber
 - iii. Original valve seats must be used, but modifications are permitted to the shape in the valve contact area, but not to the internal diameter of the main seal material.
 - iv. The area 10mm into the intake and exhaust ports relative to the valve seat may be filled (with epoxy), machined and polished to blend (align) the valve seat and the port. The work may not extend past this point nor modify the valve seat. (See diagram below)
 - v. Rocker arms (if any) must remain as homologated.
 - vi. The valves must remain as originally equipped and homologated.
 - vii. The shim buckets / tappets must remain as originally equipped and homologated.
 - viii. Valve springs may be altered or replaced.
 - ix. Valve spring retainers may be replaced or modified, but their weight must be the same as, or higher than the original retainers.
- b. The exhaust air bleed system must be blocked and the external fittings on the cam cover(s) may be replaced by plates.
- c. Compression ratio is free, but the combustion chamber may be modified only by taking material off.
- d. The throttle body intake insulators may be modified to match to the inlet port shape.

- e. It is forbidden to add any material to the cylinder head unless as described above.



2.5.8.3 Camshaft (Not Applicable to SuperSport Next Generation)

- a. Only the originally homologated or the championship eligible concession camshafts from the Eligible Parts for Competition list may be used.
- b. Camshafts may be altered or replaced from those fitted on the homologated motorcycle.
- c. The method of drive must remain as homologated.
- d. The camshafts must be available the concession parts supplier 30 days before start of 2022 season opener. The price limit is €1000 per camshaft in an inline 3 or 4 cylinder engine and €650 per camshaft in a V engine.

2.5.8.4 Cam sprockets or cam gears (Not Applicable to SuperSport Next Generation)

- a. Camshaft sprockets, pulleys or gears may be altered or replaced to allow degreeing of the camshafts.
- b. The cam chain or cam belt tensioning device(s) can be modified or changed.

2.5.8.5 Cylinders (Not Applicable to SuperSport Next Generation)

- a. Cylinders must be the originally fitted and homologated parts with only the following modification allowed:
 - i. Cylinder head gasket surface may be machined to allow the adjustment of compression ratio or resurfacing to repair a warped cylinder surface deck.
- b. The surface finish of the cylinder bore must remain as homologated.

2.5.8.6 Pistons (Not Applicable to SuperSport Next Generation)

- a. Pistons must be the originally fitted and homologated parts with no modification allowed.
- b. Polishing and lightening is not allowed.

2.5.8.7 Piston rings (Not Applicable to SuperSport Next Generation)

- a. Piston rings must be the originally fitted and homologated parts with no

modification allowed.

- b. All piston rings must be fitted.

2.5.8.8 Piston pins and clips (Not Applicable to SuperSport Next Generation)

- a. Piston pins and clips must be the originally fitted and homologated parts with no modification allowed.

2.5.8.9 Connecting rods (Not Applicable to SuperSport Next Generation)

- a. The connecting rod assembly must be the originally fitted and homologated parts with no modification allowed.

2.5.8.10 Crankshaft (Not Applicable to SuperSport Next Generation)

- a. Crankshafts must be the originally fitted and homologated parts with no modification allowed.
- b. Polishing and lightening is not allowed.
- c. Modifications of the flywheels are not allowed.

2.5.8.11 Crankcase / Gearbox housing (Not Applicable to SuperSport Next Generation)

- a. Crankcases must be the originally fitted and homologated parts with no modification allowed.
- b. It is not allowed to add a pump used to create a vacuum in the crankcase. If a vacuum pump is installed on the homologated motorcycle, then it may be used only as homologated.
- c. One threaded area may be altered or created to allow for oil pressure/temperature measurement. The sensor must be positioned so it cannot sustain impact in the case of a crash.

2.5.8.11.1 Lateral covers and protection (Including SuperSport Next Generation)

- a. Lateral (side) covers may be altered, modified, or replaced. If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of the same or higher specific weight and the total weight of the cover must not be less than the original one.
- b. Titanium bolts may be used to fasten lateral covers.
- c. Oil containing engine covers cannot be secured with aluminum bolts.
- d. 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 metal such as aluminum alloy, stainless steel, steel, or titanium. Composite covers are not permitted.
 - i. The secondary cover must cover a minimum of 1/3 of the original cover. It must not have sharp edges that could damage the track surface.
 - ii. Plates or crash bars from aluminum or steel are permitted in addition to these covers. All these devices must be designed to be resistant against sudden shocks, abrasions and crash damage.
 - iii. Covers from the Eligible Parts for Competition – List 2022 will be permitted without regard to the material or dimensions.
 - iv. Covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcases.
 - v. Oil containing engine covers cannot be secured with aluminum bolts.

- vi. The Technical Director has the right to refuse any cover not satisfying this safety purpose.

2.5.8.12 Transmission / Gearbox (Not Applicable to SuperSport Next Generation)

- a. Stock transmission shafts and gear set must be the originally fitted and homologated part. Shimming is allowed.
- b. Quick-shift systems are allowed (including wire and potentiometer).
- c. Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- d. The sprocket cover may be modified or eliminated.
- e. If it is not incorporated in the rear fender, the chain guard may be removed.
- f. Undercutting and re-shimming are allowed
- g. The positive neutral selector mechanism may be removed.
- h. Shift star/indexer, spring, roller and detent may be replaced or modified but must function as originally designed.
- i. Polishing, surface treatment, and heat treatment of all gearbox components is allowed.

2.5.8.13 Clutch (Including SuperSport Next Generation)

- 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 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, including back torque limiting capabilities (slipper type).
- f. No power source (i.e. hydraulic or electric) can be used for clutch operation if not installed in the homologated model for road use. Human power is excluded from the ban.

2.5.8.14 Oil pumps and oil lines

- a. The originally fitted and homologated oil pump may be modified but the oil pump housing, mounting points and oil feed points must remain as original.
- b. Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of braided reinforced construction with swaged or treaded connectors. **(Including SuperSport Next Generation)**

2.5.8.15 Cooling System (Including SuperSport Next Generation)

- a. The only liquid engine coolant permitted is water.
- b. The water pump must remain as homologated.
- c. The radiator may be changed with an aftermarket radiator, or an additional radiator may be added provided that it fits in the standard location and does not require any modifications to the main frame or to the fairings' outer appearance.
- d. Modifications to the homologated oil-cooler are allowed only if they do not require any modifications to the main frame or to the fairings' outer appearance. A heat exchanger (oil/water) may be replaced with an oil-cooler.

- e. The cooling system hoses and catch tanks may be changed.
- f. Radiator fan and wiring may be changed, modified or removed.
- g. Additional oil coolers are not allowed.
- h. The oil cooler must not be mounted on or above the rear fender.

2.5.8.16 Air box (Including SuperSport Next Generation)

- a. The air box must be the originally fitted and homologated part with no modification allowed.
- b. The air filter element may be removed or replaced but if fitted 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 oil breather lines must be connected (may pass through an oil catch tank) and discharge in the air box.
- e. No heat protection may be attached to the air box (i.e. foil heat tape)

2.5.8.17 Fuel Supply (Including SuperSport Next Generation)

- a. Fuel pumps and fuel pressure regulators must be the originally fitted and homologated parts with no modification allowed.
- b. The fuel pressure must be as homologated.
- c. Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced and must be located in such a way that they are protected from crash damage.
- d. Fuel level sensors may be removed or in a fixed position.
- e. Quick connectors or dry break connectors may be used.
- f. Fuel vent lines may be replaced.
- g. Fuel filters may be added.

2.5.8.18 Exhaust system (Including SuperSport Next Generation)

- a. Exhaust pipes and silencers may be altered or replaced from those fitted on the homologated motorcycle. Catalytic converters must be removed.
- b. The number of final exhaust silencer(s) must remain as homologated. The silencer(s) must be on the same side(s) as on the homologated model.
- c. For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) 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 will be 107 dB/A (with a three (3) dB/A tolerance after the race only). The test will be carried out according to the details noted in article 2.14.
- f. Supersport Next Generation machines will have limitations on the exhaust specification defined at the time of the balance test and specified in the Eligibility Parts list for Competition. If an exhaust system manufacturer wishes to make eligible a system that does not match the Manufacturers defined specification (or point b) then they may pay to have the (Phase 2) balancing test performed with their system. Once approved the system and its map ID will be added the Eligible Parts for Competition List.

2.5.9 Electrics and electronics (Including Supersport Next Generation)

2.5.9.1 Ignition/ Engine Control System

- a. The engine control system (ECU) must be either:
 - i. National series current kit or OEM electronics (See art 2.5.9.2)
 - ii. Next Generation Supersport Control Electronics System (See art 2.5.9.3)
- b. For 2024:
 - i. Next Generation Supersport Control Electronics System (See art 2.5.9.3)

2.5.9.2 If using a kit or OEM system: (Current Homologation until 2024)

- a. The system may have FIM/DWO/MotoAmerica approved external ignition and/or injection module(s) added.
- b. The total combined retail price (software and tuning tools included) on sale to the general public cannot be higher than €2500 (tax excluded).
- c. Central unit (ECU) may be relocated.
- d. 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.
- e. During an event, the Technical Director has the right to ask a team to substitute their ECU or external module with the sample received from the manufacturer. The change must be done before Sunday warm-up.
- f. No extra sensors may be added for control strategies except shift rod sensors, wheel speed sensors and lambda sensors. Wheel speed sensors must be included in the kit ECU and harness package if required.
- g. Other additional electronic hardware equipment not on the original homologated motorcycle cannot be added with the exceptions noted below.
- h. The characteristics of approved data logging systems must be the following:
 - i. Maximum retail price of the unit (hardware + software, excluding sensors and wiring harness) cannot exceed €3000 (VAT excluded) if it is a standalone unit.
 - ii. The data logger unit must be available for sale to the public and on the list of FIM/DWO/MotoAmerica approved data loggers.
 - iii. A maximum of seven (7) simultaneously working sensors (connected to the additional data logger) may be added to the original sensors on the motorcycle.
 - iv. The sensors must be simple function.
 - v. Approved data loggers with internal inertial platforms (IMU or gyros) may be used for data collection but may not be used for control strategy. Also see 2.5.9.1/i./vii.
 - vi. Type of sensor is free.
 - vii. Communication from the ECU to an approved data logger (logger can receive data only; no data transmission is allowed) is allowed without any limitation in CAN channel logger number.
- i. The maximum total price of other active/control/calculation units such as lambda driver modules, quick shifter, analogue to CAN, air bleed control and traction control units is €750. These devices must be approved by FIM/DWO/MotoAmerica.
- j. The addition of a device for infra-red (IR) transmission of a signal between the

- racings rider and his team, used exclusively for lap timing, is allowed, and considered in the seven (7) sensors.
- k. The addition of a GPS unit for lap timing/scoring purposes is allowed and considered in the seven (7) sensors.
 - l. Telemetry is not allowed.
 - m. 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.
 - n. Harness:
 - i. The main wiring harness may be replaced by the kit wire harness as supplied for the kit ECU model that is produced and/or approved by the manufacturer of the motorcycle and by FIM/DWO/MotoAmerica. The kit wiring harness may incorporate the data logging harness.
 - ii. A kit harness that incorporates the data logging harness may only accommodate seven (7) additional sensors.
 - iii. A sample of the kit wiring harness may be requested by the FIM/MotoAmerica.
 - iv. The key/ignition lock may be relocated, replaced or removed.
 - v. Cutting of the original main wiring harness is allowed.
 - o. Data logger harness:
 - i. The data logger wire harness cannot include any other sensors with the exception of the seven (7) sensors that are allowed. The only function of the approved data logger wire harness is to connect the seven (7) sensors to the data logger, to transmit the data and supply the power.
 - p. For the Superstock kit to be approved, samples of the ECU kits, kit harnesses and external modules with their tuning tools must be sent by the manufacturers to the MotoAmerica Technical Director with technical data and selling price.
 - q. For the ignition and/or injection module, quick shifter or stand-alone data logger to be approved, samples must be sent by the manufacturer of the device to the MotoAmerica Technical Director with technical data and selling price.
 - r. The original speedometer and tachometer may be altered or replaced (see also 2.5.11).
 - s. Electric cables, connectors, battery, and switches are free
 - t. Spark plugs, plug caps, coils and wires may be replaced

2.5.9.3 If using the FIM approved ECU: (All Supersport Next Generation)

- a. The ECU must be the Supersport 600 control ECU – the Mectronik MKE7 (part number WSS600_A). The sole official supplier of the ECU is Solo Engineering. www.soloengineering.com, sales@solengineering.com, for USA www.bouldermotorsports.com.
- b. The firmware and manufacturer (engine) map must be declared eligible by the championship and from the Eligible Parts for Competition.

2.5.9.3.1 Supersport Next Generation Electrics and Electronics (All Supersport Next Generation)

- a. The ECU/Dashboard/Harness must be the Supersport control ECU and dashboard Electronic System as documented in the eligible parts list. Sole official supplier of

the ECU is Solo Engineering. www.soloengineering.com,
sales@solengineering.com

- b. The firmware and manufacturer (engine) map must be declared eligible by the championship and from the Eligible Parts for Competition.
- c. The ECU must have the 'FIM Settings' section up to date at all times, it is the team's responsibility to ensure that this is done.
- d. External quick shift modules/sensors may be fitted but may only provide a signal to the Control Supersport ECU.
- e. No other external modules may be fitted except:
 - i. Part of a quick shifter where the module may only provide a signal to the control ECU.
 - ii. Championship mandated devices (e.g. 2 way RF system).
 - iii. Datalogger.
- f. Two CAN connections must be made available for Championship devices. One must be located in the rear of the seat unit of the bike. They must be connected to the ECU CAN bus and the TPMS system (if fitted) must be connected to the same bus. 12v power should be available switched by the main switch (not switched by the ignition switch). The devices may be championship mandated or nominated by the Technical Director.

Connector spec: JST 04R-JWPF-VSLE-S

- i. Ground
 - ii. CAN Lo
 - iii. CAN Hi
 - iv. 12v Main Switch
- g. The rain light must be powered by the ECU (as detailed in the harness schematics).
- h. The ECU may be freely located but must be fitted securely, in a damped mounting without vibration.
- i. During an event the Technical Director has the right to ask a team to substitute their ECU. The change must be done before Sunday warm-up.
- j. During an event the Technical Director or his appointed deputy has the right to read and save the teams calibration file, it will not be shared except for conformity checks with control electronics system partners but may be used in Dyno tests.
- k. The following sensors must be connected directly to the ECU only and must be the original OEM sensors unless noted below:
 - 1. Throttle position (multiple allowed)
 - 2. Map sensor, map sync (pressure sensor on the intake port used to synchronize the engine start)
 - 3. Airbox pressure
 - 4. Engine pick-ups (cam, crank)
 - 5. Twist grip position
 - 6. Front speed (add only if not available OEM)
 - 7. Rear speed (add only if not available OEM)
 - 8. Gearbox output shaft speed (if on OEM machine)
 - 9. Gear position

10. Ambient air pressure
 11. Water temperature
 12. Air temperature
 13. Tip-over switch (no lean angle except from ECU) (all ECU's feature crash detection by IMU).
- I. The following sensors may be connected directly to the ECU only and are not required to be OEM sensors unless noted below:
1. Gear shift load cell/switch may only provide a signal to the controlled ECU.
 2. Lambda - Bosch LSU4.9 only (one sensor only).
 3. Fork position
 4. Shock position
 5. Front brake pressure
 6. Rear brake pressure
 7. Fuel pressure (not temperature)
 8. Oil pressure
 9. Oil temperature
 10. Switches (Left and right)
 11. Rear TPMS (Temperature and pressure, must be CAN)*
 12. Front TPMS (Temperature and pressure, must be CAN)*
- *The OEM phonic/speed sensor must be used (ZX636)
*Must be from the Eligible Parts for Competition - 2022
- m. The data logger must be from the Eligible Parts for Competition – List 2022 (Data Logger list). The characteristics of approved data logging systems must be the following:
- i. Maximum retail price of the unit (hardware + software, excluding sensors and wiring harness) cannot exceed €3.000 Euro (VAT excluded). The “unit” may consist of multiple parts, input module, recording module etc.
 - ii. The Data Logger unit must be available for sale to the public.
 - iii. The data logger may ONLY be connected to the CAN bus and to those sensors listed in section 2.5.9.2/h.
- n. Only the following may be connected directly to the logging system.
- i. GPS Unit (Lap timing and track position)
 - ii. Transponder / Lap time signal
 - iii. Rear tire temperature (Infra-Red)(External)(Maximum 3)
 - iv. Any exceptions noted in the Eligible Parts for Competition List
- o. Telemetry is not allowed
- p. No remote or wireless connection to the bike for any data exchange or setting is allowed while the engine is running, or the bike is moving.
- q. All shift lights must be only white
- r. If handlebar switches are replaced from those supplied in the kit then they must meet the specification documented on www.soloengineering.com Their basic layout, switch function, position and color must follow those supplied in the kit.

- s. Plug caps and coils must be as homologated.
- t. Electric cables, connectors, battery, and switches are free, but the harness must comply with the wiring schematic that is available from soloengineering.com
- u. Spark plugs and wires may be replaced

2.5.9.4 Generator, alternator, electric starter (Including SuperSport Next Generation)

- a. The generator (ACG) must remain as homologated. No modifications are 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 two (2) seconds without the use a boost battery. No boost battery may be connected to the machine after the end of the session.

2.5.10 Main frame and spare motorcycle

- a. **During the entire duration of the event each rider may only use one (1) complete motorcycle, as presented for technical control, with the frame clearly identified with a seal.**
- b. **In case the frame needs to be replaced, the rider or the team must request the use of a spare frame to the Technical Director. The participants recognize the need for Technical Director to make decisions that require judgment and the exercise of discretion. The decision of the Technical Director is final.**
- c. **One (1) spare complete motorcycle is allowed per rider. The spare motorcycle may only be used once your original frame has been deemed unusable by the Technical Director. (For example, you may not go to your spare motorcycle for a complete engine failure.)**
- d. **The spare motorcycle will not be allowed in the pit box before the rider, or the team has received authorization from the Technical Director.**
- e. **The motorcycle must be inspected before its use by the technical stewards for safety checks and a new seal will be placed on the motorcycle frame.**
- f. **A team may opt to have one (1) spare machine shared by two or more riders.**

Explanation of Procedures

Only one (1) complete motorcycle may be presented for the preliminary technical checks, and it will be the only motorcycle allowed on the track and in the front of pit box during the practices, qualifying, and races.

The frame of this motorcycle will be officially sealed by the Technical Director or by his appointed staff. The seal will bear a serial number, which will be recorded. Any attempt made to remove the seal will damage it irreparably.

At any time during the event the technical stewards, under the direction of the Technical Director, may check the seal and verify that it conforms to the motorcycle and rider it was assigned to. For cross reference, every frame must have a unique number (VIN) punched on the steering-head.

If the primary or active motorcycle is damaged in a crash or in any other incident and is declared unrepairable (safely and in the available time) by the Technical Director or his appointed staff, then the seal on the damaged motorcycle will be destroyed by the technical staff and the chassis of this motorcycle must not be used for the remainder of the event. The new serial number will be recorded by the Technical Director.

The spare motorcycle must be of the same manufacturer and same displacement, changes to manufacturer or displacement may be allowed at the discretion of race direction and may be accompanied by grid position penalties.

During set up day (usually the day before first official practice session) no restrictions apply regarding the location of the spare motorcycle. From the start of the first practice session, any spare motorcycle must be kept out of view. It is recommended that team working areas incorporate an area for this purpose. During an event, minor adjustments may be made to the spare motorcycle, the intent being to allow teams to maintain parity with the primary bike.

In the event the spare motorcycle is used in competition, the primary machine is taken out of competition. At that time, the damaged machine must be kept out of view.

The spare machine can only be used in the next session in which the incident occurred rendering the primary bike not able to be used. In a race situation the first opportunity to use the spare machine is the next session or race. A race will be deemed to have begun when the rider exits pit lane for the sighting laps. All restarts, including those three laps or less, are considered a continuation of the original race for determining spare machine eligibility.

The team may rebuild the original primary machine, however only in the case of **TOTAL PROVEN WRECKAGE** with the spare bike can an application be made to utilize the original machine. The decision of the Technical Director regarding this is final.

The damaged frame may be impounded by the Technical Director for later examination.

2.5.10.1 Frame body and rear sub-frame

- 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).
- 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.
- d. 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).
- e. Nothing else may be added or removed from the frame body.
- f. All motorcycles must display a vehicle identification number punched on the frame body (a proper "legal VIN" or a unique designation by the team, which the Technical Director may choose to append). No detachable plates are permitted.
- g. Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated motorcycle.
- h. Front sub frames / fairing mounts may be changed or altered; the material is free.
- i. Rear sub frames may be changed or altered. The material must be metal, no composites are allowed.
- j. 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.
- k. The paint scheme is not restricted but polishing the frame body or sub- frame is not allowed.

2.5.10.2 Suspension - General

- a. Participants in the Supersport class must only use units from the Eligible Parts for Competition – List 2022. The price limits are:
 - i. Fork: For the fork kit, including all parts such as but not limited to cartridge, springs (1 set), adjusters, fork caps, blanking inserts, seals, bushes but excepting oil and fitting, the price limit is **€2450** excluding tax.
 - ii. Shock Absorber/RCU: For the complete shock absorber / RCU including but not limited to spring (1 of), pre-load adjuster and length/ride height adjuster, the price limit is **€2000** excluding tax.
- b. The eligible products from the suspension manufacturers must be available to all participants at least one (1) month before the first round of the MotoAmerica Superbike season and remain available all season. The products must be available within six (6) weeks of a confirmed order.
- c. Setting parts and tuning parts must be provided by the suspension manufacturers to all customers/ teams/ participants using the manufacturer's products. These parts can be used by all participants during the season. These parts shall be available for immediate delivery to all teams/customers.
- d. Teams may not modify any part of the forks or shock absorber; all setting parts must be supplied by the suspension manufacturer and available to all teams/riders.
- e. The suspension manufacturers are allowed to offer service contracts when the team is using the eligible suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant in order to obtain a suspension product.
 - i. No aftermarket or prototype electronically-controlled suspensions may be used. Electronically-controlled suspension may only be used if already present on the production model of the homologated motorcycle.
 - ii. The electronically-controlled valves must remain as homologated. The shims, spacers and fork/shock springs not connected with these valves can be changed.
 - iii. The ECU for the electronic suspension must remain as homologated and cannot receive any motorcycle track position or sector information; the suspension cannot be adjusted relative to track position.
 - iv. The electronic interface between the rider and the suspension must remain as on the homologated motorcycle. It is allowed to remove or disable this rider interface.
 - v. The original suspension system must work safely in the event of an electronic failure.
 - vi. Electro-magnetic fluid systems which change the viscosity of the suspension fluid(s) during operation are not permitted.
- f. Electronic controlled steering dampers cannot be used if not installed on the homologated model for road use. If equipped, it must be completely standard (any mechanical or electronic part must remain as homologated).

2.5.10.3 Front suspension

- a. Forks must be the originally fitted and homologated parts with the following modifications allowed:
- b. Original internal parts of the homologated forks may be modified or changed.
- c. After market damper kits or valves may be installed.

- d. Fork springs may be modified or replaced.
- e. Fork caps may be modified or replaced to allow external adjustment.
- f. Dust seals may be modified, changed or removed if the fork is totally oil- sealed.
- g. The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed.
- h. The upper and lower fork clamps (triple clamp, fork bridges, and stem) must remain as originally produced by the manufacturer on the homologated motorcycle.
- i. A steering damper may be added or replaced with an aftermarket damper.
- j. The steering damper cannot act as a steering lock limiting device.
- k. Electronic forks may have their complete internal parts (including all electronic control) replaced with a conventional damping system and it will be considered as a mechanical fork.

2.5.10.4 Swing arm (rear fork)

- a. The rear fork must be the originally fitted and homologated part with no modification allowed except the following:
 - i. 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.
 - ii. 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 caliper in place may be added to the rear swing-arm.
 - iii. A rear axle chain adjuster slot may be enlarged to allow the brake caliper mounting to become captive.
 - iv. Rear axle chain adjuster may be modified or changed. The wheel axle nut may be replaced and/or made captive.
 - v. The sides of the swing-arm may be protected by a thin vinyl cover only; no composite or structural covers are allowed.
 - vi. Wheel support rails/guides may be added to permit quick wheel changes.
- b. The rear fork pivot bolt must be the originally fitted and homologated part with no modification allowed.

2.5.10.5 Rear suspension unit

- a. The rear suspension unit (shock absorber) may be replaced with a unit from the Eligible Parts for Competition – List 2022 (see 2.5.10.2b).
- b. The original attachment points to the frame and rear fork (or linkage) must be as homologated.
- c. All the rear suspension linkage parts must be the originally fitted and homologated parts with no modification allowed.
- d. Removable top shock mounts must remain as homologated. A nut may be made captive on the top shock mount and shim spacers may be fitted behind it.

2.5.10.6 Wheels

- a. Wheels must be the originally fitted and homologated parts with no modification allowed.
- b. The wheels 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 included a cushion drive for the rear wheel, it must be the originally fitted and homologated parts with no modification allowed.
- e. Wheel axles may be modified or replaced but must be of the same material as the originally homologated part. The shank section of the axle must remain the same diameter as the originally homologated axle, but the threaded area may be reduced in diameter.
- f. Wheel spacers can be modified or replaced.
- g. Bearing spacers are free.
- h. Wheel balance weights may be discarded, changed, or added.
- i. Aluminum or steel inflation valves are compulsory.
- j. The only allowed rim sizes are:

Wheels Size	
Front	3.5"
Rear	5.5"

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

2.5.10.7 Brakes

- a. Front and rear brake discs may be replaced with aftermarket brake discs that must fit the original caliper and mounting. The maximum outside diameter is 320 mm. The outside diameter and the ventilation system must remain the same as on the homologated motorcycle. Internally ventilated discs are not allowed if not present on the homologated motorcycle.
- b. Only steel (max. carbon content 2.1 wt. %) is allowed for brake discs.
- c. Front brake calipers as well as all the mounting points and mounting hardware (mount, carrier, hanger) must be the originally fitted and homologated parts with no modification allowed (see art. 2.5.10.3). Spacers may be fitted between the caliper and fork lower to fit larger diameter disks.
- d. Rear brake calipers must be the originally fitted and homologated parts with no modifications allowed. The mounting points must remain as homologated.
- e. In order to reduce the transfer of heat to the hydraulic fluid, it is permitted to add metallic shims to the calipers, between the pads and the calipers, and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the caliper.
- f. The front brake master cylinder can be the originally fitted and homologated part with no modification allowed or may be replaced with a unit from the Eligible Parts for Competition - List 2022. The retail price limit for the front master cylinder (including lever) is €450. The brake lever design is free.
- g. The rear brake master cylinder can be the originally fitted and homologated part with no modification allowed or may be replaced with a unit from the Eligible Parts for Competition - List 2022. The retail price limits are:
 - i. Thumb brake (including lever and mounts) €450

- | | | |
|------|----------------------|------|
| ii. | Hand brake | €450 |
| iii. | Foot operated master | €200 |

The use of thumb or hand brakes is allowed in addition to or instead of the foot operated system. An adaptor may be fitted to the reservoir input of the OEM master cylinder to facilitate this.

- h. Front and rear hydraulic brake lines may be changed. The brake fluid reservoir may be replaced and/or repositioned. Quick connectors may be used. The split of the front brake lines for both front brake calipers must be made above the lower edge of the fork bridge (lower triple clamp). Brake line hose fittings (including banjo bolts) can only be steel or titanium.
- i. Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.
- j. Additional air ducts are not allowed.
- k. The anti-lock brake system (ABS) must be removed.
- l. Motorcycles must be equipped with brake lever protection, intended to protect the handlebar brake lever from being accidentally activated in case of collision with another motorcycle. Composite guards are not permitted. Guards from the Eligible Parts for Competition – List 2022 will be permitted without regard to the material. The Technical Director has the right to refuse any guard not satisfying this safety purpose.

2.5.10.8 Handlebars and hand controls

- a. Handlebars may be replaced.
- b. Handlebars and hand controls may be replaced and relocated.
- c. Throttle controls must be self-closing when not held by the hand.
- d. Motorcycle with Throttle Cables:
 - i. 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.
 - ii. 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. Motorcycle with Ride By Wire throttle ‘Grip’ sensor:
 - i. Only the OEM unit may be used or optional units (motorcycle specific) from the Eligible Parts List for Competition List – World Supersport Next Generation Permitted Modifications.
- f. The clutch assembly and brake lever may be replaced with an after-market model. An adjuster to the brake lever is allowed.
- g. Switches may be changed but the electric starter switch and engine stop switch must be located on the handlebars.
- h. 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.

2.5.10.9 Footrest and foot controls

- a. The footrests, hangers/brackets and hardware may be replaced and relocated but the hangers/brackets must be mounted to their original frame mounting points.
- b. The foot controls, gear shift and rear brake must remain operated manually by foot.
- c. Footrests 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 footrest must have at least an eight (8) mm solid spherical radius.
- e. Non-folding footrests must have an end (plug) which is permanently fixed, made of aluminum, plastic, Teflon® or an equivalent type of material (minimum radius 8 mm). The plug surface must be designed to reach the widest possible area. The Technical Director has the right to refuse any plug not satisfying this safety purpose.

2.5.10.10 Fuel tank

- a. Fuel tanks must be the originally fitted and homologated parts with no modification allowed.
- b. All fuel tanks must be completely filled with fire retardant material (open-celled 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 250 cc 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. If the tank has a filler 'neck' (tube) inside the tank that restricts its complete filling, then the neck may be removed or have vent holes drilled through it.
- f. **A rider spacer/pad may be fitted to the rear of the tank with non-permanent adhesive. It may be constructed of foam padding or composite material.**
- g. The tank may not have a cover fitted over it unless the homologated machine also features a full cover.
- h. The sides and rear of the fuel tank may be protected with a cover made of a composite material. These covers must follow the shape of the fuel tank exactly.
- i. The fuel tank may have heat reflective sheet attached to its bottom surface.

2.5.10.11 Fairing / Bodywork

- a. Fairing, mudguards, and body work must conform in principle to the homologated shape as originally produced by the manufacturer. The use of carbon fiber or Kevlar® materials is not allowed in fairing, fuel tank cover, seat, seat base and associated bodywork construction. Specific reinforcements in Kevlar® or carbon are allowed locally around holes and stressed areas. Headlights must be included even when considered external.
- b. All bodywork paint and decal design is free.
- c. The fairing has a tolerance of +/-10mm from the original homologated road fairing, respecting the design and features of the homologated fairing and any articles below. The overall width of the frontal area may be +10mm maximum. The decision of the Technical Director is final.
- d. For Supersport Next Generation: The fairing has a tolerance of +/-8mm from the original homologated road fairing, respecting the design and features of the homologated fairing and any articles below. The overall width of the frontal area may be +5mm maximum. The decision of the Technical Director is final.

- e. Windscreen may be replaced.
- f. Fairing brackets may be altered or replaced.
- g. The ram-air intake must maintain the originally homologated shape and dimensions.
- h. For Supersport: Original air ducts running between the fairing to the air box may only be replaced by exact cosmetic replicas of the original parts. If the part serves another function (ie Dash Mounting) then the airflow passage must retain the homologated internal shape and the part must be listed in the Eligible Parts for competition List. Material is free.
- i. For Supersport Next Generation: Original air ducts running between the fairing to the air box may be altered or replaced by exact cosmetic replicas of the original parts.
- j. Particle grills or “wire meshes” originally installed in the openings for the air ducts may be removed. Flap valve systems may be removed. Air ducts cannot be added if they are not present on the original machine.
- k. The lower fairing must be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine if they are not present on the original machine. (min. 5 liters). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.
- l. The lower fairing must incorporate one (1) 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.
- m. Minimal changes are allowed in the fairing to allow clearance for protective engine covers.
- n. Motorcycles may be equipped with a radiator shroud to improve the air stream towards the radiator but the appearance of the front, the rear and the profile of the motorcycle must not be changed.
- o. Front mudguard must conform in principle to the homologated shape originally produced by the manufacturer. Front mudguards may be replaced and the use of carbon fiber or Kevlar® composites are allowed.
- p. Front mudguard may be spaced upward for increased tire clearance.
- q. Rear hugger type mudguards fixed on the swing-arm may be replaced with a cosmetic duplicate of the original part. The use of carbon fiber or Kevlar® composites are allowed.
- r. The chain guard may be removed if it is not incorporated in the rear hugger. If the chain guard is incorporated in the hugger, then the chain guard section may be removed or modified to accommodate larger diameter rear sprockets.
- s. The chain guard may be removed as long as it is not incorporated in the rear fender.
- t. The existing rear mudguard under the seat may be removed.
- u. The exact appearance, shape, size and location of the front headlights of the homologated motorcycle must be respected and should be obtained by applying a plastic or metallic film on the front of the motorcycle.
- v. Supersport Next Generation, if the proposed machine is not fitted with a fairing, then a fairing from the manufacturers range may be used by agreement with DWO and the Technical Director. A belly pan is compulsory.

2.5.10.12 Seat

- a. The seat, seat base and associated bodywork may be replaced with parts of similar appearance as originally produced by the manufacturer for the homologated motorcycles.
- b. The top portion of the rear body work around the seat may be modified to a solo seat.
- c. Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- d. The appearance from the front, rear and profile must conform in principle to the homologated shape.
- e. The same material as fairing must be used (article 2.5.10.11.a).
- f. All exposed edges must be rounded.

2.5.10.13 Rear safety light

All motorcycles must have a functioning red light mounted at the rear of the machine. This light must be switched on any time the motorcycle is on the track or being ridden in the pit lane and the session is declared WET. All lights must comply with the following:

- a. The lighting direction must be parallel to the machine center line (motorcycle running direction) and be clearly visible from the rear at least 15 degrees to both left and right sides of the machine center line.
- b. The rear light must be mounted near the end of the seat/rear bodywork and approximately on the machine center line in a position approved by the Technical Director. In case of dispute over the mounting position or visibility, the decision of the Technical Director will be final.
- c. Power output/luminosity equivalent to approximately: 10-15 (incandescent), 0.6 – 1.8 W (LED)
- d. The output must be continuous; no flashing safety light is allowed whilst on track. Flashing is allowed in the pit lane when the pit limiter is active.
- e. The safety light power supply may be separated from the motorcycle.
- f. The Technical Director has the right to refuse any light system not satisfying this safety purpose.

2.5.10.14 Fasteners

- a. Standard fasteners may be replaced with fasteners of any material and design.
- b. Aluminum fasteners may only be used in non-structural locations.
- c. 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.
- d. 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.
- e. Fasteners may be drilled for safety wire, but intentional weight-saving modifications are not allowed.
- f. Threads repairs may be made using inserts of different material such as Helicoils and Timeserts.
- g. Fairing/bodywork fasteners may be changed to the quick disconnect type.

2.5.11 The following items MAY BE altered or replaced from those fitted to the homologated motorcycle

- a. Any type of lubrication, brake, or suspension fluid
- b. Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used
- c. Gaskets, seals, and gasket materials

2.5.12 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. Speedometer and related wheel spacers
- c. Bolt on accessories on a rear sub frame

2.5.13 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. Tool box
- f. Helmet hooks and luggage carrier hooks
- g. Passenger footrests
- h. Passenger grab rails
- i. Safety bars, center and side stands must be removed (fixed brackets must remain)
- j. Catalytic converters.
- k. Rear mudguards affixed to the seat unit

2.6 STOCK 1000 TECHNICAL SPECIFICATIONS

The following rules are intended to permit limited changes to the homologated motorcycle in the interests of safety and improved competition between various motorcycle concepts.

EVERYTHING THAT IS NOT AUTHORIZED AND PRESCRIBED IN THIS RULEBOOK IS STRICTLY FORBIDDEN

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

Stock 1000 motorcycles require a Superstock 1000 FIM homologation. (see FIM homologation procedure for Superstock, Supersport and Superbike motorcycles). 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.

Once a motorcycle has obtained homologation, it may be used for racing in the corresponding class for a maximum period of eight (8) years (see Homologation art 1.4.4), or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

The appearance from the front, rear and the profile of Stock 1000 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.

2.6.1 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.

2019-2022 Ducati V4R is accepted as homologated for MotoAmerica competition. Effective 6-26-2020 the Ducati V4R will be balanced per Article 2.6.3 adjusting the minimum weight to 180 kg.

2.6.2 Engine configurations and displacement capacities

The following engine configurations comprise the Stock 1000 class:

Over 750cc up to 1000cc	4-stroke	3 and 4 cylinders
Over 850cc up to 1200cc	4-stroke	2 cylinders

The displacement capacity, bore and stroke (new), must remain at the homologated size. All machines must be normally aspirated.

2.6.3 Balancing various motorcycle concepts

To equalize the performance of motorcycles used in the Stock 1000 Championship, a system of performance enhancements or restrictions can be developed (such as minimum weight, air restrictor or REV limit may be applied according to their respective racing performances). The decision to apply a balancing system to a motorcycle will be taken by the MotoAmerica Permanent Bureau based on decisions made by the Superbike Commission at any time deemed necessary to ensure fair competition.

2.6.4 Minimum weight

All machines (unless balanced) 170 kg (374 lbs.)

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 ballast and weight handicap must be declared to the Technical Director at the preliminary checks.

2.6.5 Numbers and number plates

The background colors and figures (numbers) for Stock 1000 are red (pantone

The sizes for all the front numbers are:	Minimum height:	140 mm
	Minimum width:	80 mm
	Minimum stroke:	25 mm
	Minimum space between numbers:	10 mm

The sizes for all the side numbers are:	Minimum height:	120 mm
	Minimum width:	70 mm
	Minimum stroke:	20 mm
	Minimum space between numbers:	10 mm

186c) background with white numbers:

The allocated number (& plate) for the rider must be affixed on the motorcycle as follows:

- a. Once on the front, either in the center of the fairing or slightly off to one side. The number must be centered on the red background with no advertising within 25 mm in all directions.
- b. Once, on each side of the motorcycle. The preferred location for the numbers on each side of the motorcycle is on the lower rear portion of the main fairing near the bottom. The number must be centered on the red background. Any change to this position must be pre-approved a minimum of two (2) weeks before the first race by the Technical Director.
- c. The numbers must use the fonts as detailed after Art. 2. Any numbers not using these fonts must have the design of the numbers and the layout pre-approved by the MotoAmerica Technical Director a minimum of two (2) weeks before the first race. All digits must be of standard form.
- d. Any outlines must be of a contrasting color and the maximum width of the outline is three (3) mm. The background color must be clearly visible around all edges of the number (including outline). Reflective or mirror type numbers are not permitted.
- e. Numbers cannot overlap

In case of a dispute concerning the legibility of numbers, the decision of the Technical Director will be final.

2.6.6 Fuel

- a. The designated fuel is VP Racing Fuels MGP.
- b. Please refer to Article 2.10 for additional details

2.6.7 Tires

- a. The maximum number of tires, of any type, available to each rider during the event will be specified in Article 2.3.7.1.
- b. A maximum of six (6) tires per rider can be mounted at any time.
- c. For Stock 1000 races only, wet tires will not need to be marked with a tire sticker. They will not be considered in the total number of tires available for use; however, normal allocation limits still apply.
- d. During free practices, qualifying practices, warm-up session and races, front and rear tires are required to be marked with tire stickers.
- e. see article 2.3.7

2.6.8 Engine

2.6.8.1 Fuel injection system

2.6.8.1.1 Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices, fuel pump and fuel pressure regulator.

- 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. Variable intake tract devices cannot be added if they are not present on the homologated motorcycle, and they must remain identical and operate in the same way as the homologated system. All the parts of the variable intake tract device must remain exactly as homologated.
- f. Air and air/fuel mixture can go to the combustion chamber exclusively through the throttle body butterflies.
- g. Electronically controlled throttle valves, known as 'ride-by-wire', may be only used if the homologated model is equipped with the same system. Software may be modified but all the safety systems and procedures designed by the original manufacturer must be maintained.

2.6.8.2 Cylinder head

- a. **Cylinder head must be the originally fitted and homologated part. The following modifications are allowed:**
 - i. **Original valve seats must be used, but modifications are permitted to the shape in the valve contact area, but not to the internal diameter of the main seal material.**
 - ii. **Rocker arms (if any) must remain as homologated.**
 - iii. **The valves must remain as originally equipped and homologated.**
 - iv. **The shim buckets / tappets must remain as originally equipped and homologated.**

- b. **The exhaust air bleed system must be blocked and the external fittings on the cam cover(s) may be replaced by plates.**
- c. **Compression ratio is free**
- d. **It is forbidden to add any material to the cylinder head unless as described above.**

2.6.8.3 Camshaft

- a. The camshaft must be the originally fitted and homologated part with no modification.
- 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.

2.6.8.4 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 must remain as homologated.
- d. The cam chain tensioner must remain as homologated.

2.6.8.5 Cylinders

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

2.6.8.6 Pistons

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

2.6.8.7 Piston rings

- a. Must be the originally fitted and homologated part with no modification.
- b. All piston rings must be fitted.

2.6.8.8 Piston pins and clips

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

2.6.8.9 Connecting rods

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

2.6.8.10 Crankshaft

- a. Must be the originally fitted and homologated part with no modification.
- b. The balancer shaft must be the originally fitted and homologated part with no modification.

2.6.8.11 Crankcase / Gearbox housing

- a. Must be the originally fitted and homologated part with no modification (including painting, polishing, and lightening).
- b. It is not allowed to add a pump used to create a vacuum in the crankcase. If a vacuum pump is installed on the homologated motorcycle, then it may be used only as homologated.

2.6.8.11.1 Lateral covers and protection

- a. Lateral (side) covers may be altered, modified or replaced. If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of the same or higher specific weight and the total weight of the cover must not be less than the original one.

- b. Oil containing engine covers cannot be secured with aluminum bolts.
- c. 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 metal such as aluminum alloy, stainless steel, steel or titanium. Each side (left and right) of the engine must have at least one (1) protective cover installed on the farthest protruding engine cover containing oil. Composite covers are not permitted. FIM approved covers will be permitted without regard of the material or dimensions.
 - i. The secondary cover must cover a minimum of 1/3 of the original cover. It must not have sharp edges that could damage the track surface. Covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcases.
 - ii. Heavy duty engine case covers may be used in lieu of secondary case covers.
- d. The Technical Director has the right to refuse any cover not satisfying this safety purpose.

2.6.8.12 Transmission / Gearbox

- a. No modifications are allowed except shimming.
- b. Quick-shift systems are allowed (including wire and potentiometer).
- c. Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- d. The sprocket cover may be modified or eliminated.
- e. The chain guard, if it is not incorporated in the rear fender, may be removed.

2.6.8.13 Clutch

- a. Aftermarket or modified clutches are permitted.
- b. Only friction and drive discs may be changed, but their number must remain as original.
- c. Clutch springs may be changed.
- d. The clutch basket (outer) must be the originally fitted and homologated part but may be reinforced.

2.6.8.14 Oil pumps and oil lines

- a. No pump modifications are allowed.
- b. Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of braided reinforced construction with swaged or threaded connectors.

2.6.8.15 Radiator, cooling system and oil cooler

- 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 fans and wiring may be removed. Thermal switches, water temperature sensors and thermostats 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 is permitted.

2.6.8.16 Air box

- a. The air box must remain as originally produced by the manufacturer on the homologated motorcycle, but the air box drains must be sealed.
- b. The air filter element may be modified or replaced but not removed 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 oil breather lines must be connected and discharge in the air box.
- e. Additional heat shielding is not allowed (e. g. gold or silver heat tape).

2.6.8.17 Fuel supply

- a. The fuel pump and fuel pressure regulator must remain as homologated.
- b. The fuel pressure must be as homologated.
- c. Fuel lines from the fuel tank to the delivery pipe assembly (excluded) may be replaced.
- d. Quick connectors or dry break connectors may be used.
- e. Fuel vent lines may be replaced.
- f. Fuel filters may be added

2.6.8.18 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 Stock 1000 will be **115 dB/A** (with a three (3) dB/A tolerance after the race only) except for where local rules prevail.

2.6.9 Electrics and electronics

2.6.9.1 Ignition / Engine Control System (ECU)

- a. The engine control system (ECU) must be an ECU (Kit or OEM) applicable to the specific homologated model. The ECU may have its software changed, but the ECU may not be physically modified. The Ducati V4R must use the homologated ECU with control software provided by Ducati. No other software will be allowed for usage. The rider is responsible for using the most recent version of the control software.
- b. The system may have FIM/DWO/MotoAmerica approved external ignition and/or injection module(s) added. Ducati V4R may not use any external ignition modules this includes quick shift modules that connect directly to the ignition harness.
- c. The total combined retail price (software and tuning tools included) on sale to the general public cannot be higher than €3000 (tax excluded) or €3750 if it is a kit ECU than includes data logging facility.
- d. Central unit (ECU) may be relocated.
- 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. During an event, the Technical Director has the right to ask a team to substitute their ECU or external module with the sample received from the manufacturer. The change must be done before Sunday warm-up.
 - g. No extra sensors may be added for control strategies except shift rod sensors, wheel speed sensors and lambda sensors. Wheel speed sensors must be included in the Kit ECU and harness package if required.
 - h. Other additional electronic hardware equipment not on the original homologated motorcycle cannot be added with the exceptions noted below.
 - i. The characteristics of approved data logging systems must be the following:
 - i. Maximum retail price of the unit (hardware + software, excluding sensors and wiring harness) cannot exceed €3.000 (VAT excluded) if it is a standalone unit.
 - ii. Maximum retail price of the unit if incorporated into the ECU (hardware + software, excluding sensors and wiring harness) is €3750.
 - iii. The data logger unit must be available for sale to the public and on the list of FIM/DWO/MotoAmerica approved data loggers.
 - iv. A maximum of seven (7) simultaneously working sensors (connected to the additional data logger) may be added to the original sensors on the motorcycle.

The sensors must be from the following list:

 1. Lambda (must be supplied in the kit if used for strategy)
 2. Fork position
 3. Shock position
 4. Front brake pressure
 5. Rear brake pressure
 6. Fuel pressure (not temperature)
 7. Oil pressure
 8. Oil temperature
 9. Transponder / lap time signal
 10. GPS unit (lap timing and track position)
 - v. The sensors must be simple function.
 - vi. Approved data loggers with internal inertial platforms (IMU or gyros) may be used for data collection but may not be used for control strategy. Also see 2.6.9.1/i./vii.
 - vii. CAN (or other data) communication from the ECU to an approved data logger (logger can receive data only; no data transmission is allowed) is allowed without any limitation in CAN channel logger number.
- j. The maximum total price of other active/control/calculation units such as lambda driver modules, quick shifter, and analogue to CAN and traction control units is €750. These devices must be approved by FIM/DWO/MotoAmerica.
- k. Telemetry is not allowed.
- l. 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.

m. Harness:

- i. The main wiring harness may be replaced by the kit wire harness as supplied for the Kit ECU model, produced and/or approved by the manufacturer of the motorcycle and by FIM/DWO/MotoAmerica.
- ii. The Kit wiring harness may incorporate the data logging harness.
- iii. A kit harness that incorporates the data logging harness may only accommodate seven (7) additional sensors.
- iv. A sample of the kit wiring harness may be requested by the FIM/MotoAmerica.
- v. The key/ignition lock may be relocated, replaced or removed.
- vi. Cutting of the original main wiring harness is allowed.

n. Data logger harness:

- i. The data logger wire harness cannot include any other sensors except for the seven (7) sensors that are allowed. The only function of the approved data logger wire harness is to connect the seven sensors to the data logger, to transmit the data and supply the power.
- o. For the Stock 1000 Kit to be approved, samples of the ECU kits, kit harnesses and external modules with their tuning tools must be sent by the manufacturers to the MotoAmerica Technical Director with technical data and selling price.
- p. For the ignition and/or injection module, quick shifter or standalone data logger to be approved, samples must be sent by the manufacturer of the device to the MotoAmerica Technical Director with technical data and selling price.
- q. Spark plugs may be replaced.
- r. The original speedometer and tachometer may be altered or replaced.
- s. Battery is free

2.6.9.2 Generator, alternator, electric starter

- a. Must be the originally fitted and homologated part with no modification.
- b. The electric starter must operate normally and always be able to start the engine during the event.
- c. During parc fermé, the starter must crank the engine at a suitable speed for starting for a minimum of two (2) seconds without the use of a boost battery. No boost battery may be connected to the machine after the end of the session.

2.6.10 Main frame and spare motorcycle

- a. **During the entire duration of the event each rider may only use one (1) complete motorcycle, as presented for technical control, with the frame clearly identified with a seal.**
- b. **In case the frame needs to be replaced, the rider or the team must request the use of a spare frame to the Technical Director. The participants recognize the need for Technical Director to make decisions that require judgment and the exercise of discretion. The decision of the Technical Director is final.**
- c. **One (1) spare complete motorcycle is allowed per rider. The spare motorcycle may only be used once your original frame has been deemed unusable by the Technical Director. (For example, you may not go to your spare motorcycle for a complete engine failure.)**
- d. **The spare motorcycle will not be allowed in the pit box before the rider, or the team has received authorization from the Technical Director.**

- e. The motorcycle must be inspected before its use by the technical stewards for safety checks and a new seal will be placed on the motorcycle frame.
- f. A team may opt to have one (1) spare machine shared by two or more riders.

Explanation of Procedures

Only one (1) complete motorcycle may be presented for the preliminary technical checks, and it will be the only motorcycle allowed on the track and in the front of pit box during the practices, qualifying, and races.

The frame of this motorcycle will be officially sealed by the Technical Director or by his appointed staff. The seal will bear a serial number, which will be recorded. Any attempt made to remove the seal will damage it irreparably.

At any time during the event the technical stewards, under the direction of the Technical Director, may check the seal and verify that it conforms to the motorcycle and rider it was assigned to. For cross reference, every frame must have a unique number (VIN) punched on the steering-head.

If the primary or active motorcycle is damaged in a crash or in any other incident and is declared unrepairable (safely and in the available time) by the Technical Director or his appointed staff, then the seal on the damaged motorcycle will be destroyed by the technical staff and the chassis of this motorcycle must not be used for the remainder of the event. The new serial number will be recorded by the Technical Director.

The spare motorcycle must be of the same manufacturer and same displacement, changes to manufacturer or displacement may be allowed at the discretion of race direction and may be accompanied by grid position penalties.

During set up day (usually the day before first official practice session) no restrictions apply regarding the location of the spare motorcycle. From the start of the first practice session, any spare motorcycle must be kept out of view. It is recommended that team working areas incorporate an area for this purpose. During an event, minor adjustments may be made to the spare motorcycle, the intent being to allow teams to maintain parity with the primary bike.

In the event the spare motorcycle is used in competition, the primary machine is taken out of competition. At that time, the damaged machine must be kept out of view.

The spare machine can only be used in the next session in which the incident occurred rendering the primary bike not able to be used. In a race situation the first opportunity to use the spare machine is the next session or race. A race will be deemed to have begun when the rider exits pit lane for the sighting laps. All restarts, including those three laps or less, are considered a continuation of the original race for determining spare machine eligibility.

The team may rebuild the original primary machine, however only in the case of TOTAL PROVEN WRECKAGE with the spare bike can an application be made to utilize the original machine. The decision of the Technical Director regarding this is final.

The damaged frame may be impounded by the Technical Director for later examination.

2.6.10.1 Frame body and rear sub frame

- a. The frame must remain as originally produced by the manufacturer for the homologated motorcycle.
- b. Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount, sensors).

- 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.
- d. Nothing else may be added or removed from the frame body.
- e. All motorcycles must display a vehicle identification number punched on the frame body (a proper “legal VIN” by the team to which the Technical Director may choose to append). No detachable plates are permitted.
- f. Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated motorcycle.
- g. Front sub frame / fairing mount may be changed or altered.
- h. Rear sub frame may be changed or altered, but the type of material must remain as homologated, or material of a higher specific weight.
- i. 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.
- j. The paint scheme is not restricted but polishing the frame body or sub frame is not allowed.

2.6.10.2 Suspension - General

- a. Participants in the Stock 1000 class must only use the approved and listed suspension units for that season. The price limits are:
 - i. Fork: For the fork kit, including all parts such as but not limited to cartridge, springs (1 set), adjusters, fork caps, blanking inserts, seals, bushes except oil and fitting the price limit is **€2420** excluding tax.
 - ii. Shock absorber/RCU: For the complete shock absorber / RCU including but not limited to spring (1 of), pre-load adjuster and length/ride height adjuster the price limit is **€2000** excluding tax.
- b. The approved products from the suspension manufacturers must be available to all participants at least one month before the first round of the MotoAmerica Stock 1000 season and remain available all season. The products must be available within six (6) weeks of a confirmed order.
- c. Setting parts and tuning parts must be provided by the suspension manufacturers to all customers/ teams/ participants using the manufacturer’s products. These parts can be used by all participants during the season. These parts shall be available for immediate delivery to all teams/customers.
- d. Teams may not modify any part of the forks or shock absorber; all setting parts must be supplied by the suspension manufacturer and available to all teams/riders.
- e. The suspension manufacturers are allowed to offer service contracts when the team is using the approved and listed suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant in order to obtain a suspension product.
- f. Electronic Suspension must be removed.
- g. Electronic controlled steering dampers 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).

2.6.10.3 Front suspension

- a. Forks must remain as originally produced by the manufacturer for the homologated motorcycle.

- b. Original internal parts of the homologated forks may be modified or changed. After-market damper kits or valves may be installed.
- c. The original surface finish of the fork tubes (stanchions, fork pipes) may be changed. Additional surface treatments are allowed.
- d. Fork caps and external damping adjusters may be modified or replaced.
- e. The upper and lower fork clamps (triple clamp, fork bridges, and stem) must remain as originally produced by the manufacturer for the homologated motorcycle.
- f. Steering head 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.
- g. A fork brace may be installed. Fork bottoms may be modified for speed and suspension sensors.
- h. Fender brackets may be modified to maintain stock tire to fender clearance when using race tires or to provide clearance for caliper mounting brackets.
- i. A steering damper may be added or replaced with an after-market damper.
- j. The steering damper cannot act as a steering lock limiting device.
- k. Electronic forks may have their complete internal parts (including all electronic control) replaced with a conventional damping system and it will be considered as a mechanical fork.

2.6.10.4 Swing arm (rear fork)

- a. The rear fork must remain as originally produced by the manufacturer for the homologated motorcycle.
- b. The rear fork pivot bolt must remain as originally produced by the manufacturer for the homologated motorcycle.
- c. Rear 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. **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 caliper in place may be added to the rear axle blocks.**
- e. Rear axle adjusters must remain as originally produced by the manufacturer for the homologated motorcycle.
- f. The sides of the swing-arm may be protected by a thin vinyl cover only; no composite or structural covers are allowed.

2.6.10.5 Rear suspension unit (shock)

- a. The rear suspension unit may be changed but a similar system must be used (i.e. dual or mono).
- b. All rear suspension linkage parts must remain as originally produced by the manufacturer for the homologated motorcycle.
- c. Mechanical Suspension: Rear suspension unit (shock absorber) may be modified or replaced, but the original attachments to the frame and rear fork (swing arm) must be as homologated.
- d. Electronic suspension may be used if such suspension is already present on the production model of the homologated motorcycle, and it must remain completely

standard (all mechanical and electronic parts must remain as homologated except for shims and springs). The original suspension system must work properly and safely in the event of an electronic failure. The electronic shock absorber can be replaced with a mechanical one.

2.6.10.6 Wheels

- a. Wheels may be replaced but not modified (see article 2.3.5) and associated parts may be altered or replaced from those fitted to the homologated motorcycle.
- b. Aftermarket Wheels Maximum retail price \$2600 USD.
- c. See Eligibility list for list of approved aftermarket wheels
- d. Aftermarket wheels must be made from aluminum (aluminum) alloys.
- e. The use of the following alloy materials for the wheels is not allowed: Beryllium ($\geq 5\%$), Scandium ($\geq 2\%$), Lithium ($\geq 1\%$).
- f. Each specific racing wheel model must be approved and certified according to JASO (Japanese Automotive Standards Organization) T 203-85 where W (maximum design load) of art. 11.1.3 is 195 kg for front wheel and 195 kg for rear wheel, K = 1.5 for front and rear wheels. Static radius of tire: front 0.301 m, rear 0.331 m.
- g. Wheel manufacturers must provide copy of the certificate for their wheel(s) as proof of compliance to the Technical Director when requested.
- h. The homologated road bike wheel and sprocket carrier assembly may be used with no modification irrespective of material. They must meet article 2.4.10.6(d)(e). Bearings and spacers may be changed.
- i. On motorcycles equipped with a double-sided swing arm (rear fork), the rear sprocket and brake rotor must remain on the rear wheel when the wheel is removed.
- j. Bearings, seals, 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 rim diameter size (front and rear)	17 inches
Front wheel rim width:	3.50
Rear wheel rim width:	6.00

- k. Wheel axles must remain as homologated; wheel spacers may be modified or replaced.

2.6.10.7 Brakes

- a. Brake discs may be replaced by aftermarket discs which comply with following requirements:
 - i. Only steel (max. carbon content 2.1 wt. %) is allowed for brake discs.
 - ii. The carrier must retain the same material as the homologated disc and carrier.
 - iii. The outside and inner diameters of the brake disc must not be larger than the ones on the homologated disc.
 - iv. The thickness of the brake disc may be increased but the disc must fit into the homologated brake caliper without any modification. The number of floaters is free.
 - v. The fixing of the carrier on the wheel must remain the same as on the homologated disc.

- b. The front and rear brake caliper (mount, carrier, hanger) must remain as originally produced by the manufacturer for the homologated motorcycle.
- c. To reduce the transfer of heat to the hydraulic fluid, it is permitted to add metallic shims to the calipers between the pads and the calipers and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the caliper.
- d. The rear brake caliper bracket may be mounted fixed on the swing- arm, but the bracket must maintain the same mounting (fixing) points for the caliper as used on the homologated motorcycle. Also see Article 2.6.10.4 e.
- e. Refer to "Supersport Master Cylinder" eligibility list for all approved Stock 1000 front master cylinders.
- f. Front and rear hydraulic brake lines may be changed.
- g. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (lower triple clamp).
- h. "Quick" (or "dry-brake") connectors in the brake lines are allowed.
- i. Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.
- j. Front brake system cooling airducts are allowed.
 - i. Air ducts shall be routed to cool the discs or directed onto the brake caliper bodies. Viewed from the side, the airducts opening shall not pass the vertical line drawn by the front axle shaft. Viewed from the front, the airducts must fall inside the shape drawn by the fairing (aerodynamic winglets excluded) and must be positioned as close as possible to the front fork leg/foot. For safety reasons, the airflow shall not be directed onto the brake pads.
 - ii. air-ducts may be made of composite materials. The complete assembly must be presented and validated by the Technical Director in prior of its use.
- k. The anti-lock brake system (ABS) must be removed.

2.6.10.8 Handlebars and hand controls

- a. Handlebars may be replaced.
- 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.
- e. The 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 can stop a running engine. The button or switch must be red.

2.6.10.9 Footrest / Foot controls

- a. Footrests, 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. Footrests 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 footrest must have at least an eight (8) mm solid spherical radius.
- e. Non-folding footrests must have an end (plug) which is permanently fixed, made of aluminum, plastic, Teflon® or an equivalent type of material (minimum radius 8 mm). The plug surface must be designed to reach the widest possible area.
- f. The Technical Director has the right to refuse any plug not satisfying this safety aim.

2.6.10.10 Fuel tank

- a. The fuel tank must begin as originally produced by the manufacturer for the homologated motorcycle. If the standard tank is of insufficient capacity to achieve full race distance, then with the prior agreement of the Technical Director, the tank may be modified to increase its fuel capacity but must maintain its original external appearance.
- b. All fuel tanks must be completely filled with fire retardant material (i.e. fuel tank foam).
- 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 spacer/pad may be fitted to the rear of the tank with non-permanent adhesive. It may be constructed of foam padding or composite material.**
- f. The tank may not have a full cover fitted unless the homologated machine also features a full cover.
- g. The sides and rear of the fuel tank may be protected with a cover made of vinyl or a composite material. These covers must follow the shape of the fuel tank exactly.

2.6.10.11 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 fiber 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.
- c. The windscreen may be replaced.
- d. Motorcycles that are not originally equipped with streamlining are not allowed to add streamlining in any form, except for a lower fairing device, as described in point (g). This device cannot exceed above a line drawn horizontally from wheel axle to wheel axle and must follow the specifications described at point (g).
- 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 fiber composites and other exotic materials are forbidden.

Particle grills 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, a minimum six (6) liters. 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 plates. The material is free but the distance between all opening centers, circle centers and their diameters must be constant. Holes or perforations must have an open area ratio $> 60\%$.
- j. The lower fairing must incorporate a single opening of $\varnothing 25$ mm diameter in the front lower area. This hole must remain sealed in dry conditions and must be only opened in wet race conditions as declared by the race director.
- k. Front fender may be replaced with a cosmetic duplicate of the original parts and may be spaced upward for increased tire clearance.
- l. The rear fender fixed on the swing arm may be modified, changed, or removed.
- m. Motorcycles may be equipped with inner ducts to improve the air stream towards the radiator but the appearance of the front, the rear and the profile of the motorcycle must not be changed.

2.6.10.12 Seat

- a. The seat, seat base and associated bodywork may be replaced with parts of similar appearance as originally produced by the manufacturer for the homologated motorcycle. The appearance from the front, rear and profile must conform to the homologated shape.
- b. The top portion of the rear bodywork around the seat may be modified to a solo seat.
- c. The homologated seat locking system (with plates, pins, rubber pads etc.) may be removed.

2.6.10.13 Rear safety light

All motorcycles must have a functioning red light mounted at the rear of the machine; this light must be switched on any time the motorcycle is on the track or being ridden in the pit-lane and the session is declared WET. All lights must comply with the following:

- a. Lighting direction must be parallel to the machine center line (motorcycle running direction) and be clearly visible from the rear at least 15 degrees to both left and right sides of the machine center line.
- b. The rear light must be mounted near the end of the seat/rear bodywork and approximately on the machine center line, in a position approved by the Technical Director. In case of dispute over the mounting position or visibility, the decision of the Technical Director will be final.
- c. Power output/luminosity equivalent to approximately: 10 – 15 (incandescent), 0.6 – 1.8 W (LED).
- d. The output must be continuous; no flashing safety light is allowed whilst on track. Flashing is allowed in the pit lane when the pit limiter is active.
- e. The safety light power supply may be separated from the motorcycle.

- f. The Technical Director has the right to refuse any light system not satisfying this safety purpose.

2.6.10.14 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 repairs may be made using inserts of different material such as Helicoils and Timeserts.
- d. Fairing / bodywork fasteners may be replaced with the quick disconnect type.
- e. Aluminum fasteners may only be used in non-structural locations.

2.6.11 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, seals, and gasket materials
- c. Instruments, instrument bracket(s) and associated cables
- d. Painted external surface finishes and decals
- e. Material for brackets connecting non-original parts (fairing, instruments, etc.) to the frame (or engine) cannot be made from titanium or fiber reinforced composites except for the exhaust silencer hanger that may be made from carbon.
- f. Protective covers for the frame, chain, footrests, etc. may be made in other materials like fiber composite material if these parts do not replace original parts mounted on the homologated model.

2.6.12 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. Chain guard if it is not incorporated in the rear fender
- c. Bolt-on accessories on a rear sub frame

2.6.13 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 footrests
- h. Passenger grab rails
- i. Safety bars, center and side stands must be removed (fixed brackets must remain).

2.7 KING OF THE BAGGERS TECHNICAL SPECIFICATIONS

The following rules are intended to give freedom to modify or replace some parts in the interest of safety, research and development and improved competition between various motorcycle concepts.

EVERYTHING THAT IS NOT AUTHORIZED AND PRESCRIBED IN THIS RULEBOOK IS STRICTLY FORBIDDEN

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

King of the Baggers motorcycles (Including Approved engines) require an MotoAmerica homologation. 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.

Once a motorcycle has obtained the homologation, it may be used for racing in the corresponding class for a maximum period of 12 years, or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

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

2.7.1 Motorcycle specifications

- Harley-Davidson FL Touring (All Years)
- Indian Bagger or Touring (All Years)

2.7.2 Engine configurations and displacement capacities

Harley-Davidson Motorcycles:

- a. Originally equipped **Milwaukee-Eight twin-cooled or air-cooled** pushrod V-Twin engines, maximum displacement of **131.95 ci.** normally aspirated.
- b. Originally equipped air-cooled pushrod V-Twin engines, maximum displacement of **131.95 ci.** normally aspirated.
- c. S&S or Jim's air-cooled pushrod Twin Cam **or twin-cooled** engines w/MSO are acceptable up to **131.95 ci.** normally aspirated.
- d. Forced induction air-cooled pushrod V-Twin engines allowed with maximum displacement of 107ci.

Indian Motorcycles:

- a. Originally equipped water-cooled V-Twin Engine, maximum displacement of 112 ci. normally aspirated.
- b. Originally equipped air-cooled pushrod V-Twin Engine, maximum displacement of **131.95 ci.** normally aspirated.
- c. Forced induction air-cooled pushrod V-Twin engines allowed with maximum displacement of 111 ci.

2.7.3 Balancing various motorcycle concepts

To equalize the performance of motorcycles used in the King of the Baggers Championship, a system of performance enhancements or restrictions can be developed (such as minimum weight, air restrictor or REV limit may be applied according to their respective racing performances). The decision to apply a balancing system to a motorcycle will be taken by the MotoAmerica Permanent Bureau based on

decisions made by the Superbike Commission at any time deemed necessary to ensure fair competition.

2.7.4 Rev Limits

a. Maximum rpm limits

Harley Davidson – 7000 Maximum rpm limit

Indian Challenger – 7700 Maximum rpm limit

b. An RPM limiting module will be required on all machines competing in MotoAmerica King of the Baggers. Only the following modules from each manufacturer are allowed.

Harley Davidson – Part Number XXXXX

Indian Challenger – Part Number XXXXX

2.7.5 Minimum weight

All machines 281.23 kg (620 lbs.)

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 ballast and weight handicap must be declared to the Technical Director at the preliminary checks.

2.7.6 Numbers and number plates

The background colors and figures (numbers) for Baggers may be any color but must be strongly contrasting.

2.7.7 Fuel

a. All competitors must use VP Supplied Fuel. Fuel Specification VP T4.

2.7.8 Tires

a. All machines must be fitted with Dunlop tires. **Specification (Dunlop Slicks)**

2.7.9 Engine

2.7.9.1 Fuel system

a. The original equipped fuel system must be used.

b. The fuel pump and fuel pressure regulator must be the originally fitted and homologated part with no modification allowed.

c. Air funnels, throttle bodies and airbox may be altered or replaced.

d. Fuel injector's may be modified or replaced.

e. Air and air/fuel mixture must go to the combustion chamber exclusively through the throttle bodies.

2.7.9.2 Cylinder Head

The cylinder head must be the originally fitted and a homologated part. The following modifications allowed

- a. 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. Welding is allowed.
- b. No machining or modification is allowed in the cam box / valve mechanism area unless pre-approved by the Technical Director. The decision of the Technical Director is final.**
- c. The throttle body insulators may be modified.
- d. Modifications of the inlet and exhaust ports are free
- e. Surface grinding of the cylinder head surface on the head gasket side
- f. Original homologated valve guides may be replaced materials are free
- g. Polishing of the combustion chamber is allowed.
- h. Original valve seats may be modified or replaced
- i. Compression ratio is free.
- j. Welding of material for cooling purpose is allowed. Must be approved by Technical Director
- k. It is forbidden to add any material to the cylinder head unless as described above.
- l. Rocker arms (if any) may be modified or replaced
- m. Valves may be modified or replaced.
 - i. Material must stay as homologated**
 - a. Valve springs may be modified or replaced.
 - b. Valve spring retainers, collets and/or spring seats may be altered or replaced.
 - c. The shim buckets must remain as homologated
 - d. Tappets/lifters may be modified or replaced**
 - i. Method of valve lash must stay as homologated**
 - e. Pushrods (if any) may be modified or replaced including covers, pushrod tubes, and anti-rotation device.**
 - i. Material must stay as homologated**

2.7.9.3 Camshaft

- a. Camshafts may be altered or replaced.
 - i. Material must stay as homologated**
- b. Camshafts must be available to all competitors within six (6) weeks of confirmed availability.**

2.7.9.4 Cam sprockets or cam gears

- a. Camshaft sprockets, pulleys or gears may be altered or replaced to allow degree adjustments of the camshafts.

- b. The cam chain or cam belt tensioning device(s) can be modified or changed.

2.7.9.5 Cylinders

- a. May be altered or replaced.
- b. Cylinders must retain its homologated appearance**
- c. Maximum bore size is 4.330" (110.00mm)**
- d. Normally aspirated air-cooled / **Twin-Cooled** pushrod engines may increase the bore to a maximum total displacement of **131.95 ci.**
- e. Normally aspirated water-cooled engines limited to 112 ci.
- f. Forced induction engines: Harley Davidson air-cooled 107 ci. / Indian air-cooled 111 ci.

2.7.9.6 Pistons, rings, pins, and clip

- a. May be modified or replaced.
- b. Pistons must be made available to all competitors within six (6) weeks of a confirmed.**

2.7.9.7 Connecting rods

- a. Connecting rod may be altered or replaced.
 - i. Material Must stay as homologated.**
- b. Connecting rod bolts are free but must be of the same weight or heavier, and of the same material as the original bolt or of higher specific weight material.
- c. Connecting rods must be made available to all competitors within six (6) weeks of a confirmed.**

2.7.9.8 Crankshaft

- a. Crankshaft may be modified or replaced
- b. Crankshaft addition or reduction in weight to reach a racing balance can be no higher than 10% of the homologated weight listed below.**
 - I. Indian (38.8 LBS) 17,610 grams. (crankshaft + trigger wheel + 4 mounting bolts)**
 - II. Harley Davidson (32.9 LBS) 14,923 grams. (complete flywheel/crankshaft assembly including connecting rods)**
- c. Heavy metal is not permitted unless originally specified in the homologated crankshaft.**
- d. Removal of the balancing shaft is allowed.**
- e. Indian Challenger - Stroke must be as homologated.**
- f. Crankshafts must be made available to all competitors within six (6) weeks of a confirmed.**

2.7.9.9 Crankshaft / Gearbox Housing

- a. Crankcases must be the originally fitted part with only the following modifications allowed. If the crankcases have an integral cylinder, then the top face of the cylinder may be ground to adjust deck height. Oil Spray nozzles may be modified. No other modifications are allowed (including painting, polishing, and lightening).

- b. Engine crankcases may be relieved to allow installation of replacement bearings for the crankshaft/flywheel. Excludes All Harley Davidson Milwaukee Eight engines. Must be pre-approved by the Technical Director. The decision of the Technical Director is final.**
- c. Air-cooled/**Twin-Cooled** pushrod V-Twin engines crankcase may be modified for installation of **131.95 ci** cylinders.
- d. Only the original or an approved sump Oil-pan (sump) and oil pick up can be used.
- e. Oil breather cover may be modified or replaced.**
- f. Oil tank breathers are acceptable and may run through an external catch-can
- g. Engine crankcase/transmission cases may be modified to allow clearance of chain/swingarm line only. Must be approved by Technical Director.
- h. Engine mounts must be as homologated.**

2.7.9.9.1 Lateral covers and protection

- a. Lateral (side) covers may be altered, modified, or replaced (excluding pump covers). If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of same or higher specific weight and the total weight of the cover must not be less than the original one.
- b. 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 metal such as aluminum alloy, stainless steel, or steel. Each side (left and right) of the engine must have at least one (1) protective cover installed on the farthest protruding engine cover containing oil. Composite covers are not permitted.**
 - i. Heavy duty engine case covers may be used in lieu of secondary case covers.**
 - ii. The Technical Director has the right to refuse any cover not satisfying this safety purpose.**
- c. All drain and fill plugs must be lock wired (safety wired). The use of clips is not permitted. External oil filter(s), screws and bolts that enter an oil cavity must be safety wired (i.e., on crankcases) or the oil filter may optionally have a secondary retention mechanism.

2.7.9.10 Transmission and Gearbox

- a. Transmission shafts and gear set must begin as originally fitted and homologated.**
- b. Shimming is allowed.**
- c. Undercutting and surface treatments are permitted.**
- d. Final drive belt systems may be converted to chain type systems.
- e. Harley Davidson – Compensator may be modified or replaced.**
 - i. Method of compensation must stay as homologated.**
- f. Countershaft sprocket, rear wheel sprocket, chain pitch and size can be changed. Chain master links must be rivet type.**
- g. External quick-shift systems are permitted.

2.7.9.11 Clutch

- a. Aftermarket or modified clutches are permitted (including plates/springs etc.).
- b. Primary gear must stay as homologated.**

2.7.9.12 Oil pumps, cam plates and oil lines

- a. The oil pump and cam plate may be modified or replaced.
- b. Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of braided reinforced construction with wedged or threaded connectors.

2.7.9.13 Cooling System

- a. The only liquid engine coolants permitted is water.
- b. The radiator may be changed, modified, or removed.
- c. The water pump must remain as homologated.**
- d. Additional radiators or oil coolers may be added.**
- e. The original oil/water heat exchanger may be modified, replaced, or removed.
- f. The cooling system hoses and catch tanks may be changed.**
- g. The radiator fan and wiring may be changed, modified, or removed.**
- h. The appearance from the front, rear and profile of the motorcycle must in principle conform to the homologated shape after the addition of additional radiators or oil coolers. The decision of the Technical Director is final.**

2.7.9.14 Airbox

- a. The airbox may be modified or replaced.
- b. The appearance from the front, rear and profile of the motorcycle must in principle conform to the homologated shape. The decision of the Technical Director is final.**
- c. Airboxes should be designed to retain oil from the crankcases in the event of engine failure or tip-over.
- d. Where breather or overflow pipes are fitted, they must discharge via existing outlets.
 - i. Catch cans may be used.

2.7.9.15 Fuel Supply

- a. The 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. The pressure tolerance at the technical control is +/- 7.25 psi (0.5 bar) in respect to the maximum pressure of the homologated motorcycle.**
- c. Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced and must be in such a way that they are protected from crash damage.**
- d. Fuel pump may be relocated inside fuel tank. Method of fuel pickup must stay as homologated.**
- e. Quick connectors or dry break connectors may be used.
- f. Fuel vent lines may be replaced.

- g. Fuel filters may be added.

2.7.9.16 Exhaust System

- a. Exhaust pipes, catalytic converters and silencers may be altered or replaced from those fitted to the homologated motorcycle. Catalytic converters may be removed.
- b. For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) must be rounded to avoid any sharp edges.
- c. Wrapping of exhaust systems is allowed.
- d. The noise limit for Baggers will be 115 dB/A measured at 3000 RPM. See Art. 2.14 for complete sound testing procedure. (With a 3 dB/A tolerance after the race only).

2.7.10 Electrics and Electronics

2.7.10.1 Engine control system

- a. **The engine control system (ECU) must be:**
 - i. **Original system as homologated, with or without a change of software**
 - ii. **An approved aftermarket system with series specified software from the King of the Bagger eligible parts list.**
- b. **Central unit (ECU) may be relocated.**
- c. **Wiring harness is free.**
- d. **Optional equipment sold by the motorcycle manufacturer for the homologated model is considered not homologated.**
- e. **At any time during an event the Technical Director has the right to make a team substitute their ECU or external module with the MotoAmerica sample.**
- f. **No traction control or lift control strategies may be used.**
- g. **No sensor may be modified or replaced from the homologated machine unless described in line h.**
- h. **The following sensors may be added or replaced**
 - 1. **Lambda sensor X2**
 - 2. **Left- and Right-Hand switches (may be replaced from kit)**
 - 3. **Fork position potentiometer**
 - 4. **Shock position potentiometer**
 - 5. **Front brake pressure sensor**
 - 6. **Rear brake pressure sensor**
 - 7. **Transponder/lap time signal**
 - 8. **GPS receiver unit**
 - 9. **Oil temperature sensor**
 - 10. **Oil pressure sensor**
 - 11. **Throttle grip sensor**
 - 12. **Gear shift load cell**
 - 13. **Water temperature sensor**
 - 14. **Cylinder head temperature sensor**
 - 15. **Tire Pressure Monitoring Sensors TPMS**

16. Gear position sensor

17. MAP Pressure sensor

- i. No extra sensors may be added for control strategies except the lambda sensor and shift rod sensor.
- j. Wheel speed sensors must be removed.
- k. For 2024, IMU if originally installed per the homologation, must be removed.**
- l. The MotoAmerica 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 and ignition coils. No external module may add traction control strategies. The modules may only connect to the fuel injectors, ignition coils, lambda sensor, power supply and “piggyback the Throttle Position, Gear and RPM signals”. Lambda closed loop/auto tuning is permitted.
- m. Other additional electronic hardware equipment not on the original homologated motorcycle cannot be added with the exceptions noted below.
 - i. Resistors/load may be added to replace the parts of the electrical system that has been removed (including lights and lambda sensors), to prevent ECU errors.
- n. Telemetry is not allowed.
- o. 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.
- p. A data logger may be fitted, Data collection from the machines sensors or ECU is allowed. Data collection by the lap timer by way of GPS and internal IMU is permitted.
 - i. External IMU may be added for data collection purposes only. IMU must go through data logger only and must not be connected directly to ECU.**
- q. All manufacturers in KOTB are required to provide DBC files with these required channels for the purpose of data collection.
 - I. RPM
 - II. Throttle position
 - III. Gear position
 - IV. Coolant temperature
 - V. Engine temperature
- r. The characteristics of approved data logging systems must be the following:
 - I. The Data Logger unit must be available for sale to the public.
 - II. The data logger may ONLY be connected to the CAN bus and to those sensors listed in section 2.7.10.1/H.
 - III. No traction control or lift control channels may be added or logged
- s. Spark plug caps and coils may be modified or replaced.
- t. Spark plugs may be replaced.
- u. Battery is free.

- v. ECU must be made available to all competitors within six (6) weeks of confirmed availability.

2.7.10.2 Generator, alternator, electric starter

- a. The stator/coil must be the originally fitted parts with no modification allowed.
- b. Motorcycles should self-start on the starting grid in neutral. Push-starting on the starting grid is not allowed, however start line Officials may push start the motorcycle if necessary (in gear).

2.7.11 Main frame and spare motorcycle

- a. During the entire duration of the event each rider may only use one (1) complete motorcycle, as presented for technical control, with the frame clearly identified with a seal.
- b. In case the frame needs to be replaced, the rider or the team must request the use of a spare frame to the Technical Director. The participants recognize the need for Technical Director to make decisions that require judgment and the exercise of discretion. The decision of the Technical Director is final.
- c. One (1) spare complete motorcycle is allowed per rider. The spare motorcycle may only be used once your original frame has been deemed unusable by the Technical Director. (For example, you may not go to your spare motorcycle for a complete engine failure.)
- d. The spare motorcycle will not be allowed in the pit box before the rider, or the team has received authorization from the Technical Director.
- e. The motorcycle must be inspected before its use by the technical stewards for safety checks and a new seal will be placed on the motorcycle frame.
- f. A team may opt to have one (1) spare machine shared by two or more riders.

Explanation of Procedures

Only one (1) complete motorcycle may be presented for the preliminary technical checks, and it will be the only motorcycle allowed on the track and in the front of pit box during the practices, qualifying, and races.

The frame of this motorcycle will be officially sealed by the Technical Director or by his appointed staff. The seal will bear a serial number, which will be recorded. Any attempt made to remove the seal will damage it irreparably.

At any time during the event the technical stewards, under the direction of the Technical Director, may check the seal and verify that it conforms to the motorcycle and rider it was assigned to. For cross reference, every frame must have a unique number (VIN) punched on the steering-head.

If the primary or active motorcycle is damaged in a crash or in any other incident and is declared unrepairable (safely and in the available time) by the Technical Director or his appointed staff, then the seal on the damaged motorcycle will be destroyed by the technical staff and the chassis of this motorcycle must not be used for the remainder of the event. The new serial number will be recorded by the Technical Director.

The spare motorcycle must be of the same manufacturer and same displacement, changes to manufacturer or displacement may be allowed at the discretion of race direction and may be accompanied by grid position penalties.

During set up day (usually the day before first official practice session) no restrictions apply regarding the location of the spare motorcycle. From the start of the first practice session, any spare motorcycle must be kept out of view. It is recommended that team working areas incorporate an area for this purpose.

During an event, minor adjustments may be made to the spare motorcycle, the intent being to allow teams to maintain parity with the primary bike.

In the event the spare motorcycle is used in competition, the primary machine is taken out of competition. At that time, the damaged machine must be kept out of view.

The spare machine can only be used in the next session to which the incident occurred rendering the primary bike not able to be used. In a race situation the first opportunity to use the spare machine is the next session or race. A race will be deemed to have begun when the rider exits pit lane for the sighting laps. All restarts, including those three laps or less, are considered a continuation of the original race for determining spare machine eligibility.

The team may rebuild the original primary machine, however only in the case of **TOTAL PROVEN WRECKAGE** with the spare bike can an application be made to utilize the original machine. The decision of the Technical Director regarding this is final.

The damaged frame may be impounded by the Technical Director for later examination.

2.7.11.1 Frame body and rear subframe

- a. The main frame must be the originally manufactured and fitted part.
- b. Holes may be drilled on the frame only to fix approved components (i.e., fairing brackets, steering damper mount).
- c. The original position (of engine, steering stem or pivots) is considered as the position in which the production motorcycle is supplied and must be retained.
- d. All motorcycles must display a vehicle identification number punched on the frame body (a proper 'legal VIN')
- e. Crash protectors may be fitted to the frame using existing points or pressed into the ends of the wheel axles.
- f. For the Indian **Challenger**, the lower portion of front frame spares may be modified for ground clearance only. Must be pre-approved beforehand by the Technical Director. The decision of the Technical Director is final.
- g. Suspension linkage mounting points on the frame must remain as homologated.**
- h. No polishing or surface refinishing is allowed but the paint scheme is not restricted.**
- i. Front fairing stay may be modified or replaced. Material is free**
- j. Rear sub frame may be modified or replaced**
 - i. The use of titanium, carbon fiber or Kevlar materials is not allowed if not homologated on the original motorcycle**

2.7.11.2 Suspension – General

- a. Participants in the King of the Bagger class must only use the approved and listed suspension units for that season. Suspension price caps will be \$6,000 for Forks and \$2,000 for Shocks.
- b. The approved products from the manufacturers must be available to all participants at least one month before the first round of the King of The Bagger season and remain available all season. The products must be available within six (6) weeks of a confirmed order.

- c. Setting parts and tuning parts must be provided by the suspension manufacturers to all customers/teams/participants using the manufacturer's products. These parts can be used by all participants during the season. These parts shall be available for immediate delivery to all teams/customers.
- d. All setting parts must be supplied by the suspension manufacturer and available to all teams/riders.
- e. The suspension manufacturers are allowed to offer service contracts when a team is using the approved and listed suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant to obtain a suspension product.
- f. Electronic suspension cannot be used.
- g. An electronic controlled steering damper can only be used if installed on the homologated model for road use. However, it must be completely standard (any mechanical or electronic part must remain as homologated).

2.7.11.3 Front Suspension

- a. The front fork in whole or part may be changed but must be the same type homologated (leading link, telescopic, etc.).
- b. The upper and lower fork clamps (triple clamp, fork bridges) and stem may be changed or modified.
 - i. **The modified upper and lower triple clamps must be available to all participants at least two months before the first round of the King of the Baggers season and remain available all season. The products must be available within six (6) weeks of a confirmed order.**
 - ii. **Price cap for all fork clamps is \$3000.**
- c. A steering damper may be added or replaced.
- d. The steering damper cannot act as a steering lock limiting device.

2.7.11.4 Swing-arm (Rear fork)

- a. Swing-arms may be replaced or modified.
- b. **The use of titanium, carbon fiber or Kevlar materials is not allowed if not homologated on the original motorcycle.**
- c. 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.
- d. Rear wheel stand brackets may be added to the rear fork by welding or by bolts.
- e. Brackets must have rounded edges (with a large radius). Fastening screws must be recessed.
- f. Swingarm spindle (pivot) may be modified or replaced.
- g. **The modified swingarms from the manufacturers must be available to all participants at least two months before the first round of the King of the Baggers season and remain available all season. The products must be available within six (6) weeks of a confirmed order including all mounting hardware.**
- h. **Swingarm price cap will be \$8,000.**
- i. **See 2.7.9.9, line H for swingarm/motor mounts**

2.7.11.5 Rear Suspension Unit

- a. Rear suspension unit may be changed but a similar system must be used (i.e., dual or mono).
- b. The rear suspension linkage and pull rod may be modified or replaced.**
- c. The original fixing points on the frame (if any) must be used to mount the shock absorber, linkage, and rod assembly fulcrum (pivot points).
- d. Removable top shock mounts may be replaced. If replaced, they must retain their homologated geometry.

2.7.11.6 Wheels

- a. Wheels may be replaced, and associated parts may be altered or replaced from those fitted to the homologated motorcycle.
- b. Wheels can either be made from aluminum alloys or homologated material.**
- c. The use of the following alloy materials for the wheels is not allowed: Beryllium ($\geq 5\%$), Scandium ($\geq 2\%$), Lithium ($\geq 1\%$).
- d. 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).
- e. Wheel balance weights may be discarded, changed, or added to.
- f. Aluminum or steel inflation valves are compulsory.
- g. Front and rear wheel sizes must be 17-19 inches.

2.7.11.7 Brakes

- a. Front brake master cylinder may be altered or replaced.
- b. Front brake calipers may be altered or replaced.
- c. Rear brake master cylinder may be altered or replaced.
- d. Rear brake calipers may be altered or replaced.
- e. Brake pads or shoes may be altered or replaced.
- f. Brake hoses and brake couplings may be altered or replaced.
- g. Hydraulic anti-knockback systems may be fitted to the brake lines/caliper.
- h. Brake discs may be altered or replaced. Only Steel (max. carbon content 2.1 wt.%) is allowed for brake discs. Alloys containing beryllium are not allowed to be used for brake calipers.
- i. ABS systems must be removed.**

2.7.11.8 Handlebars and hand controls

- a. Handlebars, hand controls and cables may be altered or replaced from those fitted to the homologated motorcycle.
- b. 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.
- c. 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 can stop a running engine. The button or switch must be RED.

2.7.11.9 Footrest and foot controls

- a. Footrests, hangers/brackets, and hardware may be replaced and relocated but the hangers/brackets must either be mounted to their original frame mounting points or another location that does not require the modification of the frame.

2.7.11.10 Fuel tank

- a. The fuel tank must conform in principle to the homologated appearance and location of the original tank. The decision of the Technical Director is final.
- b. Fuel tank must remain as homologated material.

2.7.11.11 Fairing and Bodywork

- a. **The fairings, mudguards and body work must conform in principle to the homologated shape as originally produced by the manufacturer. Material is free. The decision of the Technical Director is final.**
- b. **The fairing has a tolerance of +/-20mm from the original homologated road fairing, respecting the design and features of the homologated fairing. It must conform to the style of the original machine (scaled +/-20 mm planar) incorporating all included design features however it may not exceed the homologated minimum width of the fairing or side panels. The decision of the Technical Director will be final.**
- c. Air duct for cooling purposes may be used but must conform in principle to the homologated appearance of the motorcycle. Must be approved by Technical Director.
- d. the windscreen must be installed and may be replaced.
- e. The front mudguard (fender) may be modified or replaced. Material is free
- f. **The rear mudguard (fender) may be modified or replaced to allow for rear tire clearance for install/removal but must conform in principle to the homologated shape as originally produced by the manufacturer. Material is free.**
- g. A lower catch/belly pan must be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (min. 5 liters water-cooled/ 2.5 liters air-cooled).
 - i. **The lower catch/belly pan 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 opened only in wet race conditions, as declared by the race director.**
 - ii. **Participants in the King of the Baggers class must only use the approved catch/belly pan. The catch/belly pan must be provided by the manufacturer. Belly pan price cap will be \$1,000.**
 - iii. **The approved catch/belly pan from the manufacturers must be available to all participants (including all mounting hardware) at least one month before the first round of the King of The Baggers season and remain available all season. The products must be available within six (6) weeks of a confirmed order.**
- h. The saddlebags must conform in principle to the homologated appearance remaining stock size, position height **may be altered a maximum of 3" in respect to the homologated vertical distance of the OEM mounting point.** The lid must be functional and lock in closed position. Each saddle bag must be able to enclose a 13.6" x 5.4" x 9" box. Material is free. The decision of the Technical Director is final.

- i. **The saddlebag and lid should conform to the design and features of the homologated saddlebags, with a tolerance of +/-20mm. It should also match the style of the original machine, with a planar scale of +/-20mm, and include all of the design features that are part of the original saddlebags.**
- ii. Saddlebags must be sealed.
- j. Bodywork must be made available to all competitors within six (6) weeks of a confirmed order.

2.7.11.12 Seat

- a. Seat may be altered or replaced.

2.7.11.13 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. **Fairing / bodywork fasteners may be replaced with the quick disconnect type.**
- d. **Aluminum fasteners may only be used in non-structural locations.**

2.7.12 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, seals, and gasket material.
- c. Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- d. Thread repair using inserts of different material such as helicoils and timeserts.
- e. External surface finishes and decals.

2.7.13 The following items MAY BE removed

- a. Instrument and instrument bracket and associated cables.
- b. Tachometer.
- c. Speedometer and associated wheel spacers.
- d. Chain guard.

2.7.14 The following items Must BE Removed

- a. Rear-view mirrors.
- b. Horn.
- c. License plate bracket.
- d. Toolbox.
- e. Side stand
- f. Safety bars, center and side stand brackets welded to the main frame may be removed.

2.8 MOTOAMERICA TWINS CUP TECHNICAL SPECIFICATIONS

The following rules are intended to give freedom to modify or replace some parts in the interest of safety, research and development and improved competition between various motorcycle concepts.

EVERYTHING THAT IS NOT AUTHORIZED AND PRESCRIBED IN THIS RULEBOOK IS STRICTLY FORBIDDEN

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

Twins Cup motorcycles require a MotoAmerica homologation. (See MotoAmerica homologation procedure for Twins cup). All motorcycles must comply in every respect with all the requirements for road racing as specified in these technical regulations.

Once a motorcycle has been homologated, it may be used for racing in the corresponding class for a maximum period of twenty (20) years or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

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

2.8.1 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.

2.8.2 Engine configurations and displacement capacities

The following engine configurations comprise the Twins Cup class.

Over 600cc up to 750cc	4 stroke	2- cylinder water cooled
Over 600cc up to 800cc	4 stroke	2- cylinder air cooled

Modifying the bore and stroke to reach class limits is not allowed. All machines must be normally aspirated.

2.8.3 Balancing various motorcycle concepts

To equalize the performance of motorcycles used in the Twins Cup Championship, a system of performance enhancements or restrictions can be developed (such as minimum weight, air restrictors or REV limits may be applied according to their respective racing performances). The decision to apply a balancing system to a motorcycle will be made by the MotoAmerica Permanent Bureau based on decisions made by the Technical Director at any time deemed necessary to ensure fair competition.

See MotoAmerica Technical Bulletin 02-2021 for Aprilia RS660 engine restrictions.

2.8.4 Minimum weight

2.8.4.1 The minimum weight will be:

Over 600cc up to 800cc **153.31 kg (338 lbs.)**

At any time during the event, the weight of the whole motorcycle (including the tank and its contents) must not be less than the minimum weight.

There is no tolerance on the minimum weight of the motorcycle.

During the final technical inspection at the end of each 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 ballast and weight handicap must be declared to the Technical Director at the preliminary checks.

2.8.5 Numbers and number plates

The background colors and figures (numbers) for the Twins Cup are blue (pantone 281c) background with white numbers:

The sizes for all the front numbers are:	Minimum height:	140 mm
	Minimum width:	80 mm
	Minimum stroke:	25 mm
	Minimum space between numbers:	10 mm

The sizes for all the side numbers are:	Minimum height:	120 mm
	Minimum width:	70 mm
	Minimum stroke:	20 mm
	Minimum space between numbers:	10 mm

The allocated number (& plate) for the rider must be affixed on the motorcycle as follows:

- a. Once on the front, either in the center of the fairing or slightly off to one side. The number must be centered on the blue background with no advertising within 25 mm in all directions.
- b. Once, on each side of the motorcycle. The preferred location for the numbers on each side of the motorcycle is on the lower rear portion of the main fairing near the bottom. The number must be centered on the blue background. Any change to this position must be pre-approved a minimum of two (2) weeks before the first race by the Technical Director.
- c. The numbers must use the fonts as detailed after Art 2. Any numbers not using these fonts must have the design of the numbers and the layout pre-approved by the Technical Director a minimum of two (2) weeks before the first race. All digits must be of standard form.
- d. Any outlines must be of a contrasting color and the maximum width of the outline is three (3) mm. The background color must be clearly visible around all edges of the number (including outline). Reflective or mirror type numbers are not permitted.
- e. Numbers cannot overlap.

In case of a dispute concerning the legibility of numbers, the decision of the Technical Director will be final.

2.8.6 Fuel

- a. The designated fuel is VP Racing Fuels MGP.

- b. Please refer to Article 2.10 for additional details

2.8.7 Tires

- a. The maximum number of tires, of any type, available to each rider during the event will be specified in Article 2.3.7.1.
- b. A maximum of six (6) tires per rider can be mounted at any time.
- c. For the race only, wet tires will not need to be marked with a tire sticker. They will not be considered in the total number of tires available for use; however, normal allocation limits still apply.
- d. During free practices, qualifying practices, warm-up sessions and races, front and rear tires are required to be marked with tire stickers.
- e. See article. 2.3.7

2.8.8 Engine

2.8.8.1 Fuel injection system

2.8.8.1.1 Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices and fuel pumps.

- a. The original homologated fuel injection system must be used without any modification with the following exceptions:
 - i. Air funnels may be modified.
 - ii. Throttle bores may be modified.
 - iii. Butterfly valves may be modified to fit increased throttle size but must include the same safety features as stock.
 - iv. Secondary throttle valves and shafts may be removed or fixed in the open position and the electronics may be disconnected or removed.
- b. The fuel injectors must be stock and unaltered from the original specification and manufacture.
- c. Variable intake tract devices cannot be added if they are not present on the homologated motorcycle, and they must remain identical and operate in the same way as the homologated system. All parts of the variable intake tract device must remain exactly as homologated.
- d. **Air and air/fuel mixture must go to the combustion chamber exclusively through the throttle body.**
- e. Electronically controlled throttle valves, known as 'ride-by-wire', may be only used if the homologated model is equipped with the same system. Software may be modified but all the safety systems and procedures designed by the original manufacturer must be maintained.

2.8.8.2 Cylinder head

The cylinder head must be the originally fitted and a homologated part. The following modifications are allowed:

- a. 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. Welding is not allowed. No machining or modification is allowed in the cam box / valve mechanism area.
- b. The throttle body insulators may be modified.
- c. Modifications of the inlet and exhaust ports by taking off or adding material (welding is forbidden). Epoxy may be used to shape the ports.

- d. Surface grinding of the cylinder head surface on the head gasket side
- e. Original homologated valve guides may be replaced.
- f. Polishing of the combustion chamber is allowed.
- g. Original valve seats must be used, but modifications are allowed to the shape.
- h. Compression ratio is free, but the combustion chamber may be modified only by taking material off.
- i. It is forbidden to add any material to the cylinder head unless as described above.
- j. Rocker arms (if any) must remain as homologated.
- k. The valves may be replaced but the valve face must remain the same diameter as homologated.
- l. Valve springs may be changed but the number must remain as homologated.
- m. Valve spring retainers, collets and/or spring seats may be altered or replaced.
- n. The shim buckets / tappets must remain as homologated.

2.8.8.3 Camshaft

- a. Camshafts may be modified or replaced (see article 2.8.8.2 a).
- 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.

2.8.8.4 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 must remain as homologated.
- d. Cam chain tensioner may be replaced.

2.8.8.5 Cylinders

- a. Cylinders may be bored to a maximum of 2mm over standard bore or up to a maximum total displacement of 700 cc, whichever is less. Machines with a standard displacement greater than 700cc must remain as homologated.
- b. If the homologated cylinder is unsupported or open on the cylinder deck, the cylinder may have the deck closed.
 - i. Water jackets must match the homologated cylinder head.
 - ii. The thickness of the addition may not exceed 8mm.
- c. Cylinder coatings must remain as homologated or replaced with a steel sleeve.
- d. The cylinder base gasket(s) may be changed.
- e. The top face of the cylinder may be machined to adjust deck height.

2.8.8.6 Pistons

- a. May be modified or replaced.

2.8.8.7 Piston rings

- a. May be modified or replaced.

2.8.8.8 Piston pins and clips

- a. May be modified or replaced.

2.8.8.9 Connecting rods

- a. Connecting rods may be altered or replaced from those fitted to the homologated motorcycle.
- b. The material must be the same type as the homologated item (e.g. steel, titanium, alloy) or steel.
- c. If the original homologated connecting rod is not fitted with a little end insert, then the replacement connecting rods may be fitted with an insert of any material.
- d. The center to center (little end to big end) length of the rod must be the same as the original homologated item.
- e. Connecting rod bolts are free.

2.8.8.10 Crankshaft

Only the following modifications are allowed to the originally fitted and homologated crankshaft:

- a. Bearing surfaces may be polished.
- b. Surface treatments may be applied to the crankshaft.
- c. Balancing is allowed but only by the same method as the homologated crankshaft. For example, heavy metal (e.g. Mallory metal inserts) is not permitted unless originally specified in the homologated crankshaft.
- d. The reduction in weight of the crankshaft can be no higher than 5% of the homologated weight without the tolerance as shown on the homologation drawing of the crankshaft.
- e. There is no limit to the addition of crankshaft weight.
- f. The balancing must be performed by the original method (e.g. drilling or machining) and in the same position (e.g. edge of counter weights).
- g. Polishing of the crankshaft is not allowed.
- h. The balance shaft must remain as homologated. No modifications are allowed.

2.8.8.11 Crankcase / Gearbox housing

- a. Crankcases must remain as homologated. No modifications are allowed (including painting, polishing and lightening).
- b. Bolt-on brackets and/or bracing may be added internally to the crankcase to increase strength, however welding on the crankcase and external bracing is not allowed.
- c. It is not allowed to add a pump used to create a vacuum in the crankcase. If a vacuum pump is installed on the homologated motorcycle, then it may be used only as homologated.

2.8.8.11.1 Lateral covers and protection

- a. Lateral (side) covers may be altered, modified, or replaced (excluding pump covers). If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of the same or higher specific weight and the total weight of the cover must not be less than the original one.
- b. Titanium bolts may be used to fasten lateral covers.
- c. Oil containing engine covers cannot be secured with aluminum bolts.
- d. 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 metal such as aluminum alloy, stainless steel, steel or titanium. Each side (left and right) of the engine must have at least one (1) protective cover installed on the farthest protruding engine cover containing oil. Composite covers are not permitted. FIM approved covers will be permitted without regard of the material or dimensions.

- i. The secondary cover must cover a minimum of 1/3 of the original cover. It must not have sharp edges that could damage the track surface. Covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcases.
 - ii. Heavy duty engine case covers may be used in lieu of secondary case covers.
- e. The Technical Director has the right to refuse any cover not satisfying this safety purpose.

2.8.8.12 Transmission / Gearbox

- a. The stock transmission shafts, and gear set only are permitted. Shimming is allowed.
- b. Undercutting and surface treatments are permitted.
- c. OEM shift drum detent stars may be modified or replaced.
- d. Quick-shift systems are allowed (including wire and potentiometer).
- e. The countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- f. The sprocket cover may be modified or eliminated.
- g. The chain guard may be removed.

2.8.8.13 Clutch

- a. The 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 may be changed.
- d. The original clutch assembly (including the clutch basket) may be modified or replaced by an aftermarket unit. The maximum retail price of the complete assembly is €1200. The clutch may include back torque limiting capabilities (slipper type).
- e. No power source (i.e. hydraulic or electric) can be used for gear selection if not installed in the homologated model for road use. Human power is excluded from the ban.

2.8.8.14 Oil pumps and oil lines

- a. The originally fitted and homologated oil pump may be modified but the oil pump housing, mounting points and oil feed points must remain as original.
- b. Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of braided reinforced construction with swaged or threaded connectors.

2.8.8.15 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. The radiator fan and wiring may be removed. Thermal switches, water temperature sensors and thermostats may be removed inside the cooling system.
- e. The radiator may be changed with an aftermarket radiator or additional radiator.
- f. Oil coolers may be modified. Heat exchangers (oil/water) may be replaced with an oil cooler.
- g. Oil coolers must not be mounted on or above the rear fender.
- h. The radiator cap is free.

2.8.8.16 Air box

- a. The air box design is free but must be able to allow the engine to operate in all climatic conditions at all times (i.e. rain should not stall the engine).
- b. The air box drains must be sealed.
- c. Ram air tubes or ducts running from the fairing to the air box may be modified, replaced, or removed.
- d. All motorcycles must have a closed breather system. All oil breather lines must be connected and discharge in the air box or into a vented oil catch tank.
- e. Additional heat shielding is allowed (i.e. gold or silver heat tape).

2.8.8.17 Fuel supply

- a. Fuel pumps must remain as homologated.
- b. The fuel pressure regulator may be modified or replaced.
- c. Fuel lines from the fuel tank up to the injectors (fuel hoses, delivery pipe assembly, joints, clamps, fuel canister) may be replaced and must be located in such a way that they are protected from crash damage.
- d. Fuel petcocks may be altered, replaced, or removed from those fitted to the homologated motorcycle.
- e. Quick connectors or dry break connectors may be used.
- f. Fuel vent lines may be replaced.
- g. Fuel filters may be added.

2.8.8.18 Exhaust system

- a. Exhaust pipes, catalytic converters and silencers may be altered or replaced from those fitted to the homologated motorcycle. Catalytic converters must be removed.
- b. The number of the final exhaust silencer(s) is free.
- c. For safety reasons, the exposed edge(s) of the exhaust pipe(s) outlet(s) 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 the Twins Cup will be 107 dB/A (with a three (3) dB/A tolerance after the race only) except for where local rules prevail.

2.8.9 Electrics and electronics

2.8.9.1 Ignition / Engine Control System (ECU)

- a. The engine control system (ECU) may be modified or replaced with the following:
 - i. The original and homologated ECU with or without software changes and /or FIM/DWO/MotoAmerica approved external ignition/ injection module(s). Price

- limit **€1800** (tax and OEM ECU price excluded but includes software, upgrades/ flashes)
- ii. A MotoAmerica approved race ECU. For the race ECU to be approved the retail price including software, any activations and upgrades or necessary hardware (e.g. ignition driver and lambda modules) must be less than: **€1800** excluding data logger or **€3100** including data logger.
 - iii. The maximum total price of other active/control/calculation units such as lambda driver modules, quick shifters, analogue to CAN, air bleed control, dash and ABS defeat modules and traction control units is €750. These devices must be approved by FIM/DWO/MotoAmerica.
- b. For the ignition and or injection module, or quick shifter to be approved, samples must be sent by the manufacturer of the device to the Technical Director with technical data and selling price.
 - c. 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.
 - d. During an event, the Technical Director has the right to ask a team to substitute their ECU or external module with the sample received from the manufacturer. The change must be done before Sunday warm-up.
 - e. No extra sensors may be added for control strategies except shift rod sensors, wheel speed sensors and lambda sensors.
 - f. Other additional electronic hardware equipment not on the original homologated motorcycle cannot be added with the exceptions noted below.
 - g. The characteristics of approved data logging systems must be the following:
 - i. The maximum retail price of the unit (hardware + software, excluding sensors and wiring harness) cannot exceed €3000 (tax excluded) if it is a standalone unit and €3750 (tax excluded) if combined with the ECU.
 - ii. The data logger unit must be available for sale to the public.
 - iii. A maximum of seven (7) simultaneously working sensors (connected to the additional data logger) may be added to the original sensors on the motorcycle.
 - iv. The sensors must be simple function.
 - v. Approved data loggers with internal inertial platforms (IMU or gyros) may be used for data collection but may not be used for control strategy. Also see 2.6.9.1/i./vii.
 - vi. Type of sensor is free.
 - vii. Communication from the ECU to an approved data logger (logger can receive data only; no data transmission is allowed) is allowed without any limitation in CAN channel logger number.
 - h. 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 and considered in the seven (7) sensors.
 - i. The addition of a GPS unit for lap timing/scoring purposes is allowed and considered in the seven (7) sensors.
 - j. Telemetry is not allowed.
 - k. 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.

- l. Harness:
 - i. Wiring harness is free.
 - m. The original speedometer and tachometer may be altered or replaced.
 - n. Spark plugs may be replaced.
 - o. The central unit (ECU) may be relocated.
 - p. The battery is free.

2.8.9.2 Generator, alternator, electric starter

- a. The generator (ACG) must remain as homologated; no modifications are allowed.
- b. The flywheel may be modified or replaced.
- c. The ACG must generate sufficiently to maintain battery charge.
- d. The stator must be fitted in its original position and without offsetting.
- e. The electric starter must operate normally and always be able to start the engine during the event.

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

2.8.10 Main frame and spare motorcycle

- a. **During the entire duration of the event each rider may only use one (1) complete motorcycle, as presented for technical control, with the frame clearly identified with a seal.**
- b. **In case the frame needs to be replaced, the rider or the team must request the use of a spare frame to the Technical Director. The participants recognize the need for Technical Director to make decisions that require judgment and the exercise of discretion. The decision of the Technical Director is final.**
- c. **One (1) spare complete motorcycle is allowed per rider. The spare motorcycle may only be used once your original frame has been deemed unusable by the Technical Director. (For example, you may not go to your spare motorcycle for a complete engine failure.)**
- d. **The spare motorcycle will not be allowed in the pit box before the rider, or the team has received authorization from the Technical Director.**
- e. **The motorcycle must be inspected before its use by the technical stewards for safety checks and a new seal will be placed on the motorcycle frame.**
- f. **A team may opt to have one (1) spare machine shared by two or more riders.**

Explanation of Procedures

Only one (1) complete motorcycle may be presented for the preliminary technical checks, and it will be the only motorcycle allowed on the track and in the front of pit box during the practices, qualifying, and races.

The frame of this motorcycle will be officially sealed by the Technical Director or by his appointed staff. The seal will bear a serial number, which will be recorded. Any attempt made to remove the seal will damage it irreparably.

At any time during the event the technical stewards, under the direction of the Technical Director, may check the seal and verify that it conforms to the motorcycle and rider it was assigned to. For cross reference, every frame must have a unique number (VIN) punched on the steering-head.

If the primary or active motorcycle is damaged in a crash or in any other incident and is declared unrepairable (safely and in the available time) by the Technical Director or his appointed staff, then the seal on the damaged motorcycle will be destroyed by the technical staff and the chassis of this motorcycle must not be used for the remainder of the event. The new serial number will be recorded by the Technical Director.

The spare motorcycle must be of the same manufacturer and same displacement, changes to manufacturer or displacement may be allowed at the discretion of race direction and may be accompanied by grid position penalties.

During set up day (usually the day before first official practice session) no restrictions apply regarding the location of the spare motorcycle. From the start of the first practice session, any spare motorcycle must be kept out of view. It is recommended that team working areas incorporate an area for this purpose. During an event, minor adjustments may be made to the spare motorcycle, the intent being to allow teams to maintain parity with the primary bike.

In the event the spare motorcycle is used in competition, the primary machine is taken out of competition. At that time, the damaged machine must be kept out of view.

The spare machine can only be used in the next session in which the incident occurred rendering the primary bike not able to be used. In a race situation the first opportunity to use the spare machine is the next session or race. A race will be deemed to have begun when the rider exits pit lane for the sighting laps. All restarts, including those three laps or less, are considered a continuation of the original race for determining spare machine eligibility.

The team may rebuild the original primary machine, however only in the case of TOTAL PROVEN WRECKAGE with the spare bike can an application be made to utilize the original machine. The decision of the Technical Director regarding this is final.

The damaged frame may be impounded by the Technical Director for later examination.

2.8.10.1 Frame body and sub-frames

- a. The main frame must remain as originally produced by the manufacturer for use on the homologated machine.
- b. Gussets or tubes may not be added or removed; other modifications are allowed within the following section of these rules. Brackets may be welded or bolted to the main frame for the purpose of constructing a detachable front or rear sub-frame or attaching fairings. These brackets may not be used to change the rigidity of the main frame. (See 2.8.10.1/ j)
- c. Holes may be drilled in the frame only to fix approved components (i.e. fairing brackets, steering damper mount).
- d. The engine must be mounted in the homologated position.
- e. Suspension linkage mounting points on the frame must remain as homologated.
- f. If the homologated machine has exchangeable bearing inserts/ bushes:
 - i. The bushings/inserts are free to make the above adjustment and the homologated position is considered as the position in which the production motorcycle is supplied.
- g. If the homologated motorcycle has fixed bearing positions for the steering stem:

- i. Steering angle changes are permitted by fitting inserts onto the bearing seats of the original steering head. The original bearing seats may be modified (ovaled) or increased in diameter to insert special bushings. No part of these special bushings may protrude axially more than three (3) mm from the original steering head pipe location, nor may the bearing be inset.
- h. All motorcycles must display a vehicle identification number punched on the frame body (a proper "legal VIN" which the Technical Director may choose to append). No detachable plates are permitted.
- i. No polishing or surface refinishing is allowed but the paint scheme is not restricted.
- j. The front and rear sub frame may be changed, altered, or removed. If the rear sub frame is integral to the main frame, additional seat brackets may be added and non-stressed protruding brackets may be removed if they do not affect the safety of the construction or assembly. Rear sub frames that are integral to the main frame may be removed and replaced with a detachable sub-frame. Titanium or composites may not be used for the construction of the subframe. Bolt-on accessories to the rear sub-frame may be removed. Also see 2.8.11/f.
- k. Approved sub-frames will be permitted without regard of the material.

2.8.10.2 Suspension - General

- a. Participants in the Twins Cup class must only use the approved and listed suspension units for that season.
- b. The approved products from the manufacturers must be available to all participants at least one (1) month before the first round of the Twins Cup season and remain available all season. The products must be available within six (6) weeks of a confirmed order.
- c. Setting parts and tuning parts must be provided by the suspension manufacturers to all customers/teams/participants using the manufacturer's products. These parts can be used by all participants during the season. These parts shall be available for immediate delivery to all teams/customers.
- d. Teams may not modify any part of the forks or shock absorber; all setting parts must be supplied by the suspension manufacturer and available to all teams/riders.
- e. The suspension manufacturers are allowed to offer service contracts when the team is using the approved and listed suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant to obtain a suspension product.
- f. Electronically controlled suspension must be removed.

2.8.10.3 Front suspension

- a. The front fork in whole or part may be changed but must be the same type as the homologated (leading link, telescopic, etc.).
- b. Forks from the Twins Cup approved list, or from any other FIM homologated Supersport or Superstock 1000 machine, may be used.
- c. The upper and lower fork clamps (triple clamp, fork bridges) and stem may be changed 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.

2.8.10.4 Swing-arm (rear fork)

- a. The rear fork must remain as originally produced by the manufacturer for the homologated motorcycle.

- b. The rear swing-arm pivot position may be modified by use of a modified pivot bolt (smaller or elongated) but the frame must remain as homologated. 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.
- c. 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 caliper in place may be added to the rear swing-arm.
- d. The rear axle chain adjuster may be modified or changed.

2.8.10.5 Rear suspension unit (shock)

- a. The rear suspension unit may be changed but a similar system must be used (i.e. dual or mono).
- b. The rear suspension linkage may be modified or replaced.
- c. The original fixing points on the frame (if any) must be used to mount the shock absorber, linkage and rod assembly fulcrum (pivot points).
- d. Removable top shock mounts may be replaced. If replaced, they must retain their homologated geometry.

2.8.10.6 Wheels

- a. Wheels may be replaced (see article 2.3.4) and associated parts may be altered or replaced from those fitted to the homologated motorcycle.
- b. OEM wheels that do not meet the size requirements must be replaced.
- c. Aftermarket wheels must be made from aluminum alloys.
- d. The use of the following alloy materials for the wheels is not allowed: Beryllium ($\geq 5\%$), Scandium ($\geq 2\%$), Lithium ($\geq 1\%$).
- e. Each specific racing wheel model must be approved and certified according to JASO (Japanese Automotive Standards Organization) T 203-85 where W (maximum design load) of art. 11.1.3 is 195 kg for the front wheel and 195 kg for the rear wheel; K = 1.5 for front and rear wheels. Static radius of tire: front 0.301 m, rear 0.331 m.
- f. Wheel manufacturers must provide a copy (or copies) of the certificate for their wheel(s) as proof of compliance to the Technical Director when requested.
- g. The homologated wheel and sprocket carrier assembly may be used with no modification, irrespective of material.
- h. The wheels may be overpainted, but the original finish cannot be removed.
- i. On motorcycles equipped with a double-sided swing arm (rear fork), the rear sprocket and brake rotor must remain on the rear wheel when the wheel is removed.
- j. 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 rim diameter size (front and rear):	17 inches
Front wheel rim width:	3.50 inches
Rear wheel rim width:	5.25-5.5 inches

2.8.10.7 Brakes

- a. Participants in the Twins Cup season may use the following front brake parts:
 - i. The originally fitted and homologated front and rear master cylinder and calipers
 - ii. The front and rear master cylinder and calipers from an FIM homologated Supersport or Superstock 1000 machine
 - iii. The front and rear master cylinder and calipers from the Twins Cup or Supersport approved list.
 - iv. Any combination of the above
- b. The approved products from the manufacturers must be available to all participants at least one month before the first round of the MotoAmerica Twins Cup season and remain available all season. The products must be available within four (4) weeks of a confirmed order.
- c. No parts can be added to the approved list during the current season. Performance related updates are not allowed. Any product changes due to manufacturing or material supply issues must be approved in advance.
- d. Front and rear brake calipers, as well as all the mounting points and mounting hardware (mount, carrier, hanger), must remain in the homologated position (see also article 2.8.10.4 c). When using brake systems from other homologated machines you may use the same mounting technique that the systems originated from. (i.e. rear brakes may be converted to underslung if the caliper was made for that purpose and vice versa)
- e. Brake pads or shoes may be altered or replaced from those fitted to the homologated motorcycle.
- f. 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 calipers must be made above the lower fork bridge (lower triple clamp).
- g. Only steel (max. carbon content 2.1 wt. %) is allowed for brake discs.
- h. The ABS system must be removed.

2.8.10.8 Handlebars and hand controls

- a. Handlebars may be replaced.
- 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.
- e. The 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 can stop a running engine. The button or switch must be RED.

2.8.10.9 Footrest and foot controls

- a. Footrests, 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. Footrests 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 footrest must have at least an eight (8) mm solid spherical radius.
- e. Non-folding footrests must have an end (plug) which is permanently fixed, made of aluminum, plastic, Teflon® or an equivalent type of material (minimum radius 8 mm). The plug surface must be designed to reach the widest possible area. The Technical Director has the right to refuse any plug not satisfying this safety purpose.

2.8.10.10 Fuel Tank

- a. The 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 (i.e. fuel tank foam).
- 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 non-permanent adhesive. It may be constructed of foam padding or composite material.
- f. The tank may have a fitted cover.
- g. The sides and rear of the fuel tank may be protected with a cover made of a composite material.

2.8.10.11 Fairing / Bodywork

- a. The fairing and body work may conform in principle to the homologated shape as originally produced by the manufacturer or replicate any full fairing type motorcycle within the following limits:
 - i. No wings or winglets
 - ii. No excessive aerodynamics that may interfere with the safe operation of the motorcycle.
- b. The use of carbon fiber or Kevlar® materials is not allowed in fairing, fuel tank cover, seat, seat base and associated bodywork construction. Specific reinforcements in Kevlar® or carbon are allowed locally around holes and stressed areas.
- c. "Naked" or fairing-less is acceptable but must have a belly pan that conforms with 2.8.10.11 (e)(f).
- d. The windscreen may be replaced or added if not originally equipped.
- e. The original air ducts running between the fairing to the airbox may be altered or replaced from those fitted to the homologated motorcycle.
- f. The lower fairing must be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (min. 5 liters). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.

- g. 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.
- h. The front fender design and material are free but no excessive aerodynamics that may interfere with the safe operation of the motorcycle. The decision will be made by the Technical Director and is final.
- i. The rear fender design and material are free, may be added or removed. No excessive aerodynamics that may interfere with the safe operation of the motorcycle. The decision will be made by the Technical Director and is final.

2.8.10.12 Seat

- a. The seat may be altered or replaced from those fitted to the homologated motorcycle.
- b. The top portion of the rear body work around the seat may be modified to a solo seat.
- c. Holes may be drilled in the seat or rear cowl to allow additional cooling. Holes which are bigger than 10 mm must be covered with metal gauze or fine mesh. Mesh must be painted to match the surrounding material.
- d. Material of construction of the seat may be altered or replaced from those fitted to the homologated motorcycle.

2.8.10.13 Rear safety light

All motorcycles must have a functioning red light mounted at the rear of the machine. This light must be switched on any time the motorcycle is on the track or being ridden in the pit lane and the session is declared WET. All lights must comply with the following:

- a. Lighting direction must be parallel to the machine center line (motorcycle running direction) and be clearly visible from the rear at least 15 degrees to both the left and right sides of the machine center line.
- b. The rear light must be mounted near the end of the seat/rear bodywork and approximately on the machine center line, in a position approved by the Technical Director. In case of dispute over the mounting position or visibility, the decision of the Technical Director will be final.
- c. Power output/luminosity equivalent to approximately: 10 – 15 (incandescent), 0.6 – 1.8 W (LED).
- d. The output must be continuous; no flashing safety light is allowed whilst on track. Flashing is allowed in the pit lane when the pit limiter is active.
- e. The safety light power supply may be separated from the motorcycle.
- f. The Technical Director has the right to refuse any light system not satisfying this safety purpose.

2.8.10.14 Fasteners

- a. Standard fasteners may be replaced with fasteners of any material and design.
- b. Aluminum fasteners may only be used in non-structural locations.
- c. 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. See article 2.8.10.6/j.

- d. 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.
- e. Fasteners may be drilled for safety wire, but intentional weight-saving modifications are not allowed.
- f. Threads repairs may be made using inserts of different material such as Helicoils and Timeserts.
- g. Fairing/bodywork fasteners may be changed to the quick disconnect type.

2.8.11 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, seals, and gasket materials
- c. Bearings (ball, roller, taper, plain, etc.) of any type or brand may be used.
- d. Instruments, instrument bracket(s) and associated cables
- e. Painted external surface finishes and decals
- f. Material for brackets connecting non-original parts (fairing, exhaust, instruments, etc.) to the frame (or engine) cannot be made from titanium or fiber reinforced composites except the exhaust silencer hanger that may be in carbon.
- g. Protective covers for the frame, chain and footrests may be made in other materials, like fiber composite material, if these parts do not replace original parts mounted on the homologated model.

2.8.12 The following items MAY BE removed

- a. Instrument, instrument bracket and associated cables
- b. Tachometer
- c. Speedometer and associated wheel spacers
- d. Chain guard

2.8.13 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. Toolbox
- f. Helmet hooks and luggage carrier hooks
- g. Passenger footrests
- h. Passenger grab rails
- i. Safety bars, center and side stand brackets welded to the main frame may be removed.

2.9 MOTOAMERICA JUNIOR CUP TECHNICAL SPECIFICATIONS

The following rules are intended to permit limited changes to the homologated motorcycle in the interests of safety and improved competition between various motorcycle concepts.

EVERYTHING THAT IS NOT AUTHORIZED AND PRESCRIBED IN THIS RULEBOOK IS STRICTLY FORBIDDEN

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

Junior Cup motorcycles require an FIM Phase 1 and Phase 2 homologation. (see Appendix FIM homologation procedure for Superstock, Supersport and Superbike motorcycles). 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. FIM homologated machines must also enter into a participation agreement with MotoAmerica to be eligible for the class.

Once a motorcycle has been homologated, it may be used for racing in the corresponding class for a maximum period of 8 years (see homologation art 1.4.4), or until such time that the homologated motorcycle is disqualified by new rules or changes in the technical specifications of the corresponding class.

The appearance from the front, rear and the profile of Junior Cup 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.

2.9.1 **Motorcycle specifications**

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

2.9.2 **Eligible machines**

The class will be based around the machines sold in Europe as A2 class machines and excluding the A1 class machines. The MotoAmerica/FIM Commission has the right to decide which machines will be eligible in the class.

For 2022 the following will be legal (this list can be amended at any time by the MotoAmerica Commission):

- Kawasaki Ninja 400
- KTM RC390
- KTM RC390 R
- Yamaha YZF-R3 (Euro 3)
- Yamaha YZF-R3A (Euro 4)
- Yamaha YZF-R3 2020 (Euro 3 and 4)

2.9.3 **Balancing various motorcycle concepts**

The MotoAmerica/FIM Commission reserve the right to apply balancing to the machines in the class as they see fit in order to maintain equality amongst machines. Methods may include but are not limited to the following:

- rev limit
- weight limit changes
- restrictor plates/throttle stops

- approved parts (see approved parts list including restrictors at: <http://www.motoamericaregistration.com/competitor-info/>)

The decision to apply the handicap will be taken by the MotoAmerica/FIM Commission at any time deemed necessary to ensure fair competition. Balancing parts and modifications will be documented in the approved parts list published on www.motoamericaregistration.com and supersede all following regulations.

See technical bulletin 08-2018 for JRC cup balancing information.

[Junior Cup Balancing Information](#)

2.9.4 Minimum weight

The minimum weight for each model is as follows:

Brand	Bike Weight		Combined Minimum Bike and Rider Weight*
	Hard Minimum	Soft Maximum	
KTM RC 390 R	133 kg	146 kg	202
Ninja 400	137 kg	150 kg	210
YZF-R3 (All)	137 kg	150 kg	204

- Combined weight is the weight of the rider (in full racing equipment) and bike, as used on track.
- IF the bike has achieved or exceeded the 'Soft Maximum Weight' then the combined minimum weight does not need to be reached. The bike alone may never at any time be below the 'Hard Minimum Weight'. This limits the maximum amount of ballast that can be added to the machines.

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 and riders 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 ballast and weight handicap must be declared to the Technical Director at the preliminary checks.

2.9.5 Numbers and number plates

Numbers must be easily legible, in a clear simple font and contrast strongly with the background color. Backgrounds must be yellow (pantone yellow c).

The sizes for all the front numbers are:

Minimum height:	140 mm
Minimum width:	80 mm
Minimum stroke:	25 mm
Minimum space between numbers:	10 mm

The sizes for all the side numbers are:

Minimum height:	120 mm
Minimum width:	70 mm
Minimum stroke:	20 mm

Minimum space
between numbers: 10 mm

Allocated number (& plate) for the rider must be affixed on the motorcycle as follows:

- a. Once on the front, either in the center of the fairing or slightly off to one side. The number must be centered on the yellow background with no advertising within 25mm in all directions.
- b. Once, on each side of the motorcycle. The preferred location for the numbers on each side of the motorcycle is on the lower rear portion of the main fairing near the bottom. The number must be centered on the yellow background. Any change to this must be pre-approved a minimum of two (2) weeks before the first race by the MotoAmerica Technical Director.
- c. The numbers must use the fonts as detailed after Art 2. Any numbers not using these fonts must have the design of the numbers and the layout pre-approved by the MotoAmerica Technical Director a minimum of two (2) weeks before the first race. All digits must be of standard form.
- d. Any outlines must be of a contrasting color and the maximum width of the outline is three (3) mm. The background color must be clearly visible around all edges of the number (including outline). Reflective or mirror type numbers are not permitted.
- e. Numbers cannot overlap.

In case of a dispute concerning the legibility of numbers, the decision of the Technical Director will be final.

2.9.6 Fuel

- a. The designated fuel is VP Racing Fuels MGP.
- b. Please refer to Article 2.10 for additional details.

2.9.7 Tires

- a. The maximum number of tires, of any type, available to each rider during the event will be specified in Article: 2.3.7.1
- b. For the Junior Cup race only, wet tires will not need to be marked with a tire sticker. They will not be considered in the total number of tires available for use, however normal allocation limits still apply.
- c. During free practices, qualifying practices, warm-up session and races, front and rear tires are required to be marked with tire stickers.
- d. See article. 2.3.7

2.9.8 Engine

Machines may be randomly chosen for dyno testing.

2.9.8.1 Fuel injection system

2.9.8.1.1 Fuel injection systems refer to throttle bodies, fuel injectors, variable length intake tract devices, fuel pumps and fuel pressure regulators.

- 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 may be removed or fixed in the open position and the electronics may be disconnected or removed. Secondary throttle shafts must remain in place.
- f. Variable intake tract devices cannot be added if they are not present on the homologated motorcycle, and they must remain identical and operate in the same way as the homologated system. All the parts of the variable intake tract device must remain exactly as homologated.
- g. Air and air/fuel mixture must go to the combustion chamber exclusively through the throttle bodies.
- h. Electronically controlled throttle valves, known as 'ride-by-wire', may only be used if the homologated model is equipped with the same system.

2.9.8.2 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. Valve spring shims maybe changed freely.
- d. Head and base gasket – see approved parts list for allowed head gaskets (per manufacturer).
- e. A restrictor may be required to be fitted between the cylinder head and inlet manifold. It will be a flat plate. No blending or filling will be allowed with sealant or otherwise. See approved parts list: <http://www.motoamericaregistration.com/competitor-info/>
- f. The minimum squish clearance (per machine) will be listed in the approved parts list available at <http://www.motoamericaregistration.com/competitor-info/>

2.9.8.3 Camshaft

- a. The camshaft(s) 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.

2.9.8.4 Cam sprockets or gears

- a. Cam gears may be slotted or replaced with an adjustable part. Cam sprockets must be on the approved parts list.
- b. The cam chain must remain as homologated.
- c. Cam chain tensioning devices must remain as homologated.

2.9.8.5 Cylinders

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

2.9.8.6 Pistons

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

2.9.8.7 Piston rings

- a. Must be the originally fitted and homologated parts with no modification allowed.
- b. All piston rings must be fitted.

2.9.8.8 Piston pins and clips

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

2.9.8.9 Connecting rods

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

2.9.8.10 Crankshaft

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

2.9.8.11 Crankcase / Gearbox housing

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

2.9.8.11.1 Lateral covers and protection

- a. Lateral (side) covers may be altered, modified, or replaced. If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of the same or higher specific weight and the total weight of the cover must not be less than the original one.
- b. Oil containing engine covers must be secured with steel bolts.
- c. 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 metal such as aluminum alloy, stainless steel, steel, or titanium. Each side (left and right) of the engine must have at least one (1) protective cover installed on the farthest protruding engine cover containing oil. Composite covers are not permitted. FIM approved covers will be permitted without regard of the material or dimensions.
 - i. The secondary cover must cover a minimum of 1/3 of the original cover. It must not have sharp edges that could damage the track surface. Covers must be fixed properly and securely with a minimum of three (3) case cover screws that also mount the original covers/engine cases to the crankcases.
 - ii. Heavy duty engine case covers may be used in lieu of secondary case covers.
- d. The Technical Director has the right to refuse any cover not satisfying this safety purpose.

2.9.8.12 Transmission / Gearbox

- a. Must be the originally fitted and homologated parts with no modification allowed except:
 - i. Shimming is allowed.
 - ii. Undercutting and surface treatments are permitted.
 - iii. Shift star and detent may be replaced but must function as originally designed.
- b. Downshift auto-blipping is not allowed.
- c. The countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.
- d. The sprocket cover may be modified or eliminated.
- e. The chain guard as long as it is not incorporated in the rear fender may be removed.

2.9.8.13 Clutch

- a. The 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 may be changed.

- d. The clutch basket (outer) must be the originally fitted and homologated part but may be reinforced.
- e. The original clutch assembly may be modified or replaced by an aftermarket clutch, also may include back torque limiting capabilities (slipper type).

2.9.8.14 Oil pumps, oil lines and water pump

- a. The oil pump and oil lines must be the originally fitted and homologated parts with no modification allowed.
- b. The water pump must be the originally fitted and homologated part.

2.9.8.15 Radiator / Oil cooler

- 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 fans and wiring may be removed. Thermal switches, water temperature sensors and thermostats may be removed inside the cooling system.
- e. The 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 is permitted.

2.9.8.16 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 exclusively discharge in the air box.
- e. No heat protection may be attached to the air box.

2.9.8.17 Fuel supply

- a. The fuel pump and fuel pressure regulator must be the originally fitted and homologated parts 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.

2.9.8.18 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) is free.

- 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 the Junior Cup will be 110 dB/A (with a three (3) dB/A tolerance after the race only).
- f. The test RPM will be as follows:

Machine:	Test rpm
Kawasaki Ninja 400	6,500rpm
Yamaha YZF-R3	7,500rpm
KTM RC390	5,500rpm

2.9.9 Electrics and electronics

2.9.9.1 Ignition / Engine Control System (ECU)

- a. **The engine control system (ECU) must be either:**
 - i. The Supersport 300 Control Electronics System or a MotoAmerica approved electronics system. See Art. 2.9.9.2.
 - ii. The original system (with homologated ECU and software or MotoAmerica approved software) with a MotoAmerica/DWO approved external fuel injection module and data logger added. See Art 2.9.9.3

Machine:	Max rpm
Kawasaki Ninja 400	10,350 rpm
KTM RC390	11,000 rpm
KTM RC390 R	11,000 rpm
Yamaha YZF-R3	13,300 rpm

- b. The maximum rpm for each machine is as follows (start of 2020):

2.9.9.2 Supersport 300 Control Electronics System

- a. The ECU/Dashboard/Harness must be the Supersport 300 approved Control Electronic System. The sole official supplier of the Control Electronics System is Solo Engineering. www.soloengineering.com, sales@solengineering.com as documented in the approved parts list.
- b. The software and firmware used must be from the list of legal software/firmware versions published at www.fim-live.com.
- c. 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.
- d. At any time during an event the Technical Director has the right to make a team substitute their ECU with an FIM sample.
- e. Sensors may not be replaced, modified, or substituted unless noted and the allowed OEM ECU sensors/channels are:
 1. Throttle position sensor(s)
 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. Front speed (from ABS sensor)
 7. Rear speed (from ABS sensor)
 8. Gearbox output shaft speed
 9. Gear position
 10. Barometric air pressure
 11. Water temperature
 12. Air temperature
 13. Oil pressure switch
 14. Tip-over switch (Internal to ECU)
- f. The following sensors may be added:
1. Lambda sensor (Bosch LSU4.9)
 2. Left- and Right-Hand switches (may be replaced from kit)
 3. Fork position (teams' choice)
 4. Shock position (teams' choice)
 5. Front brake pressure sensor (teams' choice)
 6. Transponder/lap time signal
 7. GPS receiver unit
- g. No external modules may be fitted (except as part of a quick shifter where it may only provide a signal to the approved ECU and only be connected to the battery and the quick shift connector on the approved harness.
- h. No external modules may be fitted (except as part of a quick shifter where it may only provide a signal to the approved ECU and only be connected to the battery and the quick shift connector on the approved harness.
- i. The data logger must be:
- i. From the DWO/FIM approved Supersport 300 approved logger list.
 - ii. The firmware/software of any data logging units must be an FIM/DWO approved version.
 - iii. A copy of the software and documentation must be submitted by the manufacturer to the Technical Director before it can be approved for use.
 - iv. An external logger may only connect to the 'CAN' connections in the harness. These supply CAN and 12v Power.
 - v. A GPS receiver/aerial may be connected to an external logging device.
 - vi. No other connections can be made to the data logger
 - vii. Free analysis software must be available.
- j. Plug cap must remain as homologated.
- k. Spark plugs may be replaced.
- l. Battery is free.

2.9.9.3 Original Electronics System

- a. The engine control system (ECU) must be either:
 - i. The original system as homologated, with MotoAmerica approved flash installed only. See bulletin 08-2018 for approved MotoAmerica Flash.
 - ii. The original system (with the homologated ECU and software or MotoAmerica approved software) (option i) with an FIM/DWO approved external fuel injection module added.
 - iii. During an event the Technical Director may exchange ECU's with samples held by FIM/DWO. The exchange will take place on the grid or in a holding area before the pit lane opens. The team will have the option to use the same ECU in the morning warm-up and it will be impounded between warm-up and the race. Also see point g.
- b. The software and the firmware must be supplied and approved by the machine's manufacturer or a MotoAmerica approved supplier. The Technical Director must be supplied with the software/firmware, and it must be added to the approved parts list before it may be used.
- c. The manufacturer or approved supplier must provide MotoAmerica with the tools/software to perform software checks.
- d. 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.
- e. Central unit (ECU) may be relocated.
- f. 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.
- g. At any time during an event the Technical Director has the right to make a team substitute their ECU or external module with the MotoAmerica sample.
- h. 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)
 7. Gearbox output shaft speed
 8. Gear position
 9. Air pressure
 10. Water temperature
 11. Air temperature
 12. Tip-over Switch (No lean angle)
 13. Gear shift load cell/switch (Championship approved part – see Art 2.9.9.3/k.)

14. Lambda sensor (may be OEM or a replacement sensor see Art. 2.9.9.3/j. It may be connected to the original harness/ECU or to the FIM/DWO approved lambda control module).
- i. No extra sensors may be added for control strategies except the shift rod sensor of the FIM/DWO approved rev-limiter/quick shifter.
 - j. The FIM/DWO 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 FIM/DWO approved auto tuning units may be used.
 - k. A compulsory FIM/DWO rev limiter/quick shift unit must be fitted, it is the team's discretion whether to use the quick shift function. This must always remain fitted and active. It must only be installed as detailed in the supplied instructions.
 - l. The FIM/DWO quick shift unit is €500 + taxes + delivery.
 - m. See Bulletin 08-2018 for the latest contact information.
 - n. Machine Part Numbers
 - 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
 - o. HM Quick-shifter wheel speed kits may be noted on the FIM approved parts list.
 - p. It is the team's responsibility to inform the Technical Director or his appointed staff if they believe that the rev limiter is not acting correctly.
 - q. The following strategies are NOT allowed:
 - i. Traction control (including anti-spin/rate of change of rpm)
 - ii. Launch Control
 - iii. Anti-Wheelie
 - iv. Closed loop Engine Brake Control
 - v. Corner by Corner/Distance based adjustments
 - vi. Rider adjusted trims
 - r. Other additional electronic hardware equipment not on the original homologated motorcycle cannot be added with the exceptions noted below.
 - s. 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.
 - t. The characteristics of DWO/FIM approved Supersport 300 complete data logging systems must be the following:
 - i. Must be from the DWO/FIM approved Supersport 300 logging Kit list. The firmware/software of any data logging units must be an FIM/DWO approved version. A copy of the software and documentation must be submitted to the Technical Director before it can be used.

- ii. Maximum retail price of the complete kit (hardware, software, sensors and wiring harness) cannot exceed €1500 Euro (VAT excluded). The sum price of the components individually cannot exceed €1650 (VAT excluded)
- iii. If any sensors are supplied as options, then the total price including ALL options must respect 2.9.9.3/r/ii).
- iv. The Data Logger system must be available for sale to the public. The datalogging system supplier must apply to the FIM for approval before January 31st.
- v. The system may only include following sensors:
 - 1. Fork position
 - 2. Shock position
 - 3. Front brake pressure switch
 - 4. Transponder/Lap time signal
 - 5. GPS Unit (Lap timing and track position)
 - 6. Rear wheel speed (if not fitted to OEM machine)
- vi. The system may only log the following channels (by connecting to or “piggybacking” in the case of the original sensors unless noted otherwise):
 - 1. Fork position
 - 2. Shock position
 - 3. Front brake pressure switch
 - 4. Lap time
 - 5. Rear wheel speed (allowed from K-Line)
 - 6. Engine RPM (allowed from K-Line)
 - 7. Throttle Position (allowed from K-Line)
 - 8. Water temperature (allowed from K-Line)
 - 9. Transponder/Lap time signal
 - 10. GPS Position/time/speed
- u. Telemetry is not allowed.
- v. 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.
- w. Harness:
 - i. The key/ignition lock may be relocated, replaced or removed.
 - ii. 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.
 - iii. DWO/FIM approved manufacturer Kit Harness is allowed.
- x. Data logger Harness:
 - i. The Data Logger wire harness cannot connect any sensors other than those specified. The harness may connect to or “piggyback” the OEM sensors that it is allowed to log. The only function of the approved data logging wiring harness is to connect the specified sensors to the Data Logger, to transmit the data and

supply the power. It CANNOT be connected to the motorcycles CAN bus but may be connected to the K-line only to receive signals noted in 2.9.9.3/r/vi).

- y. To be approved samples of external modules with their tuning tools must be sent by the Manufacturers to the Technical Director at least 3 weeks before the beginning of the Championship, with technical data and selling price. The manufacturer must provide MotoAmerica with the tools to control the module.
- z. Dashboard is free however it may only replace the functions of the standard dashboard (including switch logic and display) and may not perform any other logic function on the bike. It may incorporate the datalogger then it is part of the logging system and the "Supersport 300 datalogging kit" price limit will be applied to the whole system – not just to the logging option/upgrade in the dashboard, (the complete unit price will be considered). The dashboard may only display those channels noted in 2.9.9.3/r). There must remain a working tachometer display.
 - aa. A lap timer may be fitted.
 - bb. Plug cap must remain as homologated.
 - cc. Spark plugs may be replaced.
 - dd. Battery is free.

2.9.9.4 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 two (2) seconds without the use a boost battery. No boost battery may be connected to the machine after the end of the session.

2.9.10 Main frame and spare motorcycle

- a. **During the entire duration of the event each rider may only use one (1) complete motorcycle, as presented for technical control, with the frame clearly identified with a seal.**
- b. **In case the frame needs to be replaced, the rider or the team must request the use of a spare frame to the Technical Director. The participants recognize the need for Technical Director to make decisions that require judgment and the exercise of discretion. The decision of the Technical Director is final.**
- c. **One (1) spare complete motorcycle is allowed per rider. The spare motorcycle may only be used once your original frame has been deemed unusable by the Technical Director. (For example, you may not go to your spare motorcycle for a complete engine failure.)**
- d. **The spare motorcycle will not be allowed in the pit box before the rider, or the team has received authorization from the Technical Director.**
- e. **The motorcycle must be inspected before its use by the technical stewards for safety checks and a new seal will be placed on the motorcycle frame.**
- f. **A team may opt to have one (1) spare machine shared by two or more riders.**

Explanation of Procedures

Only one (1) complete motorcycle may be presented for the preliminary technical checks, and it will be the only motorcycle allowed on the track and in the front of pit box during the practices, qualifying, and races.

The frame of this motorcycle will be officially sealed by the Technical Director or by his appointed staff. The seal will bear a serial number, which will be recorded. Any attempt made to remove the seal will damage it irreparably.

At any time during the event the technical stewards, under the direction of the Technical Director, may check the seal and verify that it conforms to the motorcycle and rider it was assigned to. For cross reference, every frame must have a unique number (VIN) punched on the steering-head.

If the primary or active motorcycle is damaged in a crash or in any other incident and is declared unrepairable (safely and in the available time) by the Technical Director or his appointed staff, then the seal on the damaged motorcycle will be destroyed by the technical staff and the chassis of this motorcycle must not be used for the remainder of the event. The new serial number will be recorded by the Technical Director.

The spare motorcycle must be of the same manufacturer and same displacement, changes to manufacturer or displacement may be allowed at the discretion of race direction and may be accompanied by grid position penalties.

During set up day (usually the day before first official practice session) no restrictions apply regarding the location of the spare motorcycle. From the start of the first practice session, any spare motorcycle must be kept out of view. It is recommended that team working areas incorporate an area for this purpose. During an event, minor adjustments may be made to the spare motorcycle, the intent being to allow teams to maintain parity with the primary bike.

In the event the spare motorcycle is used in competition, the primary machine is taken out of competition. At that time, the damaged machine must be kept out of view.

The spare machine can only be used in the next session in which the incident occurred rendering the primary bike not able to be used. In a race situation the first opportunity to use the spare machine is the next session or race. A race will be deemed to have begun when the rider exits pit lane for the sighting laps. All restarts, including those three laps or less, are considered a continuation of the original race for determining spare machine eligibility.

The team may rebuild the original primary machine, however only in the case of TOTAL PROVEN WRECKAGE with the spare bike can an application be made to utilize the original machine. The decision of the Technical Director regarding this is final.

The damaged frame may be impounded by the Technical Director for later examination.

2.9.10.1 Frame body and rear sub frame

- a. The frame must be the originally fitted and homologated part with no modification allowed.
- b. Holes may be drilled in the frame only to fix approved components (i.e. fairing brackets, steering damper mount, sensors).
- 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.
- d. 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: 30 mm). Without exception, the wheel axles cannot be modified.
- e. The side stand bracket may be cut or removed.
- f. Nothing else may be added or removed from the frame body.

- g. All motorcycles must display a vehicle identification number punched on the frame body (a proper 'legal VIN' or a unique designation by the team to which the Technical Director may choose to append). No detachable plates are permitted.
- h. Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated motorcycle.
- i. The front sub frame / fairing mount may be changed or altered.
- j. The rear sub frame may be changed or altered, (if equipped as indicated in section 2.3.1b) but the type of material must remain as homologated or be material of a higher specific weight.
- k. Additional seat brackets may be added. Non-stressed protruding brackets of the subframe (if equipped as indicated in section 2.3.1b) 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.
- l. The paint scheme is not restricted but polishing the frame body or sub frame is not allowed.

2.9.10.2 Suspension - General

- a. Participants in the Junior Cup class must only use the approved and listed suspension units for that season. The price limits are:
 - i. Forks: For the fork kit, including all parts such as but not limited to cartridge, springs (1 set), adjusters, fork caps, blanking inserts, seals, bushes but excepting oil and fitting the price limit is **€900** excluding tax.
 - ii. Shock Absorber/RCU: For the complete shock absorber / RCU including but not limited to spring (1 of), the price limit is **€935** excluding tax. The pre-load adjuster is free and excluded from the price limit.
- b. The approved products from the suspension manufacturers must be available to all participants at least one (1) month before the first round of the MotoAmerica season and remain available all season. The products must be available within six (6) weeks of a confirmed order.
- c. Setting parts and tuning parts must be provided by the suspension manufacturers to all customers/ teams/ participants using the manufacturer's products. These parts can be used by all participants during the season. These parts shall be available for immediate delivery to all teams/customers.
- d. Teams may not modify any part of the forks or shock absorber; all setting parts must be supplied by the suspension manufacturer and available to all teams/riders.
- e. The suspension manufacturers are allowed to offer service contracts when the team is using the approved and listed suspension products. The suspension manufacturers cannot demand a service contract for a customer or participant to obtain a suspension product.
- f. Electronically controlled suspension must be removed.
- g. 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).

2.9.10.3 Front forks

- a. Forks (stanchions, stem, wheel spindle, upper and lower crown, etc.) must be the originally fitted and homologated parts 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. The 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 may only be modified or replaced to allow external adjustment.
- 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. Only approved after-market damper kits or valves may be installed. The original surface finish of the fork tubes (stanchions, fork pipes) may be changed.

2.9.10.4 Swing-arm (rear fork)

- a. The rear fork must be the originally fitted and homologated part with no modification allowed.
- b. The rear fork pivot bolt must be the originally fitted and homologated part with no modification allowed.
- c. The rear swing-arm 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 chain guard must be fitted in such a way as to reduce the possibility that any part of the riders' body may become trapped between the lower chain run and the rear wheel sprocket.
- 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 caliper 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.

2.9.10.5 Rear suspension unit (shock)

- a. The rear suspension unit (shock) may be modified or replaced, but the original attachments to the frame and swing arm or linkage must be as homologated.
- b. All the rear suspension linkage parts must be the originally fitted and homologated parts with no modification allowed.
- c. Removable top shock mounts must be the originally fitted and homologated parts 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.

2.9.10.6 Wheels

- a. Wheels must be the originally fitted and homologated part with no modification allowed.
- b. The wheels may be overpainted, but the original finish cannot be removed.
- c. If the original design includes a cushion drive for the rear wheel, it must remain as originally produced for the homologated motorcycle.

- d. Wheel axles must remain as homologated, wheel spacers may be modified or replaced.

2.9.10.7 Brakes

- a. Brake discs may be replaced by aftermarket discs which comply with the following requirements:
 - i. Brake discs must retain the same material as the homologated disc or be steel (max. carbon content 2.1 wt.%).
 - ii. 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 aluminum.
 - iii. The outside and inner diameters of the brake disc must not be larger than the homologated disc.
 - iv. The fixing of the carrier on the wheel must remain the same as on the homologated disc.
 - v. The thickness of the brake disc may be increased but the disc must fit into the homologated brake caliper without any modification. The number of floaters is free.
- b. The front and rear brake calipers (mount, carrier, hanger) must be the originally fitted and homologated parts with no modification allowed.
- c. To reduce the transfer of heat to the hydraulic fluid it is permitted to add metallic shims to the calipers, between the pads and the calipers, and/or to replace light alloy pistons with steel pistons made by the same manufacturer of the caliper.
- d. The rear brake caliper bracket may be mounted fixed on the swing-arm, but the bracket must maintain the same mounting (fixing) points for the caliper as used on the homologated motorcycle.
- e. The swing-arm may be modified for this reason to aid the location of the rear brake caliper bracket, by welding, drilling or by using Helicoils.
The front and rear master cylinders must be the originally fitted and homologated parts with no modification allowed.
- f. Front and rear brake fluid reservoirs may be changed.
- g. Front and rear hydraulic brake lines may be changed.
- h. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (lower triple clamp).
- i. "Quick" (or "dry-break") connectors in the brake lines are not allowed.
- j. Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick change type.
- k. Additional air scoops or ducts are not allowed.
- l. If equipped the anti-lock brake system (ABS) must be removed. The ABS units electronic board may remain fitted to stop ECU errors.

2.9.10.8 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. The 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.

2.9.10.9 Footrest / Foot controls

- a. Footrests, 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. Footrests 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 footrest must have at least an eight (8) mm solid spherical radius. (see diagram A & C).
- e. Non-folding footrests must have an end (plug) which is permanently fixed, made of aluminum, plastic, Teflon® or an equivalent type of 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.

2.9.10.10 Fuel tank

- a. The 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 (open-celled 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 non-permanent adhesive. It may be constructed of foam padding or composite material.**
- f. The tank may not have a full cover fitted over it unless the homologated machine also features a full cover.
- g. The sides and rear of the fuel tank may be protected with a cover made vinyl or a composite material. These covers must follow the shape of the fuel tank exactly.
- h. Fuel tank cannot have heat reflective sheet attached to its bottom surface.

2.9.10.11 Fairing / Bodywork

- a. The 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 fiber or carbon composite materials is not allowed. Specific reinforcements in Kevlar® or carbon are allowed locally around holes and stressed areas. Headlights must be included even when considered external.

- b. For all bodywork paint and decal design is free.
- c. Overall size and dimensions must be the same as the original part, with a tolerance of ± 5 mm, respecting the design and features of the homologated fairing as far as possible. The overall width of the frontal area may be +5 mm maximum. The decision of the Technical Director is final.
- d. The wind screen may be replaced.
- e. Fairing brackets may be altered or replaced.
- f. The ram-air intake must maintain the originally homologated shape and dimensions.
- g. The original air ducts running between the fairing and the air box may be altered or replaced. Carbon fiber composites and other exotic materials are forbidden. Particle grilles or "wire-meshes" originally installed in the openings for the air ducts may be removed.
- h. The lower fairing must be constructed to hold, in case of an engine breakdown, a minimum of four (4) liters. The lower edge of all the openings in the fairing must be positioned at least 70 mm above the bottom of the fairing.
- i. 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 $\leq 90^\circ$.
- j. 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 plates. The material is free but the distance between all opening centers, circle centers and their diameters must be constant. Holes or perforations must have an open area ratio $> 60\%$.
- k. 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.
- l. The lower fairing must incorporate a single opening of $\varnothing 25$ mm diameter in the front lower area. This hole must remain sealed in dry conditions and must be opened only in wet race conditions as declared by Race Direction.
- m. The front fender may be replaced with a cosmetic duplicate of the original parts and may be spaced upward for increased tire clearance.
- n. The rear fender fixed on the swing arm may be modified, changed, or removed.

2.9.10.12 Seat

- a. The seat, seat base and associated bodywork may be replaced
- b. The appearance from the 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. The same material as the fairing must be used (article 2.9.10.11.a)
- f. All exposed edges must be rounded.

2.9.10.13 Rear safety light

All motorcycles must have a functioning red light mounted at the rear of the machine. This light must be switched on any time the motorcycle is on the track or being ridden in the pit lane and the session is declared WET. All lights must comply with the following:

- a. Lighting direction must be parallel to the machine center line (motorcycle running direction) and be clearly visible from the rear at least 15 degrees to both the left and right sides of the machine center line.
- b. The rear light must be mounted near the end of the seat/rear bodywork, and approximately on the machine center line, in a position approved by the Technical Director. In case of dispute over the mounting position or visibility, the decision of the Technical Director will be final.
- c. Power output/luminosity equivalent to approximately: 10-15 (incandescent), 0.6 – 1.8 W (LED).
- d. The output must be continuous; no flashing safety light is allowed whilst on track. Flashing is allowed in the pit lane when the pit limiter is active.
- e. The safety light power supply may be separated from the motorcycle.
- f. The Technical Director has the right to refuse any light system not satisfying this safety purpose.

2.9.10.14 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 may be made using inserts of different material such as Helicoils and Timeserts.
- d. Fairing / bodywork fasteners may be replaced with the quick disconnect type.
- e. Aluminum fasteners may only be used in non-structural locations.

2.9.11 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, seals, and gasket materials.
- c. All bearings (ball, roller, taper, plain, ect.) must be the exact OEM bearing replacement regarding size, shape and material.
- d. Painted external surface finishes and decals.
- e. Material for brackets connecting non-original parts (fairing, exhaust, instruments, etc.) to the frame (or engine) cannot be made from titanium or fiber reinforced composites except the exhaust silencer hanger that may be in carbon.
- f. Protective covers for the frame, chain and footrests may be made in other materials like fiber composite material if these parts do not replace original parts mounted on the homologated model.

2.9.12 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 or rear portion of the frame.

2.9.13 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. The following if not welded to the frame:
 - i. Helmet hooks and luggage carrier hooks
 - ii. Passenger footrests
 - iii. Passenger grab rails
- g. Safety bars, center and side stands must be removed (fixed brackets must remain excepting side stand bracket).

2.10 FUEL, OIL AND COOLANTS

2.10.1 Fuel

- a. The designated fuel is VP Racing Fuels MGP.
- b. **The designated fuel for KOTB is VP Racing Fuels T4.**
- c. No other additives or fuels are permitted for use.

2.10.1.2 Fuel technical details

- a. **Fuel physical properties for VP Racing Fuels MGP are available at:**
[VP MGP | VP Racing \(vpracingfuels.com\)](https://www.vpracingfuels.com)
- b. **Fuel physical properties for VP Racing Fuels T4 are available at:**
[VP T4 - 97 Octane | VP Racing Fuels](https://www.vpracingfuels.com)

2.10.3 Air

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

2.10.4 Primary tests

2.10.4.1 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.

2.10.4.2 The fuel company supplying fuel to participating teams must submit ten (10) liters (2 x 5 L) to the laboratory appointed by the AMA/FIMNA for analysis in accordance with the specification. Provided that the fuel is within the specification, a certificate containing a test report number will be issued to the fuel company. The contact for fuel analysis is: technicaldirector@motoamerica.com

2.10.5 Fuel sampling and testing

- a. The Technical Director has the sole responsibility for the administration and supervision during the taking of fuel samples.
- b. The preferred fuel test method is gas chromatography or the 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 fuel analysis. The detection of the components is done with a flame ionization detector.
- c. If other test methods are required, fuel samples will be transported to the appointed laboratory by an official courier, using the appropriate containers.
- d. Riders selected for fuel controls will be directed with their motorcycles to the inspection area.
- e. Only new sample bottles will be used for the fuel samples
- f. The fuel to be tested will be transferred into three (3) 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 Technical Director and/or the fuel analysts.
- g. The fuel sample declaration form will be filled out immediately, containing all information as shown on the sample sheet including the rider's name and race

number, date and location of fuel sampling. A responsible team member will sign this declaration after verifying that all the information is correct.

- h. Samples 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 organizer 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 samples A and B will be paid by MotoAmerica.
- i. 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 analysis of sample C will be paid by the team concerned.
- j. 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 Technical Director.
- k. In the case of non-conformity, the Technical Director must notify the results to the MotoAmerica Permanent Bureau, 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.
- l. 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 the MotoAmerica Permanent Bureau and the Technical Director if a counter-expertise is required (or not required) for sample C.
- m. Race Direction will take a decision 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 event at which the Race Direction decision is taken. The decision will take place after the C sample has been analyzed.

2.10.6 Fuel storage

- a. Fuel must only be stored in metal, sealable containers in the competitors' pit.
- b. Firefighting equipment, protective devices and staff must conform to the requirements imposed by the local authorities and by-laws.
- c. The organizer must have fire extinguishers of a size and type approved by the local by-laws, available to each competitor in the pit area.

2.10.7 Coolants

- a. The only liquid engine coolants permitted other than lubricating oil is water.



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

DATE FUEL SAMPLES TAKEN
FOR LAB ANALYSIS

..... /..... /

RIDER #:

SESSION:

RIDER NAME:

Sample Can "A"	
Can Label #	Can Seal #
Sample Can "B"	
Can Label #	Can Seal #
Sample Can "C"	
Can Label #	Can Seal #

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: _____

Team Position: _____
(OWNER/MANAGER/MECHANIC)

2.11 PROTECTIVE CLOTHING AND HELMETS

- 2.11.1** Riders must wear a complete leather suit with additional leather padding or other protection on the principal contact points (knees, elbows, musters, hips etc.).
- 2.11.2** Linings or undergarments must not be made of a synthetic material which might melt and cause damage to the riders' skin.
- 2.11.3** Riders must also wear leather gloves and boots, with which the leather suit provides complete coverage from the neck down.
- 2.11.4** Leather substitute materials may be used, providing they have been checked by the Technical Director.
- 2.11.5** Use of a back protector is highly recommended. **For 2024 use of a back protector will be required.**
- 2.11.6** Rider suit air bags are recommended. **For 2024 use of a rider suit air bag will be required for permanent riders and riders participating in more than five (5) events.**
- 2.11.7** Riders must wear a helmet which is in good condition, provides a good fit and is properly fastened.
- 2.11.8** 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 M2015, M2020D and M2020R
 - FIM FRHP (Circuit Racing Certification)
- 2.11.9** All helmets used by season riders in competition must be equipped with either a manufacture installed emergency cheek pad removal system or an Eject emergency helmet removal system. Single event riders will be granted a one race exemption from this requirement, however, on their second event weekend the device will be required if the helmet manufacture does not have an incorporated emergency cheek pad removal device. If used, riders will be responsible for ensuring that the Eject device is properly installed and operable during all on-track activities. The inflation tube must exit at the left chin bar. Riders must attach the provided Eject logo installed on the helmet's left chin bar. Helmets with a manufacture installed emergency cheek pad removal system must have either manufacture labeling on both chin bars or labeling provided MotoAmerica.
- 2.11.10** Helmets are to provide protection and are not a platform to attach foreign objects. No foreign objects, including cameras are permitted to be attached to the rider's helmet.
- 2.11.11** Visors must be made of a shatterproof material.
- 2.11.12** Disposable "tear-offs" are permitted.
- 2.11.13** The riders clothing must include their name, emergency contact, and blood type adhered to the left-side lining adjacent to the main zipper.
- 2.11.14** Any question concerning the suitability or condition of the riders' clothing and/or helmet shall be decided by the Technical Director, who may, if he so wishes, consult with the manufacturers of the product before making a final decision.

2.12 PROCEDURES FOR TECHNICAL CONTROL

A team/rider is always responsible for his motorcycle. **During the initial technical inspection, the team/rider must declare the year, make and model of the motorcycle to be used in competition. The declared motorcycle must conform to technical rules applicable to the year, make and model per the homologation.**

2.12.1 At each circuit, the technical checking area consisting of the *parc fermé* and the inspection area must be clearly defined:

- a. "Parc fermé"
 - i. The parc fermé is a restricted access area sealed with fences or other physical divisions with one or more gates.
 - ii. The gates and the area are under the control of marshals when the parc fermé is in use (e.g. after practice/qualifying/race).
 - iii. The parc fermé area must be sufficiently large to give shelter to all participating motorcycles.
- b. The only persons allowed to enter the parc fermé are the:
 - i. MotoAmerica Technical Director and technical staff
 - ii. Race Direction members
 - iii. FIMNA stewards
 - iv. Tire manufacturer's staff
 - v. Riders and team managers of motorcycles staying in the parc fermé.
 - vi. Up to two (2) team mechanics until dismissed by the technical stewards.
- c. No other persons have the right to enter and stay in the parc fermé unless invited by the Technical Director.

2.12.1.1 Inspection area

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

- a. The following persons are allowed to remain in the inspection area:
 - i. The MotoAmerica Technical Director and technical staff
 - ii. The Race Direction members
 - iii. The FIMNA stewards
 - iv. The rider, team managers or their representatives of the inspected motorcycles.
 - v. For disassembling operations, up to two (2) mechanics per motorcycle may be present.
- b. Any other persons may enter or stay in the inspection area at the sole discretion of the Technical Director. In the case of an engine inspection, the inspected entrant has the right to request a reserved area where other entrants cannot watch closely.
- c. In the inspection areas under the control of the technical stewards and the supervision of the MotoAmerica Technical Director, suitable equipment will be installed to conduct the various tests for example:
 - 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.

- 2.12.2** 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 Technical Director.
- 2.12.3** 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.
- 2.12.4** The motorcycle will be inspected under the name of the rider.
- 2.12.5** For each motorcycle, the Technical Stewards will prepare a digital or paper technical control card on which will be recorded, amongst other information, the team presenting the motorcycle and the rider.
- 2.12.6** The technical stewards must inspect the motorcycle for obvious safety omissions and the Technical Director may, at his discretion, choose to check the motorcycles for technical compliance with all other aspects of these regulations.
- 2.12.7** The Technical Director will refuse any motorcycle that does not have an operational transponder and team radio (listen only).
- 2.12.8** At the conclusion of the check, the technical stewards will place a sticker on the motorcycle indicating that it has passed the safety checks.
- 2.12.9** The Technical Manager will prepare a report on the results of technical checks which will be submitted to the event management committee via the Technical Director.
- 2.12.10** 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.
- 2.12.11** The technical stewards must be available, based on instructions from the 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.
- 2.12.12** At the end of the qualifying, qualifying practices, and races, the Technical Director 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 session (unless held longer at the discretion of the Technical Director).
- a. Competitors must ride directly into parc fermé from hot pit if they took the checkered flag in any qualifying session or race.
 - b. If the machine is in the hot pit when the session ended, work to the machine must be stopped (including data download) and the machine must be taken to parc fermé immediately.
 - c. If at any time a motorcycle leaves the hot pit during qualifying it must go directly to Parc Ferme or all times before the departure from the hot pit will be disallowed.
 - d. If a rider leaves the hot pit during a qualifying session and returns the track and subsequently follows the above procedure his times after the return the track are allowed.
- Competitors must retrieve their motorcycles within approximately 30 minutes after the session results have been made official, 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.
- 2.12.13** The Technical Director may require a team to provide such parts or samples as he may deem necessary.
- 2.12.14** If a motorcycle is involved in an accident the 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 Director 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.

- 2.12.15** Noise may be checked at any time of the event by request of the Technical Director. On request of rider, team or mechanic, noise of their own motorcycles can be checked at any time during the event.
- 2.12.16** The random weight check during practices will be held with minimum disturbance to the riders.
- 2.12.17** **The Technical Director has the final authority in case of a dispute on the conformity of the parts in question and for their acceptance.**
- 2.12.18** The parc fermé session may be reduced to 15 minutes and/or be held in hot pit if time constraints deem it necessary. A shortened parc fermé session will be referred to as quick parc fermé. The decision will be made by the Technical Director. In the case that quick parc fermé is imposed the time limit for protests will also be modified. (see art. 3.4.2)
- 2.12.19** The Technical Director may at any time during the event and until one hour after the finish of the last race, choose to inspect any machine, or team equipment (including but not limited to laptop and other computer equipment) for conformity to these regulations. Logged data may be collected at any point (for any session) for analysis.
- Refusal to allow inspection of machine or team equipment will be referred to race direction for accessed penalty.
- 2.12.20** **Dyno tests of any machine may be made at any point during the event at the discretion of the technical director.**

2.13 VERIFICATION GUIDELINES FOR TECHNICAL STEWARDS

2.13.1 Verification for the classes

- a. Make sure all necessary measures and administrative equipment are in place at least one (1) hour before the technical control is due to open.
- b. Decide who is doing what and note decisions. "Efficiency" must always be the watchword. Always keep a positive environment and remember the reasons for technical controls: SAFETY AND FAIRNESS.
- c. 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.
- d. Inspection must take place under cover with a large enough area.
- e. Weighing apparatus must be accurate and practical. The scale must be certified in the current year.
- f. Rules regarding noise level and measurement must be respected.
- g. The scales and noise meter will be available to the teams or riders for pre-race checking in the technical control area.

2.13.1.1 General

- a. The motorcycles will not be required for weight and/or noise check at the pre-race technical inspection.
- b. Noise test must take place in a clear area adjacent to the technical control at least five (5) meters from any possible noise reflecting obstruction.
- c. The riders and teams must be aware that the weight and noise may be checked at random during practice or qualifying in the pit-lane and at the end of each race.
- i. 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).
- d. The Technical Director reserves the right to spot check the weight and noise of any motorcycles on pit row during any timed session. This can occur at any time during a free practice and in the first two-thirds (2/3) of any qualifying session. This will be carried out with the least possible inconvenience to the rider or the team.
- e. Motorcycles arriving later than the first free practice must be controlled in the technical control area.
- f. At the conclusion of the inspections, the results will be recorded electronically indicating that the motorcycle has passed or failed the inspection
- g. The Technical Director must re-inspect any motorcycle that has been involved in an accident.
- h. The technical stewards must be available on instructions from the Technical Director or the technical manager, to re-inspect any motorcycle for compliance during the meeting.
- i. **The Technical Director reserves the right to check any motorcycles during or after any session for technical compliance. This will be carried out with the least possible inconvenience to the rider or the team.**

2.13.2 Timetable

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

See event specific timetable for final instructions.

2.13.3 Equipment list

- Revolution meter
- Sound meter and calibrator
- Slide caliper
- 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

2.13.4 Documents list

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

2.14 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 article 2.14.5 may be used.

2.14.1 Sound level shall be measured with the microphone placed at 50 cm from the exhaust pipe at an angle of 45° measured from the centerline 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.

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

2.14.3 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.

2.14.4 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.

2.14.5 Noise control

a. 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

b. The maximum sound level for engines with more than one (1) cylinder will be measured on each exhaust end.

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

d. The surrounding sound must not exceed 90 dB/A within a five (5) meter radius from the power source during tests.

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

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

g. The "slow response" setting must always be used.

2.14.6 Sound control after the competition

a. 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 (3) motorcycles listed in the final classification.

b. At this final test, there will be a three (3) dB/A tolerance.

2.14.7 Noise control during a competition

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

2.14.8 Guidelines for use of sound meters

- a. The technical stewards must arrive in sufficient time for discussions with the Technical Director and other technical stewards to agree upon a suitable test site and testing policy.
- b. 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.
- c. Two (2) sets of equipment must be available in case of failure of tachometer, sound level meter or calibrator during technical control.
- d. Tests may take place in rain or excessively damp conditions. Motorcycles considered excessively noisy must be individually tested if conditions allow.
- e. In other than moderate wind, motorcycles must face forward in the wind direction. (Mechanical noise will blow forward, away from the microphone).
- f. The 'slow' meter response must be used.
- g. 'A' weighted setting on the sound level meter must be used.
- h. No rounding down of the meter reading is permitted, that is: 110.9 dB/A = 110.9 dB/A.

2.14.9 Corrections

- a. Type 1 meter: deduct one (1) dB/A

2.14.10 Precision of the method (tolerances)

- a. All corrections are accumulative.
- b. Action and decisions will depend on the sporting discipline concerned, and decisions taken during prior discussions with the Technical Director.

2.15 APPROVED NUMBER FONTS

Futura Heavy

0123456789

Futura Heavy Italic

0123456789

Univers Bold

0123456789

Univers Bold Italic

0123456789

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

0123456789

Franklin Gothic Italic

0123456789

2.16 HOMOLOGATION

MotoAmerica homologation procedures will follow the requirements of the FIM homologation rules for Superbike, Superstock, Supersport and Junior Cup. **MotoAmerica reserves the right to make exceptions to the FIM homologation rules under the guidance of the Permanent Bureau. The decision of the technical director is final.**

2.16.1 MotoAmerica Twins Cup and KOTB homologation procedures will follow the requirements of MotoAmerica.

2.16.2 Homologation List

a. FIM homologation list:

<http://www.motoamericaregistration.com/competitor-info/>

b. MotoAmerica homologation list:

<http://www.motoamericaregistration.com/competitor-info/>

2.16.3 Period of homologation

- a. Once a motorcycle has obtained the homologation, it may be used for racing in the corresponding class for a maximum period of:
- i. Superbike and Superstock 1000: 8 years
 - ii. Supersport 600 and Junior Cup: 8 years
 - iii. Twins Cup: 20 years (MotoAmerica Homologation)
 - iv. **King of the Baggers: 12 years (MotoAmerica Homologation)**
- b. **A homologation will be withdrawn if the motorcycle no longer complies with the technical rules.**
- c. A homologation will be granted only if the fee has been paid.
- d. The Manufacturer of the homologated model can request an extension of a homologation before the end of the 8-year homologation period. The FIM may grant a 2-year extension of the homologation period. All Homologation documents must be updated to the latest standard, but no fee will be charged for a homologation extension.

DISCIPLINARY AND ARBITRATION CODE

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3.0 DISCIPLINARY AND ARBITRATION CODE

3.1 PRINCIPLES

The obligations incumbent upon the participants, officials and organizers are set out in these Regulations. Violations or non-observance of these obligations will be subject to the penalties laid down in this chapter.

3.2 PENALTIES

The penalties are:

- warnings
- fines
- penalty points
- drop of position
- long lap
- ride through
- time penalties
- grid penalty
- disqualification
- points loss (withdrawal of Championship points)
- suspension
- exclusion

3.2.1 Definition and application of penalties

Warnings:	Can be made privately or publicly.
Penalty points:	May be imposed by Race Direction on a rider in any number from 1 to 10, points are cumulative and expire after a period of 365 days from the date they were imposed. Automatic sanctions apply to a rider accumulating points as follows: <ul style="list-style-type: none">• 4 Points - Start the next race from last grid position.• 7 Points - Start the next race from pit lane.• 10 Points - Disqualification from participation at the next event (or from the race results if this occurs at the last event of the season). Points re-set to 0 after a rider reaches 10 points and serves a disqualification.
Fines:	Cash penalty up to 10,000 USD
Drop of Position:	The rider must go back the number of positions decided by the Race Direction.
Ride through:	See Art. 1.24
Time penalties:	The imposition of time affecting the rider's actual result up to 2 minutes and the cancellation of time.
Grid penalty:	The imposition of a drop of any number of grid positions or the imposition of starting the race from the pit exit at the rider's next race.
Disqualification:	Disqualification from an event, practice sessions (black flag, black flag with orange disc), race (black flag, black flag with orange disc) or from its results.

Points loss:	The loss of points from the Championship races already run.
Suspension:	The loss of rights to participate in the Championship may be applied to one or more races.
Exclusion:	The final and complete loss of all rights of participation in any activity under FIMNA or AMA control.

3.2.2 Plurality of Penalties

Any offender may have several penalties pronounced against him according to the circumstances.

3.3 THE DISCIPLINARY AND ARBITRATION BODIES

The disciplinary and arbitration bodies of FIM North America, qualified to deal with disciplinary and arbitration matters, are:

- The Race Direction
- The FIM North America Stewards
- The Permanent Bureau

3.3.1 The Race Direction

3.3.1.1 Composition

The Constitution of the Race Direction is in accordance with the Article 1.6.

3.3.1.2 Authority and Competence

The Race Direction has the authority to refer any case involving riders, teams' personnel, officials, promoters, organizers and all the persons involved in any capacity whatsoever in an event or in the Championship, to the FIMNA Stewards Panel for infringements of the Regulations, including the following:

- Any voluntary or involuntary action or deed accomplished by a person or a group of persons during a meeting, contrary to the current regulations or instructions given by an official of the meeting.
- Any corrupt or fraudulent act, or any action prejudicial to the interests of the meetings or of the sport, carried out by a person or a group of persons occurring during an event.
- Having been unable to ensure the smooth and efficient running of the event or for serious breaches of the Regulations.

3.3.2 The FIM North America (FIMNA) Stewards Panel

3.3.2.1 Composition

The Constitution of the FIMNA Stewards Panel is in accordance with Article 1.7.

3.3.2.2 Authority and Competence

The FIMNA Stewards Panel has the authority to penalize riders, teams' personnel, officials, promoters, organizers and all the persons involved in any capacity whatsoever in an event or in the Championship, to the FIMNA Stewards Panel for infringements of the Regulations, including the following:

- Any voluntary or involuntary action or deed accomplished by a person or a group of persons during a meeting, contrary to the current regulations or instructions given by an official of the meeting.
- Any corrupt or fraudulent act, or any action prejudicial to the interests of the meetings or of the sport, carried out by a person or a group of persons occurring during an event.

- Having been unable to ensure the smooth and efficient running of the event or for serious breaches of the Regulations.

The FIMNA Stewards Panel is competent to adjudicate upon a protest relating to infringements of the regulations.

3.3.2.3 Penalties that may be pronounced by the FIMNA Stewards Panel

a. The following penalties may be pronounced by the Race Direction:

- penalty points
- warnings
- fines
- drop of position
- long lap
- ride through
- time penalties
- grid penalty
- disqualification
- points loss (withdrawal of Championship points)
- suspension

b. The penalties issued for administrative infractions should be limited to warnings or fines unless there are extenuating circumstances.

c. Hearings should be held (if applicable) immediately after the session if practical. If not practical, the parties involved should be notified that an incident is under review immediately after the session and no later than the end of the same day. The hearing should be arranged during the same day and in exceptional cases up to but no later than 14 days after the incident. All hearings must be conducted with a minimum of two members of Race Direction and not later than 14 days after the incident unless otherwise agreed by race direction and the party affected by the penalty. If the investigation is delayed for circumstances beyond the control of race direction (ie parts or fuel sent out for testing etc) then the party must be notified in writing of the nature of the delay and be kept updated every 7 days.

d. During an official hearing only (1) Rider and (1) Rider Representative will be allowed. Inclusion of other person(s) will be at the sole discretion of the FIMNA Stewards Panel.

e. Penalties should be issued (if applicable) immediately after the session if practical. If not practical, penalties should be issued no later than the end of the same day and in exceptional cases up to but no later than 14 days after the incident. Penalties must be issued in writing no later than 14 days after the incident unless otherwise agreed by The FIMNA Stewards Panel and the party affected by the penalty, or the hearings are delayed.

f. The FIMNA Stewards Panel can refer the case to the Permanent Bureau to impose a higher penalty than the FIMNA Stewards Panel is empowered to issue.

3.3.3 The FIM North America (FIMNA) Appeal Stewards Panel

3.3.3.1 Composition

The Composition of the FIMNA Appeal Stewards Panel is in accordance with the requirements laid down in Article 1.7.

3.3.3.2 Competence

The FIM North America Appeal Stewards Panel will hear any appeals against decisions taken by the FIM North America Stewards Panel.

3.3.3.3 Penalties that may be pronounced by the FIMNA Appeal Stewards Panel only following an appeal:

- fines
- warnings
- time penalties
- grid penalty
- disqualification
- points loss (withdrawal of Championship points)
- suspension

3.4 JUDGES OF FACT

Judges of fact are officials in charge of checking certain facts during practices and races and whose observations must be reported immediately for a possible decision.

Statements of fact depend exclusively on factual observation without any possible adjustment of the sanction which is statutorily and precisely stated. These statements of facts and the resulting decisions are immediate and not subject to protest or appeal.

Beyond members of the FIMNA Stewards, one or several judges of fact may be appointed to supervise the jump starts, the passage of the finish line, as to whether a rider has exceeded the track limits, or as to any other fact laid down in these Regulations.

3.5 PROTESTS

A protest is an action taken by any legal entity or any individual, rider, team, manufacturer, official etc. against another legal entity or any individual, rider, team, manufacturer, official etc. in the absence of a penalty or decision issued by the FIMNA Stewards Panel or any other Official of the Meeting.

3.5.1 Right of protest to the FIMNA Stewards Panel

- Unless specifically excluded herein, any rider affected by dangerous, unfair, or fraudulent behavior, riding or act, has the right to protest against such a behavior, riding or act. Such matters may also include the conformity of a machine with these rules or the eligibility of a rider.
- There are two types of protests: technical and administrative. Technical protests relate to the legality of motorcycles and components used in competition. All other protests will be defined as administrative.
- No protest may be lodged against a decision entailing or not.
 - a change of position that takes place during a race.
 - a time penalty given in lieu of either: a ride through penalty or a change of position penalty that takes place during a race.
 - a grid penalty imposed for a race on the same day.
 - a long lap penalty imposed for a race on the same day.
 - a ride through that takes place during a race or for a race on the same day.
 - a ride through that takes place during a race.

- disqualification from the practice sessions or races by means of a black flag or black flag with orange disc.
- a fine for speeding in the pit lane or a practice start violation.
- a photo finish
- **a statement of fact by a judge of fact**

3.5.2 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 FIMNA Stewards Panel within 30 minutes of the publication of the results.

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

Protests must be handed to a responsible official (FIMNA Steward or any member of Race Direction) together with the security deposit of 500 USD or equivalent, returnable if the protest is justified.

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 (eg. weight, noise, materials, etc.) may be made after the start of official practice.

If the protest entails dismantling a motorcycle, the protest fee must be accompanied by an additional deposit of **500 USD**. This fee must be paid by the losing party to the mechanic of the rider who had to perform the dismantling procedure.

Following race one of a double header that takes place on the same day, the intention to protest other riders for technical reasons must be submitted within 15 minutes of the end of the race. For sporting protests, the time limits remain as above.

If the “quick parc fermé” procedure takes place the intention to protest other riders for technical reasons must be submitted within 15 minutes of the end of the session. For sporting protests, the time limits remain as stated above.

3.5.3 Protest hearings and decisions

- Hearings should be held immediately after a protest if practical. If not practical, the parties involved should be notified and a time established to conduct the necessary hearings. Hearings should be arranged during the same day and in exceptional cases up to but no later than 14 days after the protest. All hearings must be conducted with a minimum of two members of the FIMNA Stewards Panel and not later than 14 days after the protest unless otherwise agreed by race direction and the party affected by the protest. If the investigation is delayed for circumstances beyond the control of race direction (ie parts or fuel sent out for testing etc) then the party must be notified in writing of the nature of the delay and be kept updated every 7 days.**
- During an official hearing only (1) Rider and (1) Rider Representative will be allowed. Inclusion of other person(s) will be at the sole discretion of Race Direction.
- Protest decisions should be issued immediately after the protest hearings if practical. If not practical, decisions should be issued no later than the end of the same day and in exceptional cases up to but no later than 14 days after**

the protest. Protest decisions must be issued in writing no later than 14 days after the protest unless otherwise agreed by the FIMNA Stewards Panel and the party affected by the protest, or the hearings are delayed.

d. The protest must be judged according to the provisions of the Regulations.

3.5.4 Effect of the decision upon a protest

The decision of the Race Direction and determination of penalty is immediate.

3.6 APPEALS

An appeal is an action taken by any legal entity or any individual, rider, team, manufacturer, official etc. affected by a penalty or decision issued by the FIMNA Stewards Panel (whether arising from a protest or otherwise).

3.6.1 Right of appeal to the FIMNA Appeal Stewards Panel against a decision of the FIMNA Stewards Panel.

No appeal may be lodged against a decision entailing or not:

- a change of position that takes place during a race.
- a time penalty given in lieu of either: a ride through penalty or a change of position penalty.
- a grid penalty imposed for a race on the same day.
- a long lap penalty imposed for a race on the same day.
- a ride through that takes place during a race or for a race on the same day.
- a disqualification from the practice sessions or races by means of a black flag or black flag with orange disc.
- a fine for speeding in the pit lane or a practice start violation.
- a photo finish
- a statement of fact by a judge of fact

When no appeal may be lodged the decision of the FIMNA Stewards Panel is final.

3.6.2 Right of appeal to the MotoAmerica Permanent Bureau against a decision of the FIM North America Appeal Stewards

No appeal may be lodged if the FIM North America Appeal Stewards Panel confirm the previous decision of the FIMNA Stewards Panel. In this case, the decision of the FIM North America Stewards is final.

No appeal may be lodged against a decision entailing or not:

- a drop of position.
- a ride through.
- a disqualification from the practice sessions or races by means of a black flag or black flag with orange disc.
- a fine for speeding in the pit lane.
- a photo finish
- a statement of fact by a judge of fact

The decision of the MotoAmerica Permanent Bureau is final.

3.6.3 All rules herein may be appealed in accordance with the procedure stated in the MotoAmerica AMA Road Racing Series FIM North America Championship Regulations except for those rules that the regulations specify may not be appealed. The participants recognize the need for officials to make decisions that require judgment and the exercise of discretion, often instantaneously, with events as they are occurring. The exercise of judgment by the officials during an event with respect to

any penalty or lack of penalty shall only be appealable in accordance with the regulations. By applying to participate in an AMA FIM North America sanctioned MotoAmerica event, and in consideration of receiving the numerous benefits available, each participant agrees that the final and binding decisions of the officials are non-litigable and shall not be appealable to any court or other tribunal other than the AMA or FIM North America. The participants to any protest or appeal further agree that the protest and appeal procedures provided for in the MotoAmerica AMA Road Racing Series FIM North America Championship Regulations are the exclusive remedy for the resolution of any disputes and renounce the right to, and shall not pursue, recourse to any arbitrator, court or other tribunal not provided for in the MotoAmerica AMA Road Racing Series FIM North America Championship Regulations. No court action of any kind may be taken by any participant. By reason of participation in an event, each participant waives any rights such participant may otherwise have to be a party to or take any action in court seeking legal or equitable relief against any decision, lack of decision or action of any kind by the officials or anyone acting on their behalf or the appeal panel. Each participant acknowledges that participation in an event by other participants is, in part, on reliance on this waiver. If a participant initiates or participates in litigation in violation of this rule, all participant privileges may thereupon be suspended and subject to disciplinary action deemed warranted by the AMA or FIM North America.

3.6.4 Time limits for the lodging of an appeal

The time limit for lodging a statement of appeal is:

against a decision of the FIMNA Stewards	30 minutes
against a decision of the FIMNA Appeal Stewards	1 hour
statement of appeal before the Permanent Bureau	5 days

The time limits shall be taken from the date and time of receipt of the decision by the appellant.

3.6.5 Lodging of an appeal

To be admissible, the statement of appeal must be submitted in writing (appeal before the FIM North America Stewards) or, sent by registered letter, special courier or email to the AMA/FIM North America to be forwarded to the MotoAmerica Permanent Bureau. It is the appellant's responsibility to assure receipt of the appeal within the time limits.

The correct security deposit for appeal must be handed to FIM North America Chief Steward for an appeal before the FIM Stewards or paid to FIM North America for an appeal to the MotoAmerica Permanent Bureau.

3.6.6 Security deposit for appeals

The amount of the security deposit is **1,500 USD or equivalent, returnable if the appeal is justified.**

Teams and riders contracted to compete in the Championships may submit a letter of guarantee.

Within 10 days following the statement of appeal before the MotoAmerica Permanent Bureau, the appellant provides a brief of appeal stating the facts to FIM North America.

If the appeal was not lodged and/or the security deposit for the appeal was not paid within the deadline specified in article 3.4.9, the appeal will be declared inadmissible without hearing.

3.6.7 Security deposit payable upon an adjournment

If an adjournment to call further witnesses is ordered upon the request of one of the parties involved, this party must provide an additional financial guarantee within a time limit to be fixed by the disciplinary body. The hearing will not be continued until this guarantee has been paid. In the event of no provision of the guarantee within the time limit, the disciplinary body will make a determination on the appeal based on the evidence of the original witness.

3.6.8 Time limits to be observed for appeal hearings

The FIM North America Stewards must be convened to examine an appeal immediately after the brief of appeal is received. The FIM North America Stewards must in all cases announce a decision immediately following the hearing of the appeal.

The MotoAmerica Permanent Bureau must be convened to examine an appeal not later than 6 weeks after the brief of appeal is received.

3.6.9 Appeal hearings and decisions

- a. Hearings should be held immediately after an appeal if practical. If not practical, the parties involved should be notified and a time established to conduct the necessary hearings. Hearings should be arranged for the same day and in exceptional cases up to but no later than 14 days after the appeal. All hearings must be conducted with a minimum of two members of the FIM North America Stewards Panel and not later than 14 days after the appeal unless otherwise agreed by the FIM North America Stewards Panel and the party affected by the appeal. If the investigation is delayed for circumstances beyond the control of the FIM North America Stewards Panel (ie parts or fuel sent out for testing etc) then the party must be notified in writing the nature of the delay and be kept updated every 7 days.**
- b. During an official hearing only (1) Rider and (1) Rider Representative will be allowed. Inclusion of other person(s) will be at the sole discretion of the FIM North America Stewards.**
- c. Appeal decisions should be issued immediately after the appeal hearings if practical. If not practical, decisions should be issued no later than the end of the same day and in exceptional cases up to but no later than 7 days after the protest. Appeal decisions must be issued in writing no later than 7 days after the appeal unless otherwise agreed by the FIM North America Stewards Panel and the party affected by the appeal, or the hearings are delayed.**
- d. The appeal must be judged according to the provisions of the Regulations.**

3.6.10 Effect of an appeal

On request of the appellant, the FIM North America Appeal Stewards may decide a stay of the provisional execution adjudicated by the FIM North America Stewards Panel by injunction or in its decision.

On request of the appellant, the MotoAmerica Permanent Bureau may decide a stay of the provisional execution adjudicated by the FIM North America Appeal Stewards by injunction or in its decision.

3.7 GENERAL DISCIPLINARY PROCEDURES

3.7.1 Right to a hearing

It shall be the unquestionable right of any person or body charged with any offense under the Regulations to defend themselves, either in person or by proxy.

Any party convened before a disciplinary or arbitration body has the right to be represented by one defense counsel of its own choice and at its own expense. Adequate notice of this intention must be given in order that this may also be notified to all other parties in the case. Failure to do so may result in the disciplinary or arbitration body upholding an objection to such representation.

If any of the parties duly convened do not appear, judgment can be rendered by default.

The disciplinary or arbitration bodies may decide that the hearing take place by means of a telephone conference call or through any other means of communication using a telephone or electronic device. Such a method of conducting a hearing shall only take place with the consent of all parties involved.

3.7.2 The Hearing

The hearing shall be public unless the disciplinary or arbitration body itself decides otherwise in exceptional circumstances.

The hearing shall be conducted in English. Should one of the parties wish to use another language, it shall provide the necessary interpreters at its own expense.

The appellant must be present or duly represented, failing which, the protest will not be admissible, and the costs shall be borne by the appellant.

Once the proceedings have begun, each of the parties involved will state their respective cases without the witnesses being present.

After the statements of the parties concerned, the disciplinary or arbitration body shall hear the various witnesses and experts to complete the evidence. The parties involved in the case shall have the right to question all witnesses and experts on their evidence.

Any member of the disciplinary or arbitration body may, at any time during the hearing, question any of the parties involved, the witnesses and experts.

3.7.3 Witnesses and Experts

Each party is responsible for the convening and appearance of its own witnesses, as well as their expenses unless decided otherwise by the Court.

The disciplinary or arbitration body has no authority to oblige the witnesses to swear on oath; therefore, testimony shall be given freely. The witnesses may only testify to the facts they know and shall not be allowed to express an opinion, unless the disciplinary or arbitration body should regard them as experts on a particular subject and should ask them to do so. After having made their statements, the witnesses may not leave the room and shall not be allowed to speak to any other witness who has to give evidence.

The arbitration body may summon experts.

3.7.4 Judgment

Decisions of all disciplinary or arbitration bodies will be reached by a simple majority of votes. All members will have equal voting rights, which must be exercised when a decision is required. Abstention is not permitted.

Each member of the disciplinary or arbitration body binds himself to keep all deliberations secret.

3.7.5 Notification of Judgments

The decisions of the FIMNA Stewards or FIMNA Appeal Stewards must be in writing and the parties notified directly at the event venue. In exceptional circumstances, where it is not practical to conduct hearings and/or make

decisions at the event, the process must be completed as soon as possible and not later than 14 days from the date of the incident unless otherwise agreed by all parties affected. If the investigation is delayed for circumstances beyond the control of either party, then the party must be notified in writing of the nature of the delay and be kept updated every 7 days. If the judgement is not made at the event, it will be addressed to the parties by registered letter with acknowledgement of receipt. All judgments of the MotoAmerica Permanent Bureau must be notified, in writing, by registered letter with acknowledgement of receipt to inform all parties concerned.

3.7.6 Publication of Judgments

The disciplinary or arbitration body imposing a penalty or adjudicating a protest, or an appeal must have its findings published and quote the names of all parties concerned. The persons or bodies quoted in these statements have no right of action against FIM North America nor against any person having published the statement.

Furthermore, final decisions will be published in the media center unless the arbitration body itself decides otherwise.

3.8 COSTS OF PROCEDURE

The costs of a disciplinary or arbitration decision will be assessed by FIMNA and will be awarded against the losing party unless the arbitration body decides otherwise.

3.8.1 Payment of fines and costs

If the penalty is definitive, all fines and costs must be paid to FIM North America within 30 days of notification of the judgment decision according to Article 3.5.5. The person or body affected by the decision shall be automatically suspended from participation in all FIM North America and AMA activities, until such time as full payment has been received.

3.9 LAW OF MERCY

FIM North America, after consultation with the MotoAmerica Bureau may mitigate or completely forgive the penalty of a person or group of persons after having exhausted all the appeal procedures.

3.10 ARBITRATION CLAUSE

Final decisions made by the disciplinary bodies (exception art. 3.4.4) may be submitted exclusively to the Court of Arbitration for Sport by way of appeal within the time limit as laid down in article 3.4.9, which shall have exclusive authority to impose a definitive settlement in accordance with the Code of Arbitration applicable to sport.



FIM North America Appeal Form

When filling in this form, please give details concerning, the identity of the person(s) concerned, his/her function (rider, FMN, entrant, manufacturer, official, starting and/or licence number, etc), as well as References to Rules, Articles, etc.

Event: _____

Venue: _____

Session: _____

Date: _____ Time: _____

Decision being appealed: _____

Rider or Team Manager: _____

Rider or Team Manager Signature: _____

FIM North America Stewards Panel

FIM North America Chief Steward: _____

FMNR Steward: _____

Other Participants

Name / First name: _____

Position: _____

Name / First name: _____

Position: _____

Reasons:

FOR FIMNA USE / To be completed by the FIMNA Chief Steward

Appeal Hearing ex officio

Date of appeal: _____ Time of appeal: _____

Appeal letter added to the decision of the FIMNA Stewards Panel Yes No

Appeal fee paid 1,500 USD Yes No

Appeal fee guaranteed by MotoAmerica: Yes No

MotoAmerica Signature: _____



FIM North America Protest Form

When filling in this form, please give details concerning the identity of the person(s) concerned, his/her function (rider, FMN, entrant, manufacturer, official, starting and/or licence number, etc), as well as References to Rules, Articles, etc.

Event: _____

Venue: _____

Session: _____

Date: _____ Time: _____

Name of rider/team filing protest (Print): _____

Rider or Team Manager Signature: _____

Name of Rider being protested: _____

Single item being protested: _____

Administrative Protest:

Technical Protest:

Protest Received by (Print): _____

Protest Received by (Signature): _____

Protest Fee (750 USD) Received by (Print): _____

Protest Fee Received by (Signature): _____

FOR FIMNA USE / To be completed by the Race Direction	
<input type="checkbox"/> Protest	<input type="checkbox"/> Hearing ex officio
Date of protest: _____	Time of protest: _____
Protest letter added to the Race Direction	<input type="checkbox"/> Yes <input type="checkbox"/> No
Protest fee paid 750 USD	<input type="checkbox"/> Yes <input type="checkbox"/> No
Protest fee guaranteed by MotoAmerica: <input type="checkbox"/> Yes <input type="checkbox"/> No	
MotoAmerica Signature: _____	

CIRCUIT STANDARDS

4.0 CIRCUIT STANDARDS

Circuit standards will be guided by the "FIM STANDARDS FOR ROAD RACING CIRCUITS" (SRRC).

5.0 MEDICAL CODE

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5.0 MEDICAL CODE

5.1 INTRODUCTION

- a. **The Medical Code contains guidelines, standards, and requirements for the following: medical fitness to obtain a rider's license, medical services and personnel at events, procedure in the event of an injured rider, medical malpractice insurance, professional confidentiality, statistics, and documentation.**
- b. **This Medical Code prescribes the Medical Service available for the competitors and their teams during an AMA FIM North America MotoAmerica event. The intent of this Medical Code is to help ensure that any medical emergency can be met with all the necessary skilled resources and treatments to prevent possible mortality and minimize morbidity. This Medical Code is modelled after the FIM Circuit Racing Medical Code.**
- c. **A Medical Panel shall be authorized by MotoAmerica and comprise as a minimum the series Chief Medical Officer (CMO), the Race Director, and one (1) MotoAmerica representative. This Medical Panel will set the conditions for the medical services at each event.**
- d. **In circumstances not covered explicitly by the MotoAmerica Medical Code, a binding decision will be made by the MotoAmerica CMO, in consultation with the Track Medical Director, and the MotoAmerica Race Director.**
- e. **Any amendments to this MotoAmerica Medical Code must be approved by the MotoAmerica Rules Commission.**

5.1.1 Medical Certificate and Examination

- a. **Every rider taking part in motorcycle competition events must be medically fit. For this reason, a satisfactory medical history and examination are essential. (See Appendices A & B)**
- b. **A rider with a satisfactory medical examination & history will be issued a Medical Certificate of Fitness to Race. (See Appendix C)**
- c. **It is the responsibility of the rider to immediately inform the MotoAmerica CMO of any state of health or medical condition or any deterioration in their health or medical condition.**
- d. **Failure to do so will result in an immediate exclusion from competition and may lead to further sanctions.**
- e. **The CMO will ascertain whether this change may adversely affect their ability to ride or compete safely.**
- f. **The medical certificate is valid for not more than one year. In the event of serious injury or illness occurring following the issue of a medical certificate, a further examination and recertification are necessary.**
- g. **Physicians issuing the medical certificate of fitness for the resumption of competition should ascertain whether the rider could react appropriately to unforeseen situations. This is important to avoid jeopardizing not only his safety but also that of his fellow riders and other parties involved.**

5.1.2 Guidelines for the Examining Doctor

- a. **The examination should be performed by a doctor familiar with the applicant's medical history. The examining doctor must be aware that the person to be examined is applying for a license to participate in motorcycle events. The purpose of the examination is to determine whether the applicant**

is physically and mentally fit to control a motorcycle to ensure the safety of other riders, officials, and spectators during an event.

- b. Certain disabilities exclude the granting of a license.
- c. MotoAmerica will maintain medical history and examination records and Medical Certificate confirming the rider is medically fit or unfit to participate in MotoAmerica events after verifying the rider has undergone the following medical assessment:

A. LIMBS

The applicants should have sufficient function of their limbs to permit full control of their motorcycle during events. In the case of loss or functional impairment of all or part of a limb or limbs the applicant must be referred for the opinion of the CMO of MotoAmerica, if necessary.

B. EYESIGHT

- 1. The minimum corrected visual acuity must be 20/20 with both eyes open together. The minimum field should measure 160 degrees, 30 degrees vertical.
- 2. Corrective Glasses, if required, should be fitted with shatterproof lenses, or contact lenses, if worn, should be of the “soft” variety.
- 3. Satisfactory judgement of distance and wearing double protection when competing would be required for all riders with vision in only one eye.
- 4. Double vision is not compatible with the issuing of a competition license.
- 5. The applicant must have normal color-vision, in that they can distinguish the primary colors of red and green. If there is any doubt, a simple practical test is recommended under conditions similar to those of a race. The CMO or appointed representative will conduct this test.

C. HEARING AND BALANCE

- 1. A license can be issued to an applicant with impaired hearing but not to an applicant with a disturbance of balance.
- 2. A rider with impaired hearing must be accompanied at the rider’s briefing by a person with normal hearing who can communicate the information either by signing or in writing.
- 3. The rider must wear a clearly visible tag on the front and rear of his helmet that identifies him as hearing-impaired to the marshals and medical personnel in case of an accident/incident.

D. DIABETES

- 1. In general, it is not considered advisable for diabetics to enter motorcycle events.
- 2. However, a well-controlled diabetic not subject to hypoglycemic or hyperglycemic events and having no neuropathy nor any ophthalmoscopic evidence of vascular complications, may be passed as fit to compete.
- 3. A diabetic rider must wear a wristband to identify him as diabetic to the marshals and medical personnel in case of an accident/incident.

E. CARDIOVASCULAR SYSTEM

- 1. In general, a history of myocardial infarction or serious cardiovascular disease would normally exclude a rider. Special attention should be paid to blood pressure and cardiac rhythm disorders. In such cases a certificate from a cardiologist including the results of any test the cardiologist considers necessary, must be submitted with the medical examination form.**
- 2. Any rider of fifty years and over must have an exercise tolerance electrocardiogram (Exercise Tolerance Test) performed at least every 3 years and the result must be favorable.**

F. NEUROLOGIC AND PSYCHIATRIC DISORDERS

In general, applicants with a serious neurological or psychiatric disorder will not be granted a license.

G. SEIZURES OR UNEXPLAINED EPISODES OF LOSS OF CONSCIOUSNESS

- 1. A license will not be issued if the applicant suffers from epilepsy or has suffered any episode of unexplained sudden loss of consciousness.**
- 2. A petition for exemption is possible and will be reviewed by the MotoAmerica CMO on a case-by-case basis.**

H. ANESTHESIA

- 1. Riders will not be permitted to participate in practice or competition until at least 48 hours have elapsed following any general, epidural, spinal or regional anesthesia.**
- 2. Riders will not be permitted to participate in practice or competition until at least 24 hours have elapsed following any conscious sedation.**

I. CONCUSSION

- 1. Assessment of the injured rider and when to return to competition should be in accordance with the guidelines for the assessment and management of concussion as contained within the Consensus Statement On Concussion In Sport - The 5th International Conference On Concussion in Sport held in Berlin, October 2016.**
- 2. In the event of a suspected concussion the rider should be assessed using a recognized assessment tool such as SCAT5 or similar (see appendix D). If the assessment confirms a concussion, the rider should immediately be excluded from competition for the rest of the event.**
- 3. Prior to returning to competition the rider should be assessed for and provide documentary evidence of a return to normal neuro-psychological function using for example the ImpACT system, functional MRI scan or similar in accordance with the current International Consensus Statement on Concussion in Sport.**
- 4. Please refer to Appendix "D" for the MotoAmerica Information on Concussion.**

J. USE OF WADA PROHIBITED SUBSTANCES AND METHODS

- 1. Applicants using substances included in the WADA Prohibited List will not be accepted except with a valid Therapeutic Use Exemption (TUE) approved by MotoAmerica.**

2. Please refer to www.wada-ama.org for the most recent "Prohibited List".
3. Riders may be subject to drug testing at any time in-competition.
4. Please refer to Section 6.0 for the MotoAmerica Drug and Alcohol Policy and Testing Procedures.

K. ALCOHOL

1. Applicants with an alcohol addiction will not be accepted.
2. For safety reasons riders must not participate in competition if they are found to have a blood alcohol concentration superior to the threshold of 0.0 g/L.
3. The presence of alcohol upon testing and the consumption/use of alcohol (ethanol) are prohibited during the in-competition period and will be considered as a violation of the Medical Code.
4. Riders may be subject to alcohol testing at any time in-competition.
5. Please refer to Section 6.0 for the MotoAmerica Drug and Alcohol Policy and Testing Procedures

L. MEDICATION, SUPPLEMENTS, & DRUGS

Applicants will not be accepted if they are using medications or supplements, including those legitimately prescribed, with potentially adverse side effects that could pose a risk to the safety of the rider or others during competition. This includes drugs that cause sedation, blurred vision, psychomotor retardation, or other side effects that can adversely affect their ability to have full and complete control of a motorcycle in competition.

M. TREATMENT WITH PROHIBITED SUBSTANCES OR METHODS AT EVENTS

1. Any treatment requiring a prohibited substance or method (including any intravenous infusion), even if prescribed by a doctor, to treat a rider during an event must be discussed and agreed with the MotoAmerica CMO.
2. If this treatment is required, a Therapeutic Use Exemption (TUE) must be submitted immediately for retroactive approval to be received by the MotoAmerica CMO no later than the day following the event.

N. THE USE OF INTRAVENOUS FLUIDS

1. At no time during the event will a rider receive any type of intravenous hydration unless such hydration is deemed medically necessary by medical personnel as a result of an emergency medical situation (e.g., heat stroke) encountered by a rider, during or as a result of competing in the event.
2. Once a rider receives such hydration during the meet, the rider will be permitted to compete only after the CMO has deemed the rider safe and has released them to continue in the event.

O. COST OF MEDICAL EXAMINATION

Any fee arising from the examination or completion of the medical certificate is the responsibility of the applicant.

P. PROCEDURE IN CASE OF DOUBT OF MEDICAL FITNESS

1. The examining doctor may not feel able to approve an applicant on medical grounds. In such a case he should complete the examination form, having ticked the relevant box, sign it, and then send it to the FIMNA/AMA with his observations, including history. If necessary, he should request that the applicant be examined by a doctor appointed by MotoAmerica.
2. Following the rider being assessed as being medically fit to participate in competition, if evidence emerges of a medical condition that represents a significant risk to the rider and/or other competitors, the MotoAmerica CMO or MotoAmerica Medical Panel have the right to withdraw the riders' license at any time until further assessment of the rider is undertaken, and a subsequent satisfactory medical report is provided to the MotoAmerica CMO.

5.2 SPECIAL MEDICAL EXAMINATION

At any time during an event a special medical examination may be carried out by the CMO, or another medical provider nominated by the Chief Medical Officer (CMO) at the request of the Race Director.

5.2.1 REFUSAL TO UNDERGO SPECIAL MEDICAL EXAMINATION

- a. Any rider who refuses to submit or otherwise avoids presenting himself to such a special medical examination will be declared unfit to ride.
- b. The relevant MotoAmerica officials will be notified.

5.2.2 LIST OF MEDICALLY UNFIT RIDERS

- a. The information provided on this list must be treated in the strictest confidence and must be only made available to the relevant MotoAmerica officials at the event.
- b. A list of Medically Unfit Riders will be generated at the end of each event. Rider names will be added in real time as injuries, surgeries, illnesses, and changes in medical condition are communicated to the CMO.
- c. It is the rider's responsibility to inform the MotoAmerica CMO of any injury or illness sustained between events for inclusion in this list. Failure to do so will result in an immediate exclusion from competition and may lead to further sanctions.
- d. The CMO shall examine all riders listed as medically unfit who wish to compete to assess their medical fitness to do so the day before they use a motorcycle on the track.

5.2.3 MEDICAL FITNESS TO RACE

A rider must be sufficiently medically fit to control his motorcycle safely at all times. There must be no underlying medical disorder, injury or medication that may prevent such control or place other riders at risk. Failure of a rider to disclose such a condition may lead to the application of sanctions.

- a. Riders will not be permitted to participate in practice or competition until at least 48 hours have elapsed following any general, epidural, spinal or regional anesthesia.
- b. In the event of a suspected concussion the rider should be assessed and managed in accordance with the guidelines for the assessment and management of concussion as contained within the Consensus Statement On Concussion In Sport - The 5th International Conference On Concussion in Sport held in Berlin, October 2016. The rider should be assessed using a recognized assessment tool such as

SCAT5 or similar. If the assessment confirms a concussion the rider should immediately be excluded from competition for the rest of the event.

- c. Prior to returning to competition the rider should be assessed for and provide documentary evidence of a return to normal neuro- psychological function using for example the ImPACT system, a functional MRI or similar in accordance with the current International Consensus Statement on Concussion in Sport.
- d. Following injury or illness, the decision regarding medical fitness to return to competition is normally at the discretion of the CMO. The decision should be made on an individual case by case assessment and informed by relevant medical reports from the practitioner treating the rider including details of X-rays, scans, analyses, other investigations, and any interventions which must be provided to the CMO, if available before assessing a rider's fitness to return to competition.
- e. A rider may file an appeal to the MotoAmerica Medical Panel.

5.2.4 RIDERS WITH SPECIAL MEDICAL REQUIREMENTS

- a. Riders are responsible for informing the CMO before the event regarding their condition and that they may require special treatment.
- b. These include riders with certain medical conditions who:
 - may require special treatment in the event of injury
 - may require adaptations to race
 - have been hospitalized or had surgery during the previous 12 months
 - are receiving treatment for any medical conditions

5.3 CHIEF MEDICAL OFFICER (CMO)

The CMO coordinates medical decisions with Race Direction as necessary.

The Series CMO and the Event CMO may be the same person.

5.3.1 CMO QUALIFICATIONS

The CMO qualifications include:

- a. **Is a currently licensed physician (MD or DO) in the U.S.A. The medical license may not be restricted to working within an approved practice setting. Any other license restriction must be communicated to the Medical Panel and will be considered on an individual basis.**
- b. **Is appointed by MotoAmerica. Should be the same throughout the event.**
- c. **Should be familiar with the MotoAmerica Medical Code and the MotoAmerica Anti-Doping Code.**
- d. **Should be named in the Supplementary Regulations/event information.**
- e. **Must have malpractice insurance appropriate to the event.**
- f. **Should have attended and successfully completed an FIM CMO seminar in the past 3 years.**
- g. **Must be familiar with the circuit and the organization of the medical services at which he is appointed.**
- h. **Must be familiar with the principles of emergency medical care and current best practices in the treatment of injured motorsports riders, including current certification in ACLS or ATLS.**

- i. **Must be familiar with protective gear used in motorcycle racing and injuries sustained in motorcycle racing**
- j. **Must be familiar with the associated organizational requirements necessary for a circuit medical service to deliver effective emergency medical interventions to injured motorsports riders.**

5.3.2 **CMO DUTIES BEFORE THE EVENT**

Before the event and before motorcycles are on track, the MotoAmerica CMO will include:

- a. Developing a Medical Plan that must include:
 - A medical plan and maps of the medical service including the position and number of all the medical resources including all personnel and vehicles.
 - A plan of the circuit medical center.
 - Information showing the location, distances, and routes to the designated hospitals.
- b. **Providing an electronic copy of the Medical Plan to:**
 - **MotoAmerica Medical staff**
 - **MotoAmerica Operations Director**
 - **FIMNA Safety Steward**
 - **MotoAmerica Race Director**
 - **MotoAmerica Assistant Race Director**
 - **Track Medical Services and/or Track Safety Officer**
- c. Contacting, **in writing**, hospitals in the vicinity of the event that are able to provide the following specialist services and include them in the Medical Plan:
 - CT Scan
 - MRI
 - Trauma resuscitation
 - Neurosurgery
 - General surgery
 - Vascular surgery
 - Trauma and orthopedic surgery
 - Cardiothoracic surgery
 - Intensive Care
 - Burn Care
 - Plastic Surgery
- d. Contacting appropriate local hospitals to give information regarding the type of event, dates and times of track activity, and anticipated crowd size.
- e. The CMO shall ensure that a room, suitably private, shall be made available for any drug testing that may be requested.
- f. **Participating in the safety/track inspection together with the FIMNA Safety Steward, MotoAmerica Operations Director, the MotoAmerica Rider Representative, the MotoAmerica Corner Marshall Coordinator, and the Race Director/Direction prior to the first session each day of the event.**

- g. Collaborating with the Track Medical Services to organize a simulation of a medical intervention on track prior to on-track activities each day.
- h. Briefing the medical personnel prior to the start of the first daily session of the event.
- i. Providing and attending compulsory scenario-based demonstration and training for the initial response to and management of an injured rider should take place each morning before the event.

5.3.3 CMO DUTIES WHILE MOTORCYCLES ARE ON TRACK

When motorcycles are on the track the CMO:

- a. **Should be stationed in Race Control. In some cases, a designated medical representative can be stationed in Race Control.**
- b. **Should be in close proximity to and liaise directly with Race Director.**
- c. **Should be in direct communication with the ambulances, medical vehicles, and medical center at all times, and test this communication at the start of each day.**
- d. **Should receive immediate updates from trackside personnel to the MotoAmerica CMO and Race Direction regarding the condition of any injured rider to facilitate the most appropriate medical response to their condition.**
- e. **Should participate with Race Direction in the immediate deployment of appropriate medical resources to injured riders.**
- f. **Must obtain a list of fallen riders at the end of each practice session or race from the FIM Safety Steward.**
- g. Must ascertain whether riders fallen during the event are fit, at his/her discretion.
 - 1. Riders who fall in the first part of an interrupted (red flagged) race shall be examined before the re-start.
 - 2. Any riders who fall during the event and who refuse a medical examination shall be added to the list of unfit riders.
- h. **Must recommend to the Race Director that a practice session or a race be stopped if:**
 - 1. **There is danger to life or of further injury to a rider or officials attending an injured rider if other riders continue to circulate.**
 - 2. **The Medical personnel are unable to reach or treat a rider for any reason.**
 - 3. **If a rider is unconscious or suspected of having a spinal or other serious injuries and will require prolonged trackside medical intervention. Such information must be communicated immediately to the CMO by Race Direction.**
 - 4. **There is a risk of physiological harm to riders or of inability by riders to control their motorcycle, due to extreme weather conditions. In such circumstances of actual or potential harm from extreme weather conditions such as extreme heat the CMO should consider and recommend to the Race Direction that the race distance and length of sessions be adjusted accordingly with the provision of adequate periods for rest, recovery, and rehydration. If necessary and appropriate the CMO can recommend that the race be stopped.**

5.3.4 OTHER DUTIES OF THE CMO

- a. Attending the meetings of the Event Management Committee or Race Direction.

- b. Should inform and update the relevant MotoAmerica officials regarding the condition of injured riders and liaise with the relevant hospitals to ascertain and report the progress of their condition and treatment.
- c. Will prepare or update the list of injured riders (MEDICALLY UNFIT LIST) to be given to the relevant MotoAmerica officials.
- d. **In accordance with normal medical practice will complete a clinical record of all medical examinations and assessments. A copy of the clinical record should be provided to the rider or their nominated representative to facilitate ongoing treatment after the event and referral to the rider's medical insurance provider.**
- e. **Will meet with the MotoAmerica Medical staff every morning & afternoon after the official activity has ended to discuss the medical interventions and the status of any injured riders.**
 - 1. **Evaluation of the interventions may include video of the performance of the medical activity.**
 - 2. **Such evaluation will then be included in and inform the subsequent briefing of the medical personnel by the CMO.**
- f. **Must liaise with the MotoAmerica Staff and Track Event Staff during the year before the event to manage and improve the medical service in any way necessary and ensure the requirements of the MotoAmerica Medical Code are completely respected.**
- g. Media statements will not be made about the condition of an injured rider without the express agreement of the MotoAmerica Medical Panel.

5.3.5 OTHER DOCTORS

- a. **Any injured rider must first be seen and assessed by the track medical personnel for emergency treatment and be declared medically fit or unfit to compete as appropriate. He may then attend any other doctor of his choice.**
- b. **Any rider, who, after treatment by a doctor not part of MotoAmerica Medical Services, wishes to compete, must first obtain authorization for this from the CMO, who should be provided with a report of any investigations or interventions and consider any recommendation by the doctor treating the rider.**

5.4 MEDICAL SERVICES AT EVENTS

- a. The basic MotoAmerica Medical services will be comprised of:
 - Medical Center
 - Public Medical Services
 - The Medical Intervention Vehicle(s) or Fast Car
 - Advanced Life Support (ALS) Ambulances
- b. The MotoAmerica Medical Panel will set the conditions for the Medical Services at events including:
 - Number of doctors, nurses, paramedics and EMTs
 - Number of medical cars and ambulances
 - Number of other medical vehicles

5.4.1 MEDICAL CENTER

- a. Medical services at the event shall include a Medical Center that provides service for all riders, credentialed crew, MotoAmerica staff, volunteers as well as any other authorized persons injured or taken ill at the circuit during event.
- b. **The Medical Center may be used in some cases to do the following:**
 - **stabilize a critically injured rider before transportation**
 - **treat minor wounds**
 - **treat orthopedic injuries**
 - **treat minor illnesses.**
- c. This Track Medical Service will be staffed by a **physician** licensed to practice medicine in the jurisdiction or state of the event and one assistant (nurse or EMT).
- d. It may be a permanent or temporary structure, ideally with an entrance for EMS that is separate from the public.
- e. The Medical Center should be capable of basic:
 - Burn treatment
 - Wound treatment
 - Fracture treatment
 - General medical care
 - Adult and Pediatric resuscitation
- f. **Any treatment by the track medical service at the event is free of charge.**
- g. **Appropriate medical services must be available continuously, from at least one hour before the start of the first practice for the event, until at least one hour after the last rider has finished. Appropriate medical services are defined as follows:**
 1. **During all official track activity, fully functional medical services, including medical center, ALS ambulances, Medical Intervention Vehicle (Fast Car), and personnel in accordance with the circuit medical homologation.**
 2. **During the days with track activity the Medical Center must be fully staffed in accordance with the medical homologation from at least 1 hour before the track activity commences until at least one hour after the end of the last race or track activity.**

5.4.2 MEDICAL CENTER PERSONNEL

- a. **The Track Medical Service will be staffed by a physician licensed to practice medicine in the jurisdiction or state of the event.**
 1. **They may not be restricted to working within an approved practice setting. Any other license restriction must be communicated to the Medical Panel and will be considered on an individual basis.**
 2. **This physician will hold appropriate medical malpractice insurance.**
 3. **This physician will be familiar with the principles of emergency medical care and current best practices in the treatment of injured motorsports riders, including current certification in ACLS or ATLS.**
 4. **This physician will be familiar with protective gear used in motorcycle racing and injuries sustained in motorcycle racing**
 5. **This physician will be familiar with the Medical Plan for that event.**
- b. **Unless otherwise authorized by the rider, MotoAmerica representatives are not authorized to make statements to any third party, other than immediate**

relatives, about the condition of injured riders, without reference to and authorization from MotoAmerica.

- c. **All doctors and medical personnel must always adhere to their professional ethics and medical codes of practice.**
- d. MotoAmerica medical personnel, including Fast Car driver, must be suitably clothed to identify themselves.
- e. Paramedics, Nurses, and EMTS qualifications include:
 1. Must hold full licensure from the government agency with jurisdiction for the event location.
 2. Must provide evidence of ACLS, maintenance of standards, or relevant continuing education.
 3. Must have medical malpractice insurance or provide evidence of coverage by the event venue.
 4. Must be identified by wearing the uniform of the organization they are employed or appointed by.
- f. Training of Medical Personnel
 1. A scenario-based demonstration and training for the initial response to and management of an injured rider will take place each morning before the event.
 2. **Attendance is compulsory for medical personnel, especially ambulance crews.**
 3. **This meeting will familiarize all members of the Medical Team with the philosophy of care by MotoAmerica and goals of treatment.**
 4. **Basic skills to be reviewed include:**
 - Helmet removal
 - Leathers removal
 - Airway management in a suspected cervical injury
 - Basic motorcycle racing mechanisms of injury and injury types
 - **Response time goal of 120 seconds**

5.4.3 PUBLIC MEDICAL SERVICES

A medical service for the public, separate from the above services must be provided by the event organizers. This service is not described in this code but must conform to any regulation enforced by the relevant locale and reflect the size of crowd expected. This service is not controlled by the MotoAmerica CMO. The public is defined as contractors, guests, spectators, and all other visitor on-site.

5.4.4 MEDICAL VEHICLES

The goal for response times to any section of the track will be 120 seconds. Treatments will strive for the highest level of medical care for riders, regardless of severity of injury, to minimize or eliminate unwanted outcomes. **There must be two ALS Ambulances present for on-track activities to occur.**

- a. **Medical Intervention Vehicle or Fast Car (Type A):**
 - A vehicle for rapid intervention at accident areas to give the injured immediate assistance for respiratory and cardio-circulatory resuscitation.
 - This vehicle should have "MEDICAL" clearly marked on it in large letters. The type of vehicle used should be appropriate for this purpose in the relevant discipline.

b. Advanced Life Support (ALS) Ambulance (Type B):

- A highly specialized vehicle for the provision of advanced treatment, transport and can serve as a mobile resuscitation center. There must be two ALS Ambulances present for on-track activities to occur.

c. Basic Life Support (BLS) Ambulance (Type C):

- **A vehicle capable of transporting an injured person on a stretcher in reasonable conditions.**

d. Helicopter (Air Ambulance)

e. Other Medical Vehicles (e.g., UTVs)

f. The Medical Intervention Vehicle (a.k.a. Fast Car)

1. This high-performance vehicle will be staffed with a local physician or paramedic, as well as a driver familiar with the lay out of the course, all access roads and gates.
2. The Fast Car will have radio communication with Race Control and will be positioned so that a rapid response is possible to any section of the track. It will be equipped with advance trauma and airway management equipment.
3. This vehicle will be deployed by the Race Director in the event of a Red Flag during a session, supporting the trackside ambulance in incidents that suspect;
 - an unconscious rider
 - a spinal injury
 - a serious injury
 - a rider requiring immobilization and/or stabilization before being moved
 - a rescue needing longer than 3 minutes
 - a need for medical intervention on the track
4. The role of the Fast Car is to provide the initial evaluation and triage as well supporting the trackside ambulance paramedics and EMTs, supplementing their capabilities with advanced modalities. The Fast Car will follow the grid of riders for the sighting, warm-up, and first lap of each race.
5. Medical Equipment
 - Portable oxygen supply
 - Supraglottic, endotracheal intubation and surgical airway equipment
 - Suction equipment
 - Manual ventilator
 - Equipment for chest decompression
 - Equipment for vascular access, infusion, circulatory support, and hemorrhage control.
 - Blood pressure monitoring equipment
 - Pulse oximeter
6. Other Equipment
 - Equipment to remove race suits and helmet
 - A method (e.g., protective canvas / tarpaulins) to screen the rider or the accident scene from public view.
7. Equipment should be easily identified and stored to use at the trackside.

g. Medical Intervention Vehicle (Fast Car) Grid Procedure

1. Sighting Lap

- The Fast Car should stage at Pit Out when riders are released for their sighting lap.
- When Pit Exit is closed for riders, the Fast Car will enter the track, taking a lap and staging at the center of the track 2 rows behind the last rider on the grid.

2. Warm-Up Lap

- At the start of the Warm-Up lap, the Fast Car will follow at speed the grid of riders for that lap, repositioning again in the center of the track 2 rows behind the last gridded rider.

3. Race Start

- With the start of the race, the Fast Car will follow at speed the grid of riders, returning to Pit Out, at the completion of the first lap.

4. In the event that a rider runs off course, and returns behind the Fast Car, the vehicle will continue at same speed.

5. During the Grid Procedure, the Fast Car will not stop for a rider off course unless instructed by the Race Director.

h. Advanced Life Support (ALS) Ambulance

1. Staffing & Qualifications

- There should be 1 paramedic and 1 EMT in each of the trackside ambulances.
- Each ambulance will have radio communication with Race Control.
- The ambulances will be positioned per the individual event medical plan requirements. These personnel should be skilled in helmet removal, with/without an Eject helmet removal system, supraglottic and endotracheal airway management.

2. The Medical Service must have exclusive access at any time to a minimum of two ambulances that are registered as an ambulance with the appropriate authorities and insured to transport casualties on public roads.

3. Medical Equipment

- Portable oxygen supply
- Supraglottic and endotracheal intubation equipment
- Suction equipment
- Manual ventilator
- Equipment for vascular access, infusion, circulatory support and hemorrhage control
- Blood pressure monitoring equipment
- Pulse oximeter
- Equipment to remove race suits and helmets
- Equipment to immobilize limbs and spine
- Stretcher
- Scoop Stretcher
- ECG monitor and defibrillator

i. Air Ambulance (Medical Helicopter)

1. A medical helicopter should be available and capable of transporting an injured rider to a Level 1 Trauma Center.

- The helicopter should have a cold-start to arrival time of less than 30 min.
 - The helicopter should be staffed by one Flight Nurse, one Flight Paramedic and one pilot.
 - The helicopter should be equipped to manage advanced cardiac and trauma resuscitation.
 - The helicopter may be IFR rated but may be limited by a 1000ft minimum ceiling.
2. The helipad should be positioned in a secure area where aircraft prop wash will not have an effect on racing activities.
 3. Medical Equipment on the Helicopter:
 - Oxygen supply
 - Supraglottic, endotracheal intubation and surgical airway equipment
 - Suction equipment
 - Manual and automatic ventilator
 - Equipment for chest decompression
 - Equipment for vascular access, infusion, circulatory support and hemorrhage control.
 - Blood pressure monitoring equipment
 - Pulse oximeter
 - Stretcher
 - ECG monitor and defibrillator
 4. The Medical Panel will establish the circumstances and procedures at each event for the summoning of an Air Ambulance.

j. Other Medical Vehicles

At certain tracks, medical services may utilize other vehicles to access and transport injured riders. These will be included in the Medical Plan for that track.

5.4.5 HOSPITALS

- a. A hospital network must be identified to manage all potential spectrum of trauma utilizing the services ranging from Level 1 to Level 3 Trauma Center capabilities.
- b. Each hospital as well as the helicopter service will receive **a written notification** of the upcoming event before the race. Confirmation of receipt of these notifications will be retained by MotoAmerica.
- c. Maps will be available to these hospitals for officials, team members, and family.
- d. Trauma Level 3 Hospital Services**
 1. Services for a Level 3 hospital should include:
 - Onsite Helipad.
 - Emergency Medical Services
 - Imaging capability with X-ray, CT, and Ultrasound
 - Available Specialist in General Surgery and Orthopedics.
 - Medical ICU
 2. Transportation time by ground ambulance should be within 30 minutes.
- e. Trauma Level 1 Hospital Services**

1. Services for a Level 1 hospital should include:
 - Onsite Helipad
 - Emergency Medical Services
 - Full imaging services with X ray, CT, MRI and Ultrasound
 - Medical ICU
 - Trauma/Surgical ICU
2. Additional specialty services should include:
 - Trauma Anesthesia, Surgery and General Surgery
 - Orthopedics
 - Cardiology, Cardiothoracic and Vascular Surgery
 - Neurosurgery/Spine
 - Plastic Surgery
 - Maxillofacial Surgery
 - Internal Medicine
3. Transportation time by helicopter should be within 30 minutes.

f. Pediatric Trauma Center

There should be an identified Pediatric Trauma Center.

5.4.6 COMPETITION CARE CLINIC

- a. **MotoAmerica will provide a Competition Care Clinic at races. Services available are:**
 - **Concussion Evaluation and Management**
 - **Minor Injury Evaluation and Management**
 - **Functional Taping/Kinesio Taping**
 - **Therapeutic Massage**
 - **Manual Manipulation**
 - **Evaluation and Management of medical conditions**
- b. **These services are to help optimize performance and assist with recovery from injury.**
- c. **Credentialed MotoAmerica staff may utilize these services during race events.**
- d. **All activities are under the direction of the CMO. When possible, the Competition Care Clinic will be located in the Medical Center.**

5.5 PROCEDURE IN THE EVENT OF AN INJURED RIDER

The management of an injured rider is under the control of the CMO, in consultation with the Track Medical Doctor, and should be the following:

- a. **A fallen rider must be reached by a Corner Marshal who can assess whether the rider is injured. If the rider is injured, Race Control must be informed by radio so that further procedures can be initiated.**
- b. **The CMO or designated medical personnel must be stationed in Race Control with access to closed circuit television to monitor the situation.**
- c. **Upon request by the CMO any medical vehicle can be dispatched to the scene of the incident, however only the Race Director can authorize entry onto or response via track.**

- d. Similarly, interruption or cessation of racing or practice session can only be authorized by the Race Director.
- e. It is the responsibility of the CMO to advise the Race Director of incidences where access to a fallen rider(s) necessitates this.
- f. Response codes are:

CODE 0 NO MEDICAL INTERVENTION REQUIRED

- Rider gets up unassisted

CODE 1 SHORT RESCUE

- Rider slow to get up, wobbly, disoriented, etc (no trackside medical intervention needed but should be sent to the Medical Center for evaluation)
- Rider will be cleared from track in less than 1 minute

CODE 2 LONG RESCUE

- Rider is down but conscious and moving but not getting up or very slow to get up.
- Trackside medical intervention may be needed, Fast Car and ambulance stand by for dispatch, no spinal injury is suspected
- Rider will be cleared from track in less than 2 minutes.
- **CODE 2 COULD RESULT IN A RACE INTERRUPTION.**
- **IF THE FAST CAR IS DEPLOYED, THE RIDER(S) SHOULD NOT BE MOVED OR TRANSFERRED WITHOUT INSTRUCTIONS FROM FAST CAR STAFF.**

CODE 3 PROLONGED RESCUE

- Rider(s) is (are) down and unconscious
- Trackside Medical Intervention needed (Fast Car and Ambulance stand by for dispatch)
- Rescue will take longer than 3 minutes
- Medical intervention required on track
- **CODE 3 WILL RESULT IN A RACE INTERRUPTION (RED FLAG).**
- **FAST CAR AND AMBULANCE WILL DISPATCH AT THE DIRECTION OF RACE CONTROL AND AS SOON AS THE TRACK IS CLEAR.**

- **IF THE FAST CAR IS DEPLOYED, THE RIDER(S) SHOULD NOT BE MOVED OR TRANSFERRED WITHOUT INSTRUCTIONS FROM FAST CAR STAFF.**

5.5.1 TRANSFER TO THE MEDICAL CENTER

The injured rider will be transferred to the medical center when his condition permits.

- a. The CMO shall decide the time and method of transfer.
- b. Rarely, at the discretion of the CMO only a rider may be transferred to hospital directly from the trackside.
- c. The MotoAmerica goal is that the vehicle responding to the injured rider must be on the scene of the accident within 120 seconds following the order to intervene.

5.5.2 TREATMENT AT THE MEDICAL CENTER

- a. At the medical center, medical personnel will be available to treat the rider. The CMO will coordinate treatment of the rider in consultation with the Track Medical Doctor.
- b. A rider who is conscious may choose the medical personnel by whom he wishes to be treated. A rider who does not wish to be treated by the medical center staff against their advice must sign a “Rider Self Discharge Form”.
- c. When a concussion has been suspected:
 1. Currently MotoAmerica and the FIM use the Sport Concussion Assessment Tool, 5th Edition - SCAT 5, with a Balance Error Scoring System - BESS to confirm the presence of an alteration in brain function that is consistent with a Concussion.
 2. MotoAmerica may also use Vestibulo Occulo_Motor Screening – VOMS, with or without computer aid. These tests, in combination, have excellent sensitivity and very good specificity in detecting the presence of a Concussion.
 3. A rider suspected of having a concussion is removed from competition and placed on the Unfit Rider List until a review can be completed. This review will include, at a minimum, evaluating the video of the incident by the CMO after the session.
 4. The CMO will determine the rider’s fit/unfit status and communicate to Race Direction and other relevant MotoAmerica personnel.
 5. The rider will not be able to return immediately to the current session, even with favorable testing and will be held out from competition for 24 hours.
- d. **The helmets of all riders taken to the medical center:**
 1. For assessment following a crash to be examined by the CMO or designated medical personnel before being returned to the rider or the team manager.
 2. To be transferred with a rider to the hospital, if necessary.

5.5.3 TRANSFER TO HOSPITAL

- a. The Track Medical Doctor, in consultation with the CMO, shall decide the time of transfer, the mode of transfer and the destination of an injured rider.
- b. Having made the decision, it is his responsibility to ensure that the receiving hospital and appropriate specialists are informed of the estimated time of arrival and the nature of injuries.

- c. It is also the responsibility of the Track Medical Doctor, in consultation with the CMO, to ensure appropriately skilled and equipped staff accompany the rider.**



MEDICAL HISTORY FORM
(To be completed by the applicant)



Personal Data:

Name:	First name:	Date of birth	
Address:			
Sex	male female	FMN:	AMA / CMA

No	Yes	Details
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<input type="checkbox"/> Loss of consciousness for any reason dizziness or headache	<input type="checkbox"/>
<input type="checkbox"/> Eye problems (except glasses)	<input type="checkbox"/>
<input type="checkbox"/> Asthma	<input type="checkbox"/>
<input type="checkbox"/> Allergy to medicines or drugs	<input type="checkbox"/>
<input type="checkbox"/> Concussions (number/date)	<input type="checkbox"/>
<input type="checkbox"/> Diabetes	<input type="checkbox"/>
<input type="checkbox"/> Heart problems	<input type="checkbox"/>
<input type="checkbox"/> Blood pressure disorder	<input type="checkbox"/>
<input type="checkbox"/> Stomach problems (ulcer, etc)	<input type="checkbox"/>
<input type="checkbox"/> Uro-genital problems	<input type="checkbox"/>
<input type="checkbox"/> Epilepsy or convulsions	<input type="checkbox"/>
<input type="checkbox"/> Mental or nervous disorder	<input type="checkbox"/>
<input type="checkbox"/> Problems with arms or legs incl, muscle cramp or joint stiffness	<input type="checkbox"/>
<input type="checkbox"/> Blood disorder with tendency to bleeding	<input type="checkbox"/>
Blood type	<input type="text"/>
<input type="checkbox"/> Operations (fractures/hardware)	<input type="checkbox"/>
<input type="checkbox"/> Do you take any medicine or drugs regularly?	<input type="checkbox"/>

- I have not been banned on medical grounds, from taking part in any other sport.
- I do not take drugs and do not abuse alcohol.
- In case of an injury, I give permission to the Medical Staff to release any relevant information to the clerk of the course, my relatives, my own doctor, MotoAmerica and the AMA.
- I declare that the information that I have given is the truth.
- I agree to the information on the Medical Examination Form being sent to MotoAmerica and the AMA.

Date

Signature of Applicant (or responsible Parent or Guardian if a minor)



MEDICAL EXAMINATION FORM
(to be completed by the doctor)



The person to be examined is applying for a license to participate in motorcycle events. The purpose of the examination is to determine whether the applicant is physically and mentally fit to control a motorcycle to ensure the safety of other riders, officials, and spectators during an event.

Name:	First name:	Date of birth	
Address:			

Sex: male female non-binary

Vital Signs:

Blood Pressure	Pulse	Respiratory Rate
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System	Normal	Abnormal	Details if Abnormal
HEENT			
Eyes:			
Distance Vision without Correction			
Left Eye			
Right Eye			
Distance Vision with Correction			
Left Eye			
Right Eye			
Respiratory System			
Cardiovascular System			
Exercise Treadmill Test if over 50YO			
Abdomen			
Presence of Hernia(s)			
Genito Urinary System			
Urine Albumen			
Urine Glucose			
Extremities			
Right Arm			
Left Arm			
Right Leg			
Left Leg			
Spine			
Neurologic System			
Vestibular Function			
Rhomberg Test			
Tandem Gait Test			

* In addition to the medical examination, an applicant for any license if 50 years of age or older must undergo and successfully pass an Exercise Treadmill Test (ETT) prior to the issuing of the license. The ETT must be completed and successfully passed every three years.

- I, the undersigned, certify that this person is medically fit to take part in motorcycle events.
- I, the undersigned, certify that this person is medically NOT FIT to take part in motorcycle events.
- I recommend that this person be examined by a member of the Medical Committee of MotoAmerica, or a doctor appointed by MotoAmerica.

Date of examination

Signature of Doctor

Doctor Printed Name: _____

Address: _____

Email: _____

Telephone number: _____



FIT TO RIDE CERTIFICATE

TO: RACE DIRECTION

FROM: MEDICAL CENTER

RIDER NAME	
RIDER COMPETITION NUMBER	
CLASS	

The rider named above has been evaluated at the Medical Center and is judged fit to compete in motorcycle circuit racing.

CIRCUIT	
TIME	
DATE	

CHIEF MEDICAL OFFICER

NAME	
SIGNED	

INFORMATION TO RIDER/TEAM: You must take this certificate and present it to RACE DIRECTION. Failure to do so may result in you being unable to participate in a practice session to race.

DATABASE INPUT COMPLETED	
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MEDICAL CODE APPENDIX D - CONCUSSION POLICY

a. Introduction

Concussion was defined by the “Consensus Statement on Concussion in Sport, Zurich, 2012”, and as used by the FIM, as a “complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces”. This simply means, an alteration in the way in which the brain functions secondary to an impact to the brain, either direct or indirect. This alteration occurs on a cellular level and is not observable with either a CT or MRI scan of the brain. A loss of consciousness is not a requirement for this condition, and up to 90% of all concussions do not involve a loss of consciousness. The alterations in brain function may be subtle or dramatic.

b. Signs and symptoms

Signs can be observed, and symptoms are reported by the rider.

Clear signs are a Loss of Consciousness – LOC, a profoundly unstable gait/walk – ataxia, confusion, repetitive questioning indicating retrograde amnesia or vomiting.

Common symptoms of a concussion may include headache – the most common, nausea, “pressure in head”, dizziness/balance problems, sensitivity to light or sound, blurred/double vision, difficulty in concentrating/remembering/focusing, fatigue/drowsiness, confusion, sleep disturbances and changes in emotion/irritability, as well as other vaguer symptoms such as “not feeling right”.

Even impacts that are away from the head may produce a concussive event, for example, loading the spine axially.

Symptoms typically are self-limited to 7-10 days. 10-15% of the time this can be longer.

c. Criteria for Suspicion of a Concussion

- Observation of Loss of Consciousness on CCTV in Race Control, or the rider is slow to get up off the ground.
- Observation of profound ataxia/staggering, unsteadiness, balance difficulty or falling again after getting up.
- Observed confusion or inability to communicate by initial responding Medical Personnel or Corner Marshals. (These personnel are asked to report these signs only and are not making a diagnosis).
- Observed vomiting.
- Suspicion of the physician in the Medical Center.
- Self-reporting of Symptoms of a Concussion.
- Determination of a Concussion

Concussions do not affect brain tissue in the way found in more significant Traumatic Brain Injury, TBI. Therefore, there are not any detectable changes on standard CT or MRI scans that can help determine if a Concussion has occurred. These scans, however, are commonly used to detect the presence of a more serious TBI, because Concussion and these more serious head injuries share many common signs and symptoms.

Currently MotoAmerica, and the FIM, use the Sport Concussion Assessment Tool, **5th Edition - SCAT 5**, with a Balance Error Scoring System - BESS to confirm the presence of an alteration in brain function that is consistent with a Concussion. MotoAmerica will also use Vestibulo Occulo Motor Screening – VOMS, with or without computer aid. These tests, in combination, have excellent sensitivity and

very good specificity in detecting the presence of a Concussion.

ImPACT neurocognitive testing, when used, is a helpful tool in determining the level of continued neurocognitive disability from a concussive injury and rehabilitation strategy. It cannot be used as a stand alone determinant for Return to Competition.

d. Exclusion from Competition

When a concussion has been suspected, a rider is removed from competition and placed on the Unfit Rider List until a review can be completed. This review will include, at a minimum, evaluating the video of the incident by the CMO after the session.

The CMO will determine the rider fit/unfit status and communicate to Race Direction utilizing the "Fit To Ride Certificate" form. It is the team/rider responsibility to provide the form to Race Direction prior to participating in any session.

The rider will not be able to return immediately to the current session, even with favorable testing. The rider may be held out from competition for 24 hours.

e. Return to Competition

It is always important for riders to observe a graduated increase in activity before returning to full competition to help avoid persisted symptoms.

1. Complete mental and physical rest until all symptoms have resolved. Usually 72hrs.
2. Light aerobic activity - walking.
3. Moderate aerobic activity – bicycling/swimming.
4. Strenuous aerobic activity – HR > 60% MPHR. Preferably low impact.
5. Full Training – MX, FT, MTB
6. Return to full Competition

Symptoms should not recur as activity is advanced. If symptoms do occur, then return to the next lower level of activity for 24hrs and try to advance again. If symptoms continue to occur, a head scan may be needed to investigate further for a more serious Traumatic Brain Injury.

f. Conclusion

The understanding and management of concussion in athletes is rapidly evolving. Serious consequences can occur from the mismanagement of concussions, and it is important for all riders to have a thorough understanding of this condition and how it may potentially affect them. Since the symptoms are mostly self-reported, this policy relies heavily on self-implementation. The rider and their teams need to honestly identify rider symptoms and alert the Chief Medical Officer. Though an injury to the brain is not externally apparent in a concussion, the need for the competent management of this injury should be viewed equally as important as that of a seriously broken bone or other serious injury.

6.0 ANTI-DOPING CODE

The regulations will be governed by the AMA Substance Abuse Policy and Testing Procedures.

AMA Substance Abuse Policy and Testing Procedures

The following American Motorcyclist Association Substance Abuse Policy & Testing Procedures (“Policy”) are implemented and enforced solely and exclusively by the American Motorcyclist Association (“AMA”). Compliance with the policy and participation in the testing program is mandatory for all AMA participants.

This Policy, as it may be amended from time to time, is a supplement to the provisions of the AMA Rules for Professional Competition (AMA), and will be interpreted, enforced, and applied by the AMA. This Policy is binding upon all AMA Participants in the same manner and to the same extent as the AMA Rules for Professional Competition.

Persons participating in any AMA must agree to the following:

“I recognize the importance of maintaining the safety and integrity of professional motorcycle racing. Accordingly, I agree to strictly comply with AMA Rules for Professional Competition and the Substance Abuse Policy & Testing Procedures (“Policy”). I understand that my agreement to comply with the Policy is an essential precondition to the issuance of a professional license and that I must abide by the Policy and submit to such testing procedures as may be conducted from time to time at the sole discretion of the AMA and its testing administrator and medical staff as a condition of continued licensure. I hereby authorize the testing administrators and medical staff to contact my physician(s) and medical health care provider(s) and I give my consent to disclose my medical history, including prescriptions, for the purpose of any investigation. I further understand that any violation of the Policy, or failure or refusal to submit to testing, will result in immediate disciplinary action up to and including the ineligibility of my privilege to participate in any AMA-sanctioned events. I further consent to the public release and publication of my test results.”

INTRODUCTION

Through a comprehensive random and for-cause testing program, the AMA Substance Abuse Policy & Testing Procedures are designed to confirm that AMA competitors are uninfluenced by performance enhancing substances and methods or other prohibited substances, and that periodic testing of athletes will provide a level playing field for AMA competitions. The AMA prohibits the misuse of alcohol, prescription drugs or any substance used in a manner that affects or impacts the integrity of the competition, including, but not limited to illegal or performance enhancing substances. Ultimate responsibility for compliance with this Policy is with each competitor.

SECTION 1 – POLICY ADMINISTRATION

This Policy will be administered and implemented through a program administrator, medical review officer, testing laboratories and substance abuse professional(s) through agreement with Aegis Sciences Corporation.

1.1 PROGRAM ADMINISTRATOR (PA)

- a. The AMA has designated **Mindy Shelby, Ph.D.**, Aegis Sciences Corporation (“Aegis”) as the Program Administrator (“PA”) for the Policy.

- b. The PA is responsible for, among other things, administering collection of samples/collections under this Policy, coordinating secure shipment of specimens to the testing facility, ensuring thorough and accurate scientific testing of specimens, determining whether any AMA Licensed Participant has tested positive for prohibited substances or otherwise violated this Policy, and informing the AMA and the Participant of any such violation. In making this determination, the PA shall consider all information derived from the testing process, as well as all information derived from the independent investigation of the Medical Review Officer (MRO).
- c. The PA shall facilitate evaluations for AMA Participants for the Return to Competition Program by coordinating with the appropriate substance abuse professional(s) in designing a Return to Competition Plan that may include substance abuse counseling, treatment or rehabilitation, as well as race sanctions for confirmed positive test results.

1.2 MEDICAL REVIEW OFFICER (MRO)

- a. The AMA has designated **Douglas Aukerman, MD**, as the Medical Review Officer (“MRO”) for the Policy.
- b. The MRO is an independent and impartial physician responsible for receiving and reviewing laboratory results generated pursuant to this Policy and determining whether there is a legitimate medical explanation for a positive test or refusal to test because of adulteration, substitution or other non-negative test.
- c. The MRO shall be a board-certified Sports Medicine physician and a medical review officer certified by the American Association of Medical Review Officers (AAMRO).
- d. The AMA reserves the right to designate other MROs, as needed, to facilitate this Policy throughout the year.

1.3 TESTING LABORATORY

- a. All testing pursuant shall be conducted by Aegis Sciences Corporation (“Aegis”).
- b. Aegis shall administer the collection, transport, and testing of urine, blood and/or saliva specimens and shall communicate the results to the PA and MRO as needed.
- c. The AMA reserves the right to designate other appropriately qualified testing facilities, as needed.

SECTION 2 – AMA PARTICIPANTS SUBJECT TO TESTING

2.1 MANDATORY PARTICIPATION

This policy is provided to AMA Licensed Participants in accordance with the AMA license agreement. Compliance with the AMA Substance Abuse Policy & Testing Procedures and participation in its testing program is mandatory for all licensed participants and as a condition of their AMA license.

2.2 PERFORMANCE ENHANCING SUBSTANCE TESTING

Participant-provided specimens or samples shall be tested for a selection of known performance enhancing substances to determine if any tested Participants are utilizing or consuming prohibited substances that might improve, enhance or alter their competitive capabilities.

SECTION 3 – PROHIBITED SUBSTANCES AND ACTS

3.1 ILLEGAL USE OF DRUGS

- a. AMA Participants are prohibited from using, having in their system, possessing, purchasing, selling and/or participating in the distribution of any drug that is illegal to possess, use, and/or distribute by the laws of the United States of America and/or any of its 50 states, regardless of the amount, at any time.
- b. For the purposes of this Policy, federal bans and definitions of illegal substances supersede any state and/or local ordinance, regulation or law permitting the use of a substance.

3.2 PROHIBITED SUBSTANCES DEFINED

Prohibited substances are those substances that, in the PA’s and MRO’s determination, may adversely affect the performance of an AMA Participant, including without limitation, performance enhancing substances, illicit drugs or other substances for which the Participant does not have a legitimate medical exemption for their use. The PA and MRO may make this determination with respect to a particular substance at any time, including and without limitation at the time of discovery of the substance following a drug test.

- a. Prohibited Substances include, but are not limited to, illegal drugs such as marijuana (THC), cocaine, and hallucinogens.
- b. Prohibited Substances also include drugs or chemicals that may be used to alter a sample with the intent to defeat a drug test.
- c. Alcohol, if used improperly as defined by this Policy, is also considered a Prohibited Substance.
- d. Furthermore, the definition of Prohibited Substances also includes, without limitation, paraphernalia associated with illegal drug use and mind-altering and/or addictive substances, which are not sold as drugs or medicines, but are used or marketed for their mind or behavior-altering effect.

3.3 PROHIBITED SUBSTANCES SPECIFIED

a. STIMULANTS

Including without limitation:

Cocaine
Amphetamine
Methamphetamine
Ecstasy (MDMA)
Eve (MDEA)
MDA
PMA
Phentermine, and other amphetamine derivatives and related compounds

b. NARCOTIC ANALGESICS

Including without limitation:

Fentanyl
Hydromorphone
Meperidine
Methadone
Morphine
Oxycodone
Oxymorphone
Heroin and/or their chemical and pharmacological analogs and related compounds

Codeine, dihydrocodeine, hydrocodone, and codeine analogs and related compounds (including those available over-the-counter in some countries if taken for a non-medical use)

c. EPHEDRINE CLASS

Ephedrine, pseudoephedrine, and phenylpropanolamine and/or their chemical and pharmacological analogs and related compound, as well as pseudoephedrine (even if purchased as an over-the-counter medication without a prescription) if used:

- in a manner that is inconsistent with the instructions provided by the drug manufacturer (e.g., use in concentrations or amounts in excess of the manufacturer’s recommended dose); or
- in a manner or an amount that may cause an increased risk to health, safety, or an impairment of ability to conduct his/her participation in relation to an AMA event.

d. BENZODIAZEPINES

Including without limitation:

Alprazolam
Diazepam
Lorazepam (Ativan)
Oxazepam (Serax)
Temazepam (Restoril)
Alpha-hydroxy-alprazolam (Xanax)
Nordiazepam (Valium) and/or their chemical and pharmacological analogs and related compounds

e. BARBITURATES

Including without limitation:

Amobarbital (Amytal)
Butalbital (Anolor 300, Esgic, Fioricet, Fiorinal)
Phenobarbital (Luminol, Solfoton)
Pentobarbital (Nembutal, Nembutal Sodium)
Secobarbital (Seconal) and/or their chemical and pharmacological analogs and related compounds

f. PERFORMANCE ENHANCING DRUGS

Including without limitation, Human Growth Hormone (hGH), Human Chorionic Gonadotropin (hCG), Lutenizing Hormone (LH) and Insulin-like Growth Factor (IGF-1), clenbuterol, anabolic androgenic steroids (“AAS”), SARMS, Anti-Estrogen and Diuretic substances, including without limitation:

Androstenediol
Androstendione
Bolasterone
Boldenone
Chloroxomesterone (dehydrochlormethyltestosterone)
Clostebol
Dehydroepiandrosterone
Dihydrotestosterone
Dromostanolone
Epi-testosterone
4-Chlortestosterone

Fluoxymesterone
Formebolone
Furazabol
Mesterolone
Methandienone (Methadrostenolone)
Methandriol
Methenolone
Methylclostebol
Methyltestosterone
Methyltrienolone
Mibolerone
Nandrolone
Norandrostendione
Norethandrolone
Norethindrone
Oxabolone
Oxandrolone
Oxymesterone
Oxymetholone
Stanozolol
Stenbolone
Testosterone
Trenbolone

g. **MUSCLE RELAXERS (PEDs)**

Including without limitation, carisoprodol (Soma) and meprobamate (Miltown, Meprospan).

h. **SLEEP AIDS**

Including without limitation, zolpidem (Ambien).

i. **BETA BLOCKERS**

Including without limitation, the following drugs and related compounds:

Acebutolol
Alprenolol
Amosulalol
Atenolol
Betaxolol
Bisoprolol
Carteolol
Esmolol
Landiolol
Levobunolol
Mepindolol
Metipranolol
Metoprolol
Nadolol
Nebivolol
Oxprenolol
Penbutolol
Pindolol
Propranolol
Sotalol
Tilisolol
Timolol

3.4 MEDICAL AND NON-MEDICAL USE OF PRESCRIPTION AND OVER-THE-COUNTER MEDICATIONS

- a. Many prescription and over-the-counter medications serve essential or beneficial purposes for the health and well-being of Participants, and nothing in this Policy is intended to discourage the proper use of these medications.
- b. Some medications, even when properly used, may adversely affect the safety and integrity of competition for AMA events.
- c. Misuse or non-medical use of a prescription or over-the-counter medication by a Participant is prohibited.
- d. The MRO will examine whether:
 1. the medication was used in a manner inconsistent with the instructions provided by the manufacturer, pharmacist and/or the prescribing physician
 2. the medication causes a competitive advantage, or a diminished or impaired ability to perform duties on the day of an AMA event
 3. the medication was used without a valid prescription for an appropriate medical indication from a credentialed and treating physician
 4. the participant failed to advise the issuing physician that another physician was prescribing the same and/or similar medication; and/or
 5. the medication was prescribed more than 6 months prior to an AMA event
- e. Illegal acquisition and/or illegal distribution of any prescription or over-the-counter medication is strictly prohibited.

3.5 DIETARY SUPPLEMENTS

- a. Dietary supplements may contain (either purposefully or through contamination) a prohibited substance.
- b. Any product sold with a warning advising non-use if the purchaser is subject to a drug testing program should be avoided even though such product may be available without a prescription.
- c. Information regarding the contents of over 75,000 nutritional supplements can be found online at the Aegis website (www.aegisshield.com), as well as consulting a medical provider.

3.6 MASKING AGENTS & SUBSTANCES THAT MIMIC BANNED SUBSTANCES

- a. The use of or attempted use of any agent or technique that is designed to avoid detection of a prohibited substance and/or the attempt to falsify, alter, compromise, or otherwise tamper with the integrity of a specimen or test is prohibited, including:
 1. Providing false urine samples (e.g., urine substitution or synthetic urine)
 2. Contaminating the urine sample with chemicals or chemical products
 3. Using pharmaceutical diuretics to purposefully dilute the urine sample
 4. Using masking agents
 5. Using Aromatase inhibitors that may be used to biologically manipulate the testosterone/epitestosterone ratio, and/or using epitestosterone to artificially alter the testosterone/epitestosterone ratio
- b. The use of any legal or illegal substance, or combination of substances, including but not limited to synthetics, analogues and/or derivatives of a banned substance is prohibited.

3.7 MANNER OF USE

a. SAFETY

The use of any legal or illegal substance, or combination of substances, which when taken into the human body can impair the ability of the person to perform safely or is used in an unsafe manner is prohibited.

b. INTEGRITY OF COMPETITION

The use of any legal or illegal substance, or combination of substances, which when taken into the human body can alter or enhance a person's ability to compete in a manner unfair to other Participants is prohibited.

SECTION 4 – PROOF OF PRESCRIPTION FOR PROHIBITED SUBSTANCES

4.1 MANDATORY NOTIFICATION

- a. Participants are required to notify and provide proof of prescriptions containing prohibited substances to the MRO upon receipt of such a prescription from his/her treating physician.
- b. The information required to be submitted must include the following:
 1. Participant name and Date of birth (DOB)
 2. Participant mailing address and email address
 3. Participant cell phone number
 4. Name of medication and date of prescription
 5. Name and phone number of the prescribing physician
 6. Attach a copy of the prescription providing the dosage and duration instructions for proper use
- c. Email the information along with scanned copies of the documents to mro@aukmed.net or fax to (888) 595-4949. Include "AMA Participant Proof of Prescription" in the Subject line.
- d. The MRO may contact the prescribing physician to confirm the prescription, the prognosis, expected length of treatment and corresponding duration of the prescription.

SECTION 5 - TESTING FOR PROHIBITED SUBSTANCES

5.1 BASIS FOR TESTING

a. EVENT TESTING

The AMA may, at its sole discretion, require a test of any Participant competing in an AMA competition. Testing may include the top three overall riders in each class and a number of random selected Participants from each class. Each Participant should expect to be tested, at a minimum, at least once during the AMA season.

b. REASONABLE SUSPICION

The AMA reserves the right to require a Participant to submit to a test(s) if an AMA Official has reasonable suspicion that the Participant has violated any part of this Policy or has a competitive advantage or diminished ability to perform as a result of using any prohibited substance. Conditions, observations and/or reports that may cause reasonable suspicion include:

1. Participant is found or observed in possession of illegal substances or illegal drug paraphernalia at any time.
2. Observation of signs, symptoms, and/or behaviors generally understood to accompany the use of prohibited substances or alcohol use or intoxication, including without limitation:
 - physical signs of red or droopy eyes, dilated or constricted pupils
 - slurred speech, stumbling, or hyperactivity
 - needle marks
 - repeated unexplained disappearances from an Event
 - constantly running nose, red appearance in the face, or persistent sniffing
 - time distortion, including repeated tardiness and missed appointments
 - chronic forgetfulness
 - accidents during Events

- inability to concentrate or to maintain attention
- mental confusion, paranoia, or presence of abnormal thoughts or ideas
- violent tendencies, loss of temper, or irritability
- extreme personality changes or mood swings
- deteriorating personal hygiene or appearance
- an arrest or conviction for driving while under the influence of alcohol or drugs, or an alcohol or drug-related conviction
- receipt of a report from a reliable source that Participant is under the influence of prohibited substances on the day of an Event, or, at any time, is using, possessing or selling illegal drugs or substance
- the results of an examination or test which shows evidence of use of a prohibited substance or alcohol abuse or of adulteration or manipulation of the specimen
- the odor or aroma of an alcoholic beverage on or about the breath or body of Participant consistent with use of such a substance or alcoholic beverage on the day of an Event
- violation of event procedures resulting in an incident or accident involving injury, death or property damage

5.2 SPECIMENS FOR TESTING

- a. Testing may include specimens of urine, blood, saliva, hair, and/or breath.
- b. The choice of specimen for a particular test is at the discretion of the PA and/or MRO.
- c. The type of test performed is at the discretion of the PA and/or MRO.
- d. In the event of disagreement, the PA shall make the determination of the specimen for a particular test and the type of test to be performed.

5.3 FOLLOW-UP TESTING

a. ADMINISTRATIVE REQUEST

The PA and/or MRO may request follow-up testing for administrative purposes.

b. MRO REQUEST

The PA and/or MRO may request follow-up testing for a variety of reasons, including but not limited to:

1. A finding by the MRO of invalid test results
2. To monitor or determine appropriate therapeutic levels of prescription drug use
3. To determine whether a Participant is “cycling” or “stacking” a performance enhancing substance
4. To determine if there is a legitimate medical reason for test results

5.4 AUTHORIZATION FOR TESTING AND RELEASE

- a. A Participant who refuses to execute, falsifies or withdraws any authorization for testing or the release of medical records, shall become ineligible to compete in AMA activities for an indefinite period.
- b. A Participant who attempts to falsify or otherwise tamper with any urine, blood, saliva, hair and/or breath test, shall become ineligible to compete in AMA activities for an indefinite period.

5.5 REFUSAL TO TEST

- a. Refusing to submit to testing will be treated as a positive test.
- b. For the purposes of this Policy, Participants have refused to take a test for the following:
 1. Failure to participate, authorize or cooperate for testing, including failure to follow procedures of *Section 5.4 Authorization for Testing and Release*

2. Failure to appear for a test within the time period designated by the PA after being notified of the test with the time period required
 3. Failure to remain for the duration of testing or until all testing requirements are completed
 4. Failure to provide sufficient amount of the requested specimen, and the MRO determines that no legitimate medical reason exists for the insufficient specimen
 5. Failure to permit or allow an observed collection
 6. Failure to take a follow-up test
 7. Failure to consult and/or cooperate with the MRO
 8. Failure to provide an unadulterated specimen. A test is considered a refusal for any findings of specimens that are adulterated, substituted, including but not limited to a finding of synthetic urine, synthetic marijuana, adulterants, intentional dilution of specimens, etc., and where no legitimate medical explanation supports the laboratory findings.
- c. Any attempts by a Participant to mask or alter the results of the test will be considered a refusal.

SECTION 6 – SPECIMEN COLLECTION AND HANDLING

6.1 SAMPLE COLLECTION

a. SAMPLE COLLECTION AGENTS (SCA)

1. Aegis shall designate one or more Sample Collection Agents (SCA) to collect the samples and to oversee sample collections and/or the administration of other testing protocols.
2. Each SCA shall be trained in appropriate collection techniques by the certified laboratory.

b. IDENTIFICATION & DIRECT OBSERVATION

1. Once a Participant has been selected for testing, an AMA Official will notify and immediately escort the Participant to the testing area.
2. Once in the testing area, Participants may not leave the designated area until testing is completed.
3. Collection shall be made as soon as possible following the notification of the Participant that testing will be conducted.
4. A SCA of the same gender shall directly observe the collection of the urine samples.

c. SPECIMEN QUALITY

1. The SCA will promptly measure the temperature of the specimen to ensure it has not been manipulated.
2. Where results indicate that the sample is inappropriate for testing, the SCA may require the Participant to provide additional specimens as necessary.

d. SPECIMEN HANDLING

The SCA will split the specimen into “A” and “B” samples (when possible), label, secure, and transport the specimens to the Testing Laboratory in such a manner as to ensure that the specimens are not misplaced, tampered with, or relabeled.

e. SPECIMEN TESTING

The specimens shall be tested for prohibited substances and the results reported promptly to the MRO.

6.2 SPECIMEN OWNERSHIP

All specimens collected, including both “A” and “B” samples, are exclusively the property of the AMA.

SECTION 7 – POSITIVE TEST RESULTS - MRO INVESTIGATION – “B” SAMPLE TESTING

7.1 NOTIFICATION OF RESULTS TO PARTICIPANT

- a. The testing laboratory will notify the MRO of the results of all testing.

- b. In the event of a positive test indicating the presence of a prohibited substance, or of a refusal to test because of adulteration or substitution, or other non-negative test, the MRO shall promptly notify the Participant of the results.
- c. Participants shall be notified pursuant to the contact information provided on Participant's license application.

7.2 MRO INVESTIGATION

- a. Upon notification of a positive test or a refusal to test, the MRO shall conduct an investigation.
- b. To assist in the investigation, the MRO may request:
 1. An interview with Participant
 2. Additional information from Participant, including but not limited to:
 - suitable proof of valid medical prescriptions given by a licensed and treating physician
 - consent to review records of the prescribing physician
 - any other reasonable requests that may assist the MRO investigation
 3. Participant undergo an independent medical evaluation from a professional designated by the MRO, at the Participant's expense.
- c. Participant must respond to the MRO's request for an interview and/or additional information within **72 hours** of the request from the MRO.
- d. Participant must complete the independent medical evaluation within **30 business days** of the request from the MRO.
- e. The failure to cooperate with the MRO's investigation or provide suitable proof in a timely manner shall be treated as confirmation of the positive test or unexcused refusal to test.

7.3 SPLIT SPECIMEN or "B" SAMPLE TESTING

a. "B" SAMPLE TEST REQUEST

1. Upon notification to a Participant of a positive test or refusal to test because of adulteration, substitution, or other non-negative test, Participant may request a test of the split specimen or "B" sample.
2. The request to test a "B" sample must be made within **72 hours** from the time of notification of test results.
3. The request to test a "B" sample must be made in writing and emailed to the MRO at mro@ankmed.net.
4. Failure to timely request a "B" sample within the 72-hour request period constitutes an acceptance of the positive results.
5. Participants who failed or refused to produce an original specimen may not request a "B" sample test.
6. Participants who waive the 72-hour request period during the MRO interview may not request a "B" sample test.

b. "B" SAMPLE TEST LABORATORY

1. The "B" sample test shall be conducted by Aegis using the "B" specimen from the original collection.
2. PA and MRO will use their best efforts to expedite the "B" sample test.
3. Participant may be present (either personally or by representation by a qualified toxicologist not affiliated with Aegis) during the "B" sample test.
4. If Participant chooses to be present personally or by representation during the "B" sample test, Participant must notify the MRO in writing within the **72-hour** request period at mro@ankmed.net.

5. The “B” sample test will be performed at the expense of the Participant.

c. “B” SAMPLE TEST PROCEDURES

1. The “B” sample test will be performed in accordance with the same procedures used in the original test of the “A” specimen.
2. If the “B” sample fails to confirm the original “A” specimen test results, then the specimen and test will be recorded as negative, and there will be no violation under this Policy.
3. If the “B” sample test confirms the original “A” specimen test results, then the specimen and test will be recorded as a confirmed positive test and a violation of this Policy.
4. If no “B” sample is available due to the nature of the collection, then the MRO and PA will act upon the procedures in *Section 7.2 - MRO Investigation*.

d. UNCOOPERATIVE PARTICIPANT

1. When the PA or MRO has made repeated attempts to contact the Participant regarding notification of a positive test and the right to “B” sample testing, and the Participant fails to respond or otherwise cooperate, then the PA and MRO may report the test as positive after 72 hours from the findings of the test.
2. Lack of cooperation with the PA or MRO by the Participant will be treated as a constructive waiver of the right to “B” sample testing.

7.4 REPORTING RESULTS TO THE AMA

- a. Upon completion of the MRO investigation, if the MRO determines there is no legitimate medical use or legitimate medical explanation for a positive test or refusal to test because of adulteration or substitution, the MRO shall report the results to the PA.
- b. In the event the MRO determines the “A” sample is positive and the Participant has made a timely request to test the split specimen or “B” sample, the “B” sample shall be tested, and the results verified.
- c. Once split specimen testing is completed and the results verified, the MRO shall report all information derived from the testing process and the independent investigation to the PA, and the PA shall make a determination of whether the results are positive or negative.
- d. The PA shall issue to the AMA either a confirmed negative test result or a confirmed positive test result.
- e. If split specimen procedures are waived or not acted upon, the PA shall issue a confirmed positive result and violation of this Policy to the AMA.
- f. If the PA verifies a test as cancelled or negative, the results will be reported to the AMA and no violation of this Policy will be found.
- g. The final determination of whether there has been a violation of this Policy shall be made by the PA.

SECTION 8 – SANCTIONS

8.1 TEMPORARY INELIGIBILITY BASED ON “A” SAMPLE RESULTS

- a. Upon notification of an “A” specimen positive test, Participant may continue to compete pending testing of the “B” sample and final confirmation of results from the PA, unless exigent circumstances exist.
- b. Participant may become temporarily ineligible to compete pending completion of the “B” sample test if the AMA, in its sole discretion, deems exigent circumstances exist, including:
 1. Concerns regarding the safety of the Participant and others at the Event or on-track

2. Concerns regarding the fairness of a competition
3. Undue delay to accommodate the presence of the Participant (or his/her representative) at the “B” sample test.

8.2 DISQUALIFICATION FROM EVENT(S)

- a. Upon confirmation of a positive test result or other violation of this Policy, Participant will be disqualified from all results from the time of the event in which the original specimen sample was given, to the time of confirmation of violation.
- b. In addition to disqualification of results, Participant will forfeit all event awards, points and prizes.
- c. A Participant who refuses to comply with Policy procedures at an event may be:
 1. disqualified from event results
 2. required to forfeit awards, points and prizes
 3. removed from the event
- d. The AMA may take such further emergency action deemed appropriate in its sole discretion.

8.3 PERIOD OF INELIGIBILITY

- a. Upon confirmation of a positive test result or other violation of this Policy, Participant shall become ineligible to compete in further AMA events for a specified period of time, subject to potential elimination, reduction or suspension of ineligibility pursuant to *Section 9 – Return to Competition Program*.
- b. The period of ineligibility shall be no longer than four (4) years where:
 1. the violation does not involve a Specified Substance or a Specified Method, unless the Participant or other person can establish that the violation was not intentional; or
 2. the violation involves a Specified Substance, or a Specified Method and the PA can establish that the violation was intentional.
- c. The period of ineligibility shall be no longer than two (2) years in all other instances.
- d. The AMA shall give Participant written notice of the violation, the period of ineligibility, and the means by which the Participant may mitigate and reduce the period of ineligibility by participating in *Section 9 - Return to Competition Program*.
- e. The period of ineligibility imposed by the AMA shall be final and non-appealable.
- f. The AMA may impose such further disciplinary action deemed appropriate in its sole discretion.

8.4 PUBLICATION OF RESULTS

- a. The AMA may publish the results of any test(s) conducted pursuant to this Policy and the circumstances giving rise to such test(s) to such third parties as the AMA, in its sole discretion, deems reasonable under the circumstances, including the general public.
- b. The AMA may publish any and all violations to this Policy, including but not limited to conduct violations where no testing may have occurred.
- c. No Participant shall have any claim or cause of action of any kind against the AMA or any director, officer, employee or agent of the AMA, the Testing Laboratory, PA or MRO with respect to such publication, and/or shall be deemed to have released any such claim or cause of action.

SECTION 9 - RETURN TO COMPETITION PROGRAM

9.1 PURPOSE OF PROGRAM

- a. Ineligible Participants may return to competition prior to the expiration of their ineligibility period upon successful completion of a Return to Competition Program (the “Program”) and authorization from the PA.
- b. The Program will be developed based upon an evaluation prepared by the PA in consultation with substance abuse or other health care professionals (if applicable).

- c. The Program will be designed around the unique circumstances of the violation and the health care needs of the Participant, for the express purpose of providing the Participant with a means to eliminate, reduce or suspend the ineligibility period.
- d. Factors which will result in mitigation of the period of ineligibility include:
 - 1. Admission of violation and Acceptance
 - 2. Finding of No Fault, inadvertence or negligence
 - 3. Substantial assistance in identifying Policy violations by others
- e. The Program is voluntary, and Participant must agree to the terms and conditions of the Program.

9.2 TERMS AND CONDITIONS

- a. The AMA shall notify the Participant in writing of the terms and conditions of the Program and the means by which the Participant may eliminate, reduce or suspend the period of ineligibility.
- b. The terms and conditions shall be based upon the recommendations of the PA, which may include the following:
 - 1. Abstinence from prohibited substances
 - 2. Follow-up testing
 - 3. Substance abuse counseling
 - 4. Treatment
 - 5. Rehabilitation
- c. The Program will establish how many times the Participant will be tested, for how long, and for what substances.
- d. Testing shall be performed at a time and place and under conditions specified in the Program.
- e. Participant will be responsible for all costs, including laboratory testing fees, associated with the Program.

9.3 PROGRAM COMPLETION

- a. Upon successful completion of the Program, as determined by the PA, the AMA shall reinstate and return the Participant to competition and terminate the ineligibility period.
- b. Return to competition may include conditions of reinstatement, including,
 - 1. Ongoing follow-up testing
 - 2. Ongoing follow-up counseling
- c. In the event Participant fails to successfully complete the Program, as determined by the PA, then the original ineligibility period shall remain in full force and effect until expiration.

SECTION 10 - VOLUNTARY DISCLOSURE

10.1 BENEFITS OF VOLUNTARY DISCLOSURE

- a. The AMA encourages voluntary disclosure of substance abuse and supports voluntary rehabilitation efforts by Participants. Consequently, the AMA is agreeable to accommodating such persons during their recovery and abstinence, so long as the safety and integrity of the AMA program is not jeopardized.
- b. The primary objective of voluntary disclosure is to prevent participation of individuals who are in violation of this Policy until such time as the violation has been resolved. In principal persons who voluntarily disclose violation of this Policy, and who voluntarily withdraw from participation until their eligibility status is resolved, will receive more favorable consideration than those whose violations are discovered through testing process and who have continued to knowingly participate in AMA events while in violation of this Policy.

- c. Participants are encouraged to contact the PA and/or the AMA to voluntarily disclose violations of this Policy prior to being selected for a drug test. Persons who do not self-report will be subject to whatever actions and controls the AMA deems necessary to protect the safety and integrity of the racing program, including suspending competition privileges.
- d. Upon notification of voluntary disclosure, the PA will develop a Return to Competition Program for the Participant in accordance with the provisions of *Section 9 – Return to Competition Program*.
- e. Participants who voluntarily disclose their violation(s) of this Policy, and who cooperate with the PA in setting a plan of action for reinstatement, shall not, under normal circumstances, be charged with violation of this Policy.
- f. Participants who have no previous offenses of this Policy may voluntarily disclose violation(s) even at the time of selection for a random test under the provisions of *Section 5.1.a – Basis for Testing – Random Testing*, or at the time of notification of a test under the reasonable suspicion provisions of *Section 5.1.b – Basis for Testing – Reasonable Suspicion*. However, such individuals must immediately cease their participation in the event's activities and refrain from any further participation in AMA events until their eligibility status has been resolved.
- g. Individuals who have one or more previous violations of this Policy are offered no specific protections under this section of the Policy. However, voluntary disclosure of repeat violation(s) and voluntary withdrawal from participation will be viewed as mitigating factors by the AMA in determining penalties which might be imposed.

10.2 PROBATION

- a. Participants who voluntarily disclose their violation(s) of this Policy will be subject to a preliminary test to be conducted in a timely manner at the direction of the AMA and any subsequent testing as determined by the PA. The cost of such testing shall be at the expense of Participant.
- b. Participant will be prohibited from competition in AMA events until they have a negative test result on a sample specifically identified as a "Return to Competition Sample".
- c. If the results of the preliminary test reveal that participation of the Participant may jeopardize the safety or integrity of the AMA program, as determined in the sole discretion of the AMA, then the Participant shall be placed on Probation and will be prohibited from participating in further competition until such time as there is evidence, acceptable to the AMA, that the Participant will no longer jeopardize the safety and integrity of the race program.
- d. Participants placed on Probation will be required to enter into a **Voluntary Disclosure Agreement** with the AMA stipulating the conditions of their probation.
- e. Any violation of this Policy discovered while a Participant is on Probation under voluntary disclosure shall be treated as an offense of this Policy.
- f. Upon successful completion of Probation, the AMA shall return the Participant to competition with a finding of "No Violation" of this Policy.

7.0 ENVIRONMENTAL CODE

The regulations will be guided by the FIM Environments Code.

