



# **2020 SOLO SUPERMOTO TECHNICAL REGULATIONS**

## A. TECHNICAL CONTROL

It is the competitor's responsibility to ensure that their machine/s is presented at technical inspection in the same condition as for racing. It is the responsibility of the competitor to re-present his machine for technical inspection after any accident damage.

**The SOLE RESPONSIBILITY for the safety and suitability of his machine and clothing for competition lies with the competitor.** The Senior Technical Official or Race Director may, at their entire discretion, refuse to allow any machine, or component, or item of protective clothing to be used on the grounds of safety, in any competition, their word shall be final.

## B. PROTESTS - MACHINE ELIGIBILITY

Any protest against the eligibility of a machine must be made in accordance with the NORASPORT

Sporting Code, section 18: Protests and Appeals. If so ordered by the Race Director, competitors must strip their machines to allow adjudication upon the veracity of a protest. Refusal to strip shall be considered a verification of the protest, which will then be upheld.

## C. ADDITIONAL TECHNICAL REQUIREMENTS

A Championship Organiser/Promoter may enforce additional technical requirements at any time, which shall be published in the Championship Conditions, the Final Instructions or by way of an Official Bulletin.

## D. GENERAL

All machines offered for technical inspection shall be of a clean, tidy and sporting appearance with no offensive markings that could damage the image of the organisers and promoters or bring the sport into disrepute. Race numbers and backgrounds must be clearly visible, of the correct size and not obscured by any graphics or stickers.

## E. FIRE EXTINGUISHER

It is a compulsory requirement that all vehicles used for the transport of a racing machine, whether that be internally transported or externally by trailer be equipped with a 2kg (minimum) dry powder fire extinguisher available for immediate use. This extinguisher must show the date of the last annual inspection. Failure to comply with this regulation will result in a sanction imposed by the Race Director.

**Section 1** – Personal Protection

**Section 2** – Solos

**Section 3** – Mini Bikes

### 1. PERSONAL PROTECTION

#### 1.1. PROTECTIVE CLOTHING

During practice and racing, competitors must wear protective clothing to the following minimum standards; all intended racing clothing must be clean and readily available for inspection if required. Protect yourself always.

A complete leather suit of at least 1.2mm thickness, suits zipped together to a good standard are permitted. Non-leather substitutes may be used if they can be demonstrated to give the same level of protection only with the prior consent of the organisers. Competitors' footwear must be of leather or Kevlar substitute to the same standard and be a minimum of 200mm high to provide protection.

Competitors must wear suitable leather/kevlar race gloves of high quality; gloves must cover the gap at the wrist. **Fabric short Moto-X gloves are not permitted.** Suitable eye protection must always be worn.

## 1.2. HELMETS

All Competitors must wear helmets bearing one of the following approval codes and must be in good condition with no damage. Helmets must fit correctly and have a secure means of fastening.

<b>Territory</b>	<b>Marking</b>
UK Only	BS6658:1985 or ACU Gold Label
Europe	ECE22-05 'P' 'NP' or 'J'
Japan	JIS T 8133:2000
USA	SNELL M2005

## 1.3. PERSONAL VIDEO EQUIPMENT

Personal video equipment, i.e. GO-PRO and other similar devices are allowed. However, the mounting of these devices on the riders' helmet is strictly prohibited. If worn on the person, they must be chest mounted on a secure purpose-built harness. If mounted on the machine they must be securely fitted, suction mounts are not acceptable. A tether if supplied with the device or if not, cable ties must be added to ensure that if dislodged the camera stays with the competitor and machine.

## 2. SOLOS

### 2.1. ELIGIBILITY

Any mass manufactured or specially built Solo Supermoto machine

### 2.2. ENGINE AND FRAME NUMBERS

All machines are required to have engine and frame numbers that have not been tampered with or deleted. New unstamped components are permissible, but proof of ownership may be required.

### 2.3. NUMBER PLATES

These must be fitted to the front and both sides of the machine in a position that is not obscured by the rider when seated on the machine. The minimum size for number plates is 250mm x 200mm and the minimum figure size for identification numbers is 130mm high x 15mm wide.

All machines must have the following coloured backgrounds and numbers:

- All solo race machines except the following white back grounds, black numbers
- Over 45's may run blue numbers
- Academy class blue backgrounds, white numbers letter "A" after number
- Two stroke class green background white numbers
- Evo class yellow backgrounds black numbers
- Previous year's class champions may run red background with white numbers

**ALL RACE MACHINES MUST DISPLAY THE CORRECT ALLOCATED NUMBER**

## 2.4. CONTROL OF EXHAUST SOUND LEVEL

The biggest challenge facing our sport is the control of noise. All competitors have a duty to ensure their machines comply with approved noise levels and technical regulations prior to attending a meeting.

The sound output from each machine shall not exceed 96dba at the engine revolutions applicable to the machine in the following table:

<b>Engine Size</b>	<b>RPM (Static)</b>
Up to 125cc	7000rpm
126cc to 499cc	4000rpm
Over 500cc	5000rpm

The noise test will be conducted with the microphone placed at an angle of 45degrees from the end of the exhaust, 95cm away from the sound source.

### **NOISE IS SOCIAL AND ENVIROMENTAL**

**POLLUTION.** Machines found to be excessively noisy during an event may be subject to exclusion.

Black flag will be implemented. Please make every effort to comply. You will be subjected to noise testing at random, which may be going on to the circuit or leaving the circuit after the race. Be helpful and cooperative with all officials

## 2.5. EXHAUST PIPES

The end of the exhaust pipe (silencer), or pipes, must not project beyond the extremity of the fixed cycle parts. The maximum allowed diameter of the exhaust silencer outlet is 33mm.

## 2.6. SUPERCHARGERS AND TURBOCHARGERS

Superchargers and turbochargers are not permitted.

## 2.7. THROTTLE CONTROL

Throttle controls must be self-closing when not held by the hand. This function must apply whether the engine is running or not.

## 2.8. HANDLEBARS

The width of handlebars must be at least 450mm. Grips must be attached in such a way that at least the minimum width is reached when measured between the outside end of the grips. Any exposed bar ends must be plugged with a rubber covered solid material. Plastic hand guards (aka brush guards) must be fitted to the machine's handlebars, one hand guard on either side. Each individual hand guard must be fixed to the handlebar via two mounting points, one of which must be the end of the handlebar. The minimum angle of movement must be 15 degrees either side of the centre line. Steering must be restricted to ensure that a minimum clearance of 30mm is maintained between the grips and the tank or any other part of the bodywork to prevent the rider's fingers from being trapped.

## 2.9. CLUTCH AND BRAKE LEVERS

All handlebar levers must be ball ended (radius ended or flat with no sharp edges). The ends must be permanently fixed and form an integral part of the lever.

## **2.10. BRAKES**

Machines must have independent brakes for each wheel. For machines with two front brakes the split of the brake lines must be above the bottom yoke.

## **2.11. OIL SUPPLY PIPES**

Oil supply pipes containing positive pressure should be of braided steel construction and be security fastened.

## **2.12. OIL CATCH TANKS, PETROL AND OIL BREATHERS**

Where breathers are fitted to engine, gearbox and petrol tanks, these must discharge into a secure container of at least 250cc capacity.

## **2.13. PETROL AND OIL FILLERS/FILTERS**

Petrol and oil fillers must lock securely or be suitably security wired to prevent leakage. Oil drain plugs and external oil filters must be security wired.

## **2.14. ADDITIVES TO WATER IN RADIATORS**

Glycol Anti-freeze is extremely slippery when spilt on tarmac and is consequently forbidden. An approved non-Glycol additive may be used, plain water is also permitted. The penalty for non-compliance is disqualification from the meeting.

## **2.15. FOOTRESTS**

Footrests should be of the folding type and the ends of the footrests must be rounded and have no sharp edges.

## **2.16. CRASH BOBBINS AND FOOTREST SLIDERS**

Crash bobbins and footrest sliders are mandatory at all circuits. When these items are affixed to any machine, footrest sliders must be mechanically attached with secure fastenings (not cable ties) and crash bobbins must be secured with nyloc type nuts.

## **3. MINI BIKES**

### **3.1. ELIGIBILITY**

Any mass manufactured or special built Pit Bike based on the Chinese horizontal pit bike engine or Honda CRF150 engine or vertical 85cc 2-stroke engine. Maximum Wheel size 12". Open Suspension Open Tyres.

### **3.2. ENGINE AND CHASSIS NUMBERS**

All machines are required to have engine and frame numbers that have not been tampered with or deleted. New unstamped components are permissible, but proof of ownership may be required.

### 3.3. NUMBER PLATES

These must be fitted to the front and both sides of the machine in a position that is not obscured by the rider when seated on the machine. The minimum size for number plates is 250mm x

200mm and the minimum figure size for identification numbers is 130mm high x 15mm width. All machines must have White background with Black numbers

### 3.4. CONTROL OF EXHAUST SOUND LEVEL

The sound output from each machine shall not exceed 96dba at the engine revolutions applicable to the machine in the following table:

<b>Engine Size</b>	<b>RPM (Static)</b>
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Up to 125cc	7000rpm
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126cc to 200cc	5000rpm
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The noise test will be conducted with the microphone placed at an angle of 45degrees from the end of the exhaust, 95cm away from the sound source. **NOISE IS A SOCIAL AND ENVIROMENTAL POLLUTION.** Machines found to be excessively noisy during an event may be subject to exclusion.

Black flag will be implemented. Please make every effort to comply. You will be subjected to noise testing at random, which may be going on to the circuit or leaving the circuit after the race. Be helpful and cooperative to all members of staff.

### 3.5. EXHAUST PIPES

The end of the exhaust pipe, or pipes, must not project beyond the extremity of the fixed cycle parts. The maximum exhaust outlet is 33mm

### 3.6. SUPERCHARGERS AND TURBOCHARGERS

Superchargers and turbochargers are not permitted.

### 3.7. THROTTLE CONTROL

Throttle controls must be self-closing when not held by the hand. This function must apply whether the engine is running or not.

### 3.8. HANDLEBARS

Any exposed bar ends must be plugged with a rubber covered solid material. If Plastic hand guards

(aka brush guards) are fitted to the machine's handlebars, each individual hand guard must be fixed to the handlebar via two mounting points, one of which must be the end of the handlebar.

### 3.9. CLUTCH AND BRAKE LEVERS

All handlebar levers must be ball ended (radius ended or flat with no sharp edges). The ends must be permanently fixed and form an integral part of the lever.

### 3.10. BRAKES

Machines must have independent brakes for each wheel.

### 3.11. OIL SUPPLY PIPES

Oil supply pipes containing positive pressure should be of braided steel construction and be security fastened.

### 3.12. OIL CATCH TANKS, PETROL AND OIL BREATHERS

Where breathers are fitted to engine, gearbox and petrol tanks, these must discharge into a secure container of at least 250cc capacity.

### 3.13. PETROL AND OIL FILLERS/FILTERS

Petrol and oil fillers must lock securely or be suitably security wired to prevent leakage. Oil drain plugs and external oil filters must be security wired.

### 3.14. ADDITIVES TO WATER IN RADIATORS

Glycol Anti-freeze is extremely slippery when spilt on tarmac and is consequently forbidden. An approved non-Glycol additive may be used, plain water is also permitted. The penalty for non-compliance is disqualification from the meeting.

### 3.15. FOOTRESTS

Pegs should be of the folding type & ends of the footrests must be rounded & have no sharp edges.

### 3.16. CRASH BOBBINS AND FOOTREST SLIDERS

Crash bobbins and footrest sliders are mandatory at all circuits. When these items are affixed to any machine, footrest sliders must be mechanically attached with secure fastenings (not cable ties) and crash bobbins must be secured with nyloc type nuts.

### 3.17. BATTERIES

All batteries must be securely fixed and protected from impact. Sealed batteries in a secure steel framework are strongly recommended.

### 3.18. FRONT SPROCKET GUARDS

Front sprocket guards must be fitted and adequate protection.

### 3.19. ENGINE RESTRICTIONS

**Stock 140 Class** – All bikes must have the original production based horizontal engine with a maximum of 140cc. Z40 cams are allowed. Open ignition systems. Open carburettor to a maximum of 26mm. Open exhaust. No high compression pistons. Standard head and base gasket must be used. No porting skimming or gas flowing will be allowed.

**Open Class** - All bikes must have the original Chinese production based horizontal engine with a maximum of 200cc. Open Ignition system. Open Exhaust. Open Carburettor.

**150 Minibike Class** – Honda CRF150 engine or 85cc 2-stroke vertical engines. Open Ignition System. Open Carburettor. Open Exhaust

### **3.20. ENGINE RESTRICTIONS**

Only fuel commercially available from Roadside filling stations is eligible. No Race Fuel or AvGas.

### **4. EVO CLASS**

The Supermoto technical regulations apply to this class. This class is primarily designed to allow competitors to bring out older machines that may no longer be competitive and race them in a fun and enjoyable fashion. The definition of the Evo Class is a commercially available Supermoto produced and sold to the general public within Europe. All EVO class bikes must be non-fuel injected, except Aprilia SXV models. The Aprilia MXV is not eligible. The bike must retain its original production parts and not have later modifications added, the list of these modifications includes but is not limited to, later suspension components, modified swing arms, upgraded brake components that require different fork legs, engine configuration and changes to the original plastics – the bikes must retain an original appearance. Modified Japanese Moto-X bikes are permitted but they must only use components commercially available. If in doubt, please speak to the Race Director or the appointed eligibility scrutineer. All bikes must be 2010 or earlier models.

### **5. GENERAL**

All machinery must go through technical inspection, which will be carried out in the competitor's paddock area by approved staff at times indicated in the Final Instructions. Continued lateness by a competitor may well result in refusal to be inspected resulting in an inability to sign on.

**Please read all the documentation provided, taking special care to understand all matters of safety concerning your class of machinery and procedures, ignorance is not an acceptable defence when it comes to discipline protests or litigation**