



FÉDÉRATION INTERNATIONALE DE MOTOCYCLISME

Technical Rules *Règlements Techniques*

Motocross

(Including Rules for Quads and Snowcross)
(Règlements pour Quads et Motoneige inclus)

Trial

Enduro

(Including Rules for Cross-County Rallies)
(Règlements pour Rallies Tout Terrain inclus)

Track Racing *Courses sur Pistes*

(Including Rules for Motoball)
(Règlements pour Motoball inclus)

Technical Rules
Règlements Techniques
General Section/Section générale

Motocross
(Including Rules for Quads and Snowcross)
(*Règlements pour Quads et Motoneige inclus*)

Trial

Enduro
(Including Rules for Cross-Country Rallies)
(*Règlements pour Rallyes Tout Terrain inclus*)

Track Racing
Courses sur Pistes
(Including Rules for Motoball)
(*Règlements pour Motoball inclus*)

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Articles amended as from 01.01.2008 are in bold type
Les articles modifiés dès le 01.01.2008 sont en caractères gras

Technical Rules General Section

Règlements Techniques Section générale

These articles, from 01.01 until 01.81 apply to all the disciplines hereafter.
Ces articles, de 01.01 à 01.81 s'appliquent à toutes disciplines ci-après.

2008

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01.01 INTRODUCTION

The term motorcycle covers all vehicles having, in principle, less than four wheels, propelled by an engine and designed essentially for the carriage of one or more persons of which one is the rider of the vehicle. The wheels must normally be in contact with the ground except momentarily or in certain exceptional circumstances. Furthermore, in order to traverse certain surfaces one or all of the wheels can be replaced with skis, rollers or chains.

01.03 FREEDOM OF CONSTRUCTION

A motorcycle must conform to the requirements of the FIM regulations, to the Supplementary Regulations, as well as to a number of specific conditions that the FIM may require for certain competitions. No restriction is placed on the make, construction or type of motorcycle used.

All solo motorcycles (Group A) must be constructed in such a way that they are entirely controlled by a rider. Motorcycles with Sidecars (Group B) must be constructed to carry a passenger.

01.05 CATEGORIES AND GROUPS OF MOTORCYCLES

Motorcycles are divided into categories which must be observed for all meetings and world record attempts.

In principle, it is forbidden for different categories, groups and classes to compete in the same race, unless the Supplementary Regulations state otherwise.

Category I

Motorcycles propelled by the action of one wheel in contact with the ground.

Category II (not applicable for Track Racing)

Special vehicles propelled by the action of one or more wheels in contact with the ground but which are not covered by the conditions of Category I.

Group A1 - Solo Motorcycles

2-wheel vehicles making only one track on the ground.

Group B1

Vehicles with three wheels, making two tracks on the ground, consisting of a motorcycle making one track and a Sidecar for a passenger making the other.

Group B2

Vehicles with three wheels, making two or three tracks on the ground in the direction of forward travel, with a permanently attached Sidecar forming a complete integral unit.

If three tracks are made, the centre-line of the two tracks made by the motorcycle wheels must not be more than 75 mm apart. A track is determined by the longitudinal centre-line of each of the vehicle's wheels in the direction of forward travel.

Category II (not applicable for Track Racing)

- Group C – Special 2 wheeler motorcycles
- Group D – Special 3 wheeler motorcycles
- Group E – Snowmobiles
- Group F – Sprinters and Dragsters
- Group G – Quad Racers
- Group H –
- Group I –

Category III (not applicable for Track Racing)

- Group J – Electric Vehicles (see Article 01.82 in the Road Racing Technical Rules)

01.07 CLASSES

Groups are again separated into classes according to cylinder capacities as detailed below. Generally, these classes must be observed for all meetings.

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

01.11 MEASUREMENT OF CAPACITY**11.11 Reciprocating movement engine, "Otto" Cycle**

The capacity of each engine cylinder is calculated by the geometric formula which gives the volume of a cylinder; the diameter is represented by the bore, and the height by the space swept by the piston from its highest to lowest point:

$$\text{Capacity} = \frac{D^2 \times 3.1416 \times C}{4}$$

where D = bore
and C = stroke

When a cylinder bore is not circular the cross sectional area must be determined by a suitable geometrical method or calculation, then multiplied by the stroke to determine capacity.

When measuring, a tolerance of 1/10 mm is permitted in the bore. If with this tolerance the capacity limit is exceeded for the class in question, a further measurement should be taken with the engine cold, to 1/100 mm limits.

11.13 Rotary engines

The capacity of an engine which determines the class in which the motorcycle shall compete in a meeting shall be calculated by:

$$\text{Capacity} = \frac{2 \times V}{N}$$

where V = total capacity of all the chambers comprising the engine
and N = number of turns of the motor necessary to complete one cycle in a chamber.

Classified as a 4-stroke.

11.15 Wankel system

For Wankel system engines with a triangular piston, the capacity is given by the formula:

$$\text{Capacity} = 2 \times V \times D$$

where V = capacity of a single chamber
and D = number of rotors.

This engine is classified as a 4-stroke.

01.17 SUPERCHARGING

Supercharging by means of a device of any kind is forbidden in all meetings.

An engine whether 2-stroke or 4-stroke coming within any one of the recognised classes (determined by the capacity of the working cylinder) shall not be considered as supercharged when in respect of one engine cycle, the total capacity measured geometrically, of the fuel charging device or devices, including the capacity of the working cylinder (if used for injecting the fuel), does not exceed the maximum capacity of the class in question.

01.18 TELEMETRY

Information must not be transmitted in any way to or from a moving motorcycle. An official signalling device may be required on the machine. Automatic lap timing devices are not considered as "telemetry". Automatic lap timing devices must not disrupt any official time keeping methods and equipment.

01.19 MOTORCYCLE WEIGHTS Weights of motorcycles without fuel

19.01

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

A 1 % tolerance in the weight of the machine after the race is accepted.

19.03

Seals must be fixed to the front main frame.

19.04

Weighing scales must be certified annually by a National Institute.

19.05

For Groups B1 and B2 at all competitions a passenger must be carried.

01.21 DESIGNATION OF MAKE

When two manufacturers are involved in the construction of a motorcycle the name of both must appear on the machine as follows:

- The name of the chassis manufacturer
- The name of the engine manufacturer

This applies where no commercial interests are involved.

01.23 DEFINITION OF A PROTOTYPE

A prototype motorcycle is a vehicle which must conform to the safety requirements as required by the FIM Sporting Code and Appendices applicable to the type of competition for which it is to be used.

01.25 GENERAL SPECIFICATIONS

The following specifications apply to all vehicles of the groups indicated and to all types of competitions except where otherwise stated in the corresponding section of the FIM Sporting Code.

They should also be applied to all national competitions unless the FMNR (National Motorcycling Federation) has otherwise directed.

Further specifications for some competitions may also be required and these will be detailed in either the appropriate FIM Appendix or in the Supplementary Regulations for the competition in question.

25.01

The use of titanium in the construction of the frame, the front forks, the handlebars, the swinging arms, the swinging arm spindles and the wheel spindles is forbidden.

The use of light alloys for wheel spindles is also forbidden (except for Trial motorcycles).

The use of titanium alloy nuts and bolts is allowed.

Titanium test to be performed at trackside:

25.01.1 Magnetic test (titanium is not magnetic).

25.01.2 3 % nitric acid test (Titanium does not react. If metal is steel, the drop will leave a black spot).

25.01.3 Specific mass of titanium alloys 4,5-5, of steel 7,5-8,7 can be ascertained by weighing the part and measuring its volume in a calibrated glass vessel filled by water (intake valve, rocker, connecting rod, etc.)

25.01.4 In case of doubt, the test should take place at a Materials Testing Laboratory.

25.02

Aluminium alloys can be ascertained visually.

25.06

The number of cylinders in an engine is determined by the number of combustion chambers.

25.07

If separate combustion spaces are used they must be connected by an unrestricted passage of minimum cross sectional area at least 50 % of the total inlet port area.

01.26 DEFINITION OF A FRAME OF A SOLO MOTORCYCLE

The structure or structures used to join any steering mechanism at the front of the machine to the engine/gear box unit and to all components of the rear suspension.

01.27 STARTING DEVICES

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

01.29 OPEN TRANSMISSION GUARDS

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

01.31 EXHAUST PIPES

Exhaust pipes and silencers must fulfill all the requirements concerning sound control (see also Art. 01.79).

31.01

The end of the silencer must be horizontal and parallel (over a minimum distance of 30 mm) to the central axis of the solo motorcycle (with a tolerance of $\pm 10^\circ$) and must not exceed the end of the silencer body by more than 5 mm. All sharp edges must be rounded with a minimum radius of 2 mm (See diagram E).

31.02

Exhaust fumes must be discharged towards the rear but not in a manner as to raise dust, foul the tyres or brakes, or inconvenience a passenger, if there is one, or any other riders.

All possible measures must be taken to prevent the possible loss of waste oil so that it does not inconvenience a following rider.

31.03

The extremity of the exhaust pipes on solo motorcycles must not pass the vertical tangent of the rear tyre (see diagram E).

31.04

On a Sidecar machine the exhaust must discharge horizontally and towards the rear, at a maximum angle of 30° to the axis of the machine.

01.33 HANDLEBARS**33.01**

The width of handlebars (solo and Sidecars) is: not less than 600 mm and not more than 850 mm.

33.02

The handlebars must be equipped with a protection pad on the cross bar. The handlebars without cross member must be equipped with a protection pad located in the middle of the handlebars, covering widely the handlebars clamps.

33.05

Exposed handlebar ends must be plugged with a solid material or rubber covered.

33.08

Solid stops (other than a steering damper) must be fixed in order to assure a minimum space of 30 mm between the handlebars with its levers and the fuel tank when on full lock to prevent trapping the rider's fingers.

33.09

Handlebar clamps must be very carefully radiused and engineered so as to avoid fracture points in the bar.

33.10

If hand protectors are used they must be of a shatter-resistant material.

33.11

The repair by welding of light alloy handlebars is prohibited.

01.35 CONTROL LEVERS

35.01

All handlebar levers (clutch, brake, etc.) must be in principle ball ended (diameter of this ball to be at least 16 mm). This ball can also be flattened, but in any case the edges must be rounded (minimum thickness of this flattened part 14 mm). These ends must be permanently fixed and form an integral part of the lever.

35.03

Each control lever (hand and foot levers) must be mounted on an independent pivot.

35.04

The brake lever if pivoted on the footrest axis must work under all circumstances, such as the footrest being bent or deformed.

01.37 THROTTLE CONTROLS

37.01

Throttle controls must be self closing when not held by the hand.

37.02 Ignition cut-out switches

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

37.03

Solo motorcycles must be equipped with a functional ignition kill switch or button mounted on either right or left side of handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine (for Track Racing motorcycles, please refer to this article in the CCP section).

01.39 FOOTRESTS

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

01.41 BRAKES

41.01

All motorcycles must have at least 2 efficient brakes (one on each wheel) operated independently and operating concentrically with the wheel.

41.02

Vehicles in Group B must be fitted with at least 2 efficient brakes operating on at least 2 of the wheels and operated independently and operating concentrically with the wheels.

01.43 MUDGUARDS AND WHEEL PROTECTION

Motorcycles must be fitted with mudguards.

43.01

Mudguards must project laterally beyond the tyre on each side.

43.02

The front mudguard must cover the circumference of the wheel at an angle sufficient enough to protect the rider from mud.

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

01.45 STREAMLINING

No type of streamlining is allowed (see diagrams), with the exception of motorcycles in Cross Country Rallies.

Radiator covers (shields) must be made of flexible materials only (i.e. plastic).

01.47 WHEELS, RIMS, TYRES**47.01**

All tyres will be measured mounted on the rim at a pressure of 1 kg/cm (14 lb./sq.in.); measurements taken at a tyre section located 90° from the ground.

47.02

Any modification to the rim or spokes of an integral wheel (cast, moulded, riveted) as supplied by the manufacturer or of a traditional detachable rim other than for spokes, valve or security bolts is prohibited except for tyre retention screws sometimes used to prevent tyre movement relative to the rim. If the rim is modified for these purposes, bolts, screws, etc., must be fitted.

01.49 TYRES

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

01.53 SPECIFICATIONS FOR SIDECARS

(for Sidecars in Track Racing, please refer to the same article in the same section)

53.02

The drive shall be transmitted to the ground only through the rear wheel of the motorcycle.

53.06

Handlebars must be firmly secured to the forks. They must be at a height above the mid point in the seat.

A steering head must be fitted which like the handlebar must not be attached to the unsprung part of the front wheel suspension.

53.07

To reduce the torque in the steering it is allowed to displace the front wheel and the rear wheel leaving a maximum width of 75 mm between them.

53.08

The fuel tank must be sufficiently and independently protected from the ground.

53.09

Articulated Sidecars are strictly forbidden.

53.10

The Sidecar must be fixed to the motorcycle in at least three points, if it is not an integral part of the chassis.

The fixing points must not allow movement at the joints. If the angle of the inclination is changeable, it must be locked in such a way that it is completely secured and not only clamped on.

53.13

A structure of crossed belts or a metallic grid must be fitted to fill the opening between the wheels and the sidecar, to prevent the riders' foot from accidentally touching the ground.

53.14

The minimum dimensions of a Sidecar available for passenger accommodation are:

Length: 1000 mm
Width: 400 mm

Height of the screen protecting the passenger: 300 mm minimum (see diagram N).

53.15

The ground clearance of a machine measured when the machine is loaded must not be less than 175 mm.

53.16

For Sidecars, the rear wheel and the Sidecar wheel must be covered or protected with a solid material.

53.20

The distance between the tracks left by the centre lines of the rear motorcycle wheel and the Sidecar wheel must be at least: 800 mm and not more than 1150 mm.

53.21

On the opposite side of the Sidecar, the exhaust pipe must not extend more than 330 mm from the centre of the machine. On the other side, the exhaust pipe must not extend beyond the width of the Sidecar (see diagram N). The furthest extremity of the exhaust pipe must not exceed the vertical line drawn at a tangent to the rear edge of the rear motorcycle tyre or the rear edge of the Sidecar platform whichever is shorter.

01.55 NUMBER PLATES

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

01.63 FUEL, OIL AND COOLANTS

All motorcycles must be fuelled with unleaded petrol, as this term is generally understood (with the exception of Track Racing, four stroke - single cylinder engines).

63.01 Physical properties for unleaded fuel

63.01.1 Unleaded petrol must comply with the FIM specification.

63.01.2 Unleaded petrol will comply with the FIM specification if:

(a) It has the following characteristics:

Property	Units	Min.	Max.	Test Method
RON		95.0	102.0	ISO 5164
MON		85.0	90.0	ISO 5163
Oxygen	% m/m		2.7	ASTM D 5622 ASTM D 4815 (1)
Nitrogen	% m/m		0.2	ASTM D 4629
Benzene	% v/v		1.0	EN 238
RVP	kPa		90	EN 12
Lead	g/l		0.005	EN 237
Density at 15°C	kg/m ³	720.0	775.0	ASTM D 4052
Oxidation stability	minutes	360		ASTM D 525
Existent gum	mg/100 ml		5.0	EN ISO 6246
Sulphur	mg/kg		50.0	ASTM D 5453
Copper corrosion	rating		C1	ISO 2160
Distillation:				
E at 70°C	% v/v	22.0	50.0	ISO 3405
E at 100°C	% v/v	46.0	71.0	ISO 3405
E at 150°C	% v/v	75.0		ISO 3405
Final Boiling Point	°C		210.0	ISO 3405
Residue	% v/v		2.0	ISO 3405
Appearance	Clear and bright			Visual Inspection

Property	Units	Min.	Max.	Test Method
Olefins	% v/v		18.0	ASTM D 1319 (2)
Aromatics	% v/v		35.0	ASTM D 1319 (2)
Total diolefins	% m/m		1.0	GCMS/ HPLC

Notes:

- (1) GC/MS methods may also be applied to fully deconvolute the GC trace
- (2) The above maximum values for olefins and aromatics are corrected for fuel oxygenate content according to clause 13.2 of ASTM D 1319:1998.

The test method for olefins and aromatics of two stroke mixtures will be gas chromatography. In the case of a dispute, the test method given in the EN 228:2000 standard will be used.

- (b) The total of individual hydrocarbon components present at concentrations of less than 5% m/m must constitute at least 30% m/m of the fuel. The test method will be gas chromatography and/or GC/MS.
- (c) The total concentration of naphthenes, olefins and aromatics classified by carbon number must not exceed the values given in the following table:

%	C4	C5	C6	C7	C8	C9+
Naphthenes	0	5	10	10	10	10
Olefins	5	20	20	15	10	10
Aromatics	-	-	1.2	35	35	30

The total concentration of bicyclic naphthenes and bicyclic olefins may not be higher than 1% (m/m). The test method used will be gas chromatography.

- (d) Only the following oxygenates are permitted:

Methanol. Ethanol. Iso-propyl alcohol. Iso-butyl alcohol. Methyl tertiary butyl ether. Ethyl tertiary butyl ether. Tertiary amyl methyl ether. Di-isopropyl ether. N-propyl alcohol. Tertiary-butyl alcohol. N-butyl alcohol. Secondary-butyl alcohol.

- (e) Manganese is not permitted in concentrations above 0.005 g/l. For the present this is solely to cover possible minor contamination by other fuels. The fuel will contain no substance that is capable of an exothermic reaction in the absence of external oxygen.

Lead replacement petrols, although basically free of lead, are not an alternative to the use of unleaded petrol. Such petrols may contain unacceptable additives not consistent with the FIM Fuel Regulations.

- (f) For oil used in two stroke mixtures, the following tolerances on the fuel specifications will be allowed:

• Density at 15°C	Plus/minus 30 kg/m ³
• Distillation residue	Not controlled

Any infringement of the fuel specifications will automatically result in the exclusion of the competitor from the entire meeting (see also Sporting Code Art. 140.1). The result of the competitors' fuel sample analysis (A or B Sample) more favourable to the competitor will be taken into account (See also Art. 63.05.3).

If the fuel available locally for the event is not of a sufficient quality for use by competitors, the FMN of the organising country must ask the FIM for a waiver in order to enable the use of fuel not corresponding to the characteristics defined above.

63.03 Air

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

63.04 Primary Tests

63.04.1 In all FIM Championship and Prizes, the FIM 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.

63.04.2 FIM may request any person or organisation, being a potential supplier of fuel, to submit a sample for testing for conformity with the fuel specifications in Art. 63.01.

63.05 Fuel Test Procedures

63.05.1 Fuel tests may be administered at any time and place during the course of any event under the authority of the FIM.

63.05.2 The CTI Bureau, in consultation with the relevant Commission President, has sole authority to, and may, direct the administration of fuel tests during the course of an FIM Championship or Prize Event. Such direction must be by written document (Fuel Test Order) which must be delivered to the Jury President before the meeting. The Jury President must deliver the Fuel Test Order to the Chief Technical Steward for the meeting who is responsible for the administration of the fuel tests. The Fuel Test Order must nominate:

- (a) The criteria (which may be random) for selection of the machines from which samples are to be taken; and
- (b) The officials who must administer the tests.
- (c) At least 3 of the characteristics specified in Arts. 63.01 and 63.02 to be the subject of the tests, or only 1 characteristic when using an ASTM approved "short test" or "field test method" for the detection of only one of the characteristics in a fuel sample.

63.05.3 Fuel tests must be administered according to the Fuel Test Order and must comply with the following procedures:

- (a) Only nominated officials may take samples.
- (b) Containers for holding samples:
 - (i) must be clean and constructed of robust, fuel non reactive, impermeable material.
 - (ii) must be sealable;
 - (iii) must have provision for identification.
- (c) Equipment used for the extraction of fuel from machines must be clean and constructed of fuel non-reactive material.
- (d) The FMNRs must ensure that there is a supply of at least 12 containers (12 X 1 litre each).

- (e) Each sample must be divided into two and placed in separate containers, (2 samples of maximum 1 litre each). Each sample may be initially tested for one of the characteristics, using an ASTM approved field test method. The results obtained from such a test must be given immediately to the International Jury. The containers must be immediately sealed and identified by reference to the machine from which the sample was taken.

This information must be entered on a certificate (FIM Fuel Sample Certificate) which must certify the date, place and time of taking the sample, the identity of the machine from which the sample was taken, and the identity of its rider.

- (f) Both samples (sample A and sample B) must remain in the control of the Technical Steward. The rider or the representative of the rider/ team must sign the FIM Fuel Sample Certificate acknowledging that a sample was taken, and must be given a copy of the Certificate.
- (g) At the end of the meeting the Technical Steward must deliver both samples (sample A and sample B) to a courier authorised by the FIM, Jury President or the Technical Steward. The Technical Steward must return a copy of the Fuel Sample Certificate, signed by the courier, to the Jury President.
- (h) The authorised courier must deliver both samples (sample A and sample B), together with copies of the relevant Fuel Sample Certificates, to an FIM authorised laboratory, where they must be tested for content in accordance with standard scientific procedures.
- (i) The results obtained from such testing must be attached to the laboratory's copy of the Fuel Sample Certificate and delivered to the FIM as soon as practicable after the results have been obtained.
- (j) In case of non conformity to the rules, the FIM must as soon as practicable after receipt of the results notify:
- (i) the relevant riders or team representatives;
 - (ii) the relevant FMNR;
 - (iii) the Jury President for the relevant meeting.

63.05.4 The FIM may authorise one or more named laboratories for testing fuels. Such authorisation must be by written document, distributed to all FMNRs.

63.05.5 A Jury may direct the administration of fuel tests during the course of any international event other than an FIM Championship or Prize Event. Such direction must be by Fuel Test Order which must be delivered to the Technical Steward. Such Fuel Test Order has the same authority as if it had been issued by the CTI Bureau under Art. 63.05.2. The procedures for the administration of fuel tests under this Article must comply with the procedures under Arts. 63.05.2 and 63.05.3.

63.05.6 For tests under Art. 63.04 all characteristics specified in Art. 63.01 must be present for the tested fuel to comply.

63.05.7 For tests under Arts. 63.05.2 and 63.05.5 tested fuel must comply with the characteristics specified in the relevant Fuel Test Order.

63.06 Fuel Test Costs

63.06.1 The costs of fuel tests conducted under Arts. 63.04.1, 63.04.2 and 63.05.2 will be paid by the FIM.

63.06.2 The costs of fuel tests conducted under Art. 63.05.5. will be paid by the organiser of the event.

63.06.3 Where a fuel test is ordered by a Jury in relation to a protest, the party which loses the protest must bear the entire cost of the fuel test, or such proportion thereof as is directed by the Jury.

01.65 EQUIPMENT AND PROTECTIVE CLOTHING Clothing and footwear

During practising and racing, riders and passengers must wear the protective clothing and footwear

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

65.07 Material equivalent to leather

The following characteristics of the material must be at least equivalent to 1.5 mm of cowhide (not split leather):

- 65.07.1** Fire retardant quality
- 65.07.2** Resistance to abrasion
- 65.07.3** Coefficient of friction against all types of asphalt
- 65.07.4** Perspiration absorbing qualities
- 65.07.5** Medical test - non toxic and non-allergenic
- 65.07.6** Fabric of a quality that does not melt.

65.07.7 Clothing in material other than leather must bear a sticker or label which says "in conformity with the FIM rules". This label must be sewn or attached to the clothing in a permanent way.

65.08 Approval

The clothing manufacturer is responsible for ensuring that the products and materials that carry his name conform to these rules. The FIM cannot be held liable for any injuries that a rider or passenger may sustain from their use.

01.67 WEARING OF HELMETS

It is compulsory for all participants taking part in practice and races to wear a protective helmet. The helmet must be properly fastened, be of a good fit, and be in good condition. The helmet must have a chin strap type 'retention system'.

Helmets constructed with an outer shell of more than one piece are permitted, provided that, in case of emergency; they can be quickly and easily removed from the rider's head by releasing or cutting the chin strap only.

All helmets must be marked with one of the official international standard marks mentioned in Art. 01.70 or the Approval Mark (stamp) of the FMN of the rider. Helmets marked by an FMN must comply with one of the International Standards listed in Art. 01.70 before approval by an FMN.

Failure to observe the above rules will entail exclusion.

01.69 HELMET OPERATIVE INSTRUCTIONS

69.01

Scrutineers, under the supervision of the Chief Technical Steward, may check prior to practice and the races that all helmets meet the technical requirements.

69.02

If a helmet does not meet the technical requirements and is found to be defective, the Technical Steward must remove all approval marks and retain the helmet until the end of the event. The rider must submit another helmet for approval by the Technical Steward. After an accident involving impact, the helmet must be presented to the Technical Steward for examination (see also Art. 77.02.14).

69.03

All helmets must be intact and no alteration must have been made to their construction. After an accident involving impact the helmet must be presented to the Technical Steward for examination.

69.04

The Technical Steward and/or the Technical Scrutineer may perform the following checks before the rider is permitted to take part in practice of the race:

69.04.1 That the helmet fits well on the rider's head,

69.04.2 That it is not possible to slip the retention system over the chin, when fully fastened,

69.04.3 That it is not possible to pull the helmet over the rider's head by pulling it from the back of the helmet.

01.70 RECOGNISED INTERNATIONAL HELMET APPROVAL MARKS

- Europe ECE 22-05 'P', 'NP' or 'J'
- Japan JIS T 8133 : 2000
- USA SNELL M 2005

(see International Helmet Standards in diagram section)

01.71 EYE PROTECTION

The use of glasses, protective goggles as well as helmet visors and 'tear off's' is permitted. The material used for eye protectors and glasses must be made of shatter-proof material. Helmet visors must not be an integral part of the helmet.

Eye protectors which cause visual disturbance (scratched etc.) must not be used.

01.73 NATIONAL COLOURS FOR HELMETS

(with the exception for the CCP)

The following National colours are approved:

Andorra	FMA	White with vertical blue, yellow and red bands
Argentina	CAMOD	White with blue horizontal band
Australia	MA	Dark green with gold bands and gold kangaroo on both sides of the helmet
Austria	OeAMTC	Bright red with a 60 mm wide black band and the label of the OeAMTC in a white field on the front side
Belgium	FMB	Yellow
Brazil	CBM	Yellow and green
Bulgaria	BMF	Green and red
Canada	CMA	White and 3 Red Maple leaves, one on front and one on each side
Chile	FMC	Red with blue band and yellow stars
China	CMSA	Red and yellow
Czech Republic	ACCR	Blue with red, white and blue border
Denmark	DMU	Red and white
Finland	SML	White with blue cross
France	FFM	Blue
Germany	DMSB	White with black border
Great Britain	ACU	Green
Greece	ELPA	White with blue border
Hungary	MAMS	Red and green
Ireland	MCUI	Green and orange
Italy	FMI	Red with one green and one white horizontal band
Japan	FMJ	White with red circle on top
Kenya	KMSF	Black, Red, Green, with white bands and the country name KENYA on both sides.
Luxembourg	MUL	Purple
Mexico	FMM	White with green and red border
Monaco	MCM	Blue and white
Netherlands	KNMV	Orange
New Zealand	MNZ	White with black kiwi on front
Norway	NMF	Red and blue
Peru	FPEM	Red with 75 mm wide white strips and blue and yellow chequered border
Poland	PZM	White with red band
Portugal	FNM	White
Rumania	FRM	Black with vertical blue, yellow and red bands with national emblem.
Russia	MFR	White with a red border and a vertical red band with star
San Marino	FSM	White with the San Marino National emblem
Slovakia	SMF	Blue, red and white
South Africa	MSA	Black, green, blue and red with yellow and white bands
Spain	RFME	Yellow and red
Sweden	SVEMO	Blue and yellow
Switzerland	FMS	Red with white cross
Uruguay	FUM	Light blue
USA	AMA	Blue with 2 white bands

In addition to this, for the holders of World or National championships, a central band 50 mm wide from front to back across the top carrying the national colours or a rainbow is admitted.

In competitions between national teams, helmets must be the same colour for each team member and must include in the overall helmet colour scheme, their national flag colours, presented in stripes, bands or other design.

01.75 BADGE OF THE FIM

Under certain circumstances the FIM may permit the use of the FIM badge on certain equipment in order to show that the latter conforms with the standards laid down by the FIM. When this authorisation is granted and provided the equipment on which it appears is in good condition, the badge is then the guarantee of the conformity with the standard set by the FIM.

01.76 NUMBER SASHES (BIBS)

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

01.77 CONTROL

77.01 Verification

General

A rider is at all times responsible for his machine.

77.01.1 The Chief Technical Steward must be in attendance at an event 1 hour before technical verifications are due to begin. He must inform the Clerk of the Course, Jury President and CTI Delegate, if present, of his arrival.

77.01.2 He must ensure that all technical stewards, appointed for the event, carry out their duties in a proper manner.

77.01.3 He shall appoint the technical stewards to individual posts for the race, practices and final control.

77.01.4 Technical inspections will only be carried out when the technical specification form of the motorcycle has been presented by the Organiser.

77.01.5 The rider, or his mechanic, must be present with the machine for technical control within the time limits stated in the Supplementary Regulations. On request of the Technical Steward, the riders must present themselves to the technical verification.

77.01.6 The Chief Technical Steward must inform the Clerk of the Course/ Jury President of the results of the technical control. The Chief Technical Steward will then draw up a list of accepted machines and submit this list to the Clerk of the Course.

77.01.7 The Chief Technical Steward has the right to look/ inspect any part of the motorcycle at any time of the event.

77.02

Any rider failing to report as required below may be excluded from the meeting. The Clerk of the Course may forbid any person who does not comply or any rider who can be a danger to other participants or to spectators, to take part in the practising or in the races.

77.02.1 The technical control must be carried out in accordance with the procedure and times fixed in the Disciplines' Rules and the Supplementary Regulations of the event. The maximum number of persons permitted to be present at the technical verification is the rider, plus two others. For Team events, the Team Manager is also allowed.

77.05 Dangerous machines

If, during practising or the race, a Technical Steward finds that a machine is defective and might constitute a danger to other riders, he must immediately notify the Clerk of the Course or his deputy. It is their duty to exclude such a machine from either the practice or from the race itself.

01.79 SOUND CONTROL

Sound will be controlled to limits as stated in Art. 79.11.

For the initial sound control and technical inspection, a rider (or his mechanic) shall present only one spare silencer per machine.

Other spare silencers may be presented after all participants have presented their motorcycles, or on the following days of the event.

79.01

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

79.02

During the sound test only, every motorcycle must be equipped with an extension (min. 30 cm) to the spark plug cable, if requested by the Chief Technical Steward. One end of this extension must be plugged into the original spark plug cap whilst the other end has another spark plug cap and fitted normally on the spark plug.

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

During the sound test, only the rider may take place on the machine in the normal riding position and operate the throttle. No other team personnel may influence the sound test.

79.03

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.

All silencers will be checked and marked, once they have successfully passed the sound check. The end opening of the silencer shall remain unmodified once it has been checked and marked.

Silencers fitted with adapters aimed to reduce the sound level shall be permanently fitted.

79.04

The rider shall keep his engine running 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.

79.05

The RPM depends upon the mean piston speed corresponding to the stroke of the engine.

The RPM will be given by the relationship:

$$N = \frac{30,000 \times cm}{l}$$

in which N = prescribed RPM of engine
 cm = fixed mean piston speed in m/s
 l = stroke in mm

79.06

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

79.07

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

79.08

A machine which does not comply with the sound limits can be presented several times at pre-race control.

79.11 **Sound limits in force**

For specific details, refer to this article of each discipline (CMS, CTR, CER, CCP).

79.12

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

79.13

Apparatus for sound control must be to international standard IEC 651, Type 1 or Type 2.

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

79.14

The "slow response" setting must always be used.

79.15

Due to the influence of temperature on sound tests, all figures are correct at 20°C. For tests taken at temperatures below 10° C there will be a + 1 dB/A tolerance

For tests below 0°C, a + 2 d/BA tolerance.

79.16 Sound control during and after the competition

In a competition which requires a final examination of machines before the results are announced, this examination must include a sound control measurement of at least three machines chosen at the discretion of the Clerk of the Course in co-operation with the Chief Technical Steward

01.80 GUIDELINES FOR USE OF SOUND LEVEL METERS**80.01**

The Sound Control Officer (NCO) must arrive in sufficient time for discussions with the Clerk of the Course and other Technical Officials in order that a suitable test site and testing policy can be agreed.

80.02

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

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

80.03

Before testing, the NCO should if possible liaise with a maximum of two holders of FIM Entrant's or Manufacturer's licences, or team managers, who have sound test equipment including calibrators, in order to agree the accuracy of the official sound level meter.

80.04

Tests should not take place in rain or excessively damp conditions. Machines considered excessively noisy must be individually tested if conditions allow.

80.05

In other than moderate wind, machines should face forward in the wind direction. (Mechanical sound will blow forward, away from microphone).

80.06

'Slow' meter response must be used.

80.07

'A' weighted setting on sound level meter.

80.08

Always round down meter reading, that is: 100.9 dB/A = 100 dB/A.

80.09 Corrections

Type 1 meter : deduct 1 dB/A

Type 2 meter : deduct 2 dB/A

80.10 Temperature

Ambient temperature:

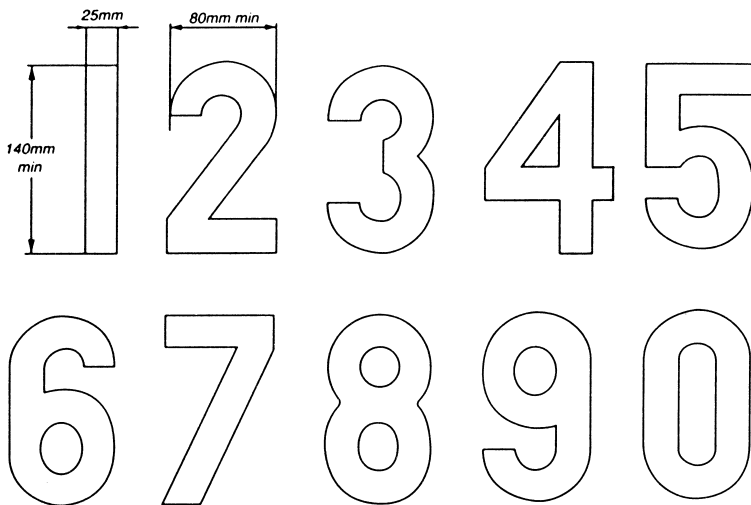
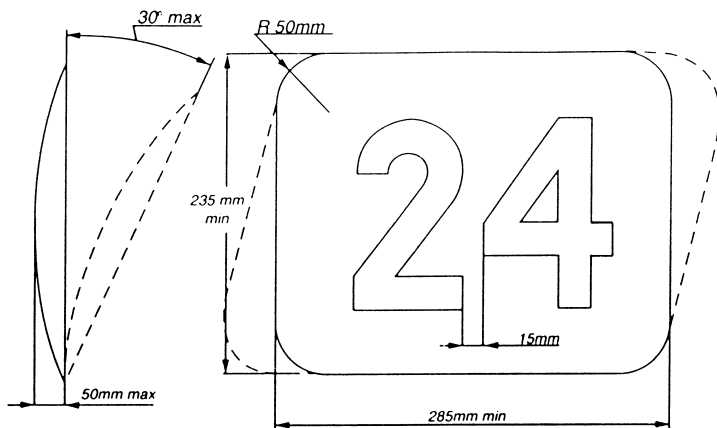
Below 10° Celsius : deduct 1 dB/A

Below 0° Celsius : deduct 2 dB/A.

All tolerances are accumulative. Action taken will depend on the sporting discipline concerned, and decisions taken during prior discussions with the Clerk of the Course.

01.81 TIMEKEEPING

Since 1.1.1993, the responsibility for Timekeeping has been referred to the each Sporting Commission.



Futura Heavy

0 1 2 3 4 5 6 7 8 9

Futura Heavy Italic

0 1 2 3 4 5 6 7 8 9

Univers Bold

0 1 2 3 4 5 6 7 8 9

Univers Bold Italic

0 1 2 3 4 5 6 7 8 9

Oliver Med.

0 1 2 3 4 5 6 7 8 9

Oliver Med. Italic

0 1 2 3 4 5 6 7 8 9

Franklin Gothic

0 1 2 3 4 5 6 7 8 9

Franklin Gothic Italic

0 1 2 3 4 5 6 7 8 9

TEN FITTING TESTS FOR HELMETS
DIX TESTS D'ADAPTATION POUR LES CASQUES

1. *Obtain correct size by measuring the crown of the head*
Avoir la bonne grandeur en mesurant le sommet de la tête
2. *Check there is no side to side movement*
Vérifier qu'il n'y ait pas de déplacement d'un côté à l'autre
3. *Tighten strap securely*
Serrer solidement la jugulaire
4. *With head forward, attempt to pull up back of helmet to ensure helmet cannot be removed this way*
Tête en avant, essayer de soulever le casque pour s'assurer qu'il ne peut pas être enlevé de cette façon



5. *Check ability to see clearly over shoulder*
Vérifier si vous pouvez voir clairement par-dessus l'épaule
6. *Make sure nothing impedes your breathing in the helmet and never cover your nose or mouth*
S'assurer que rien ne gêne votre respiration dans le casque et ne jamais couvrir le nez ou la bouche
7. *Never wind scarf around neck so that air is stopped from entering the helmet. Never wear scarf under the retention strap*
Ne jamais enrouler une écharpe autour du cou, car cela empêche l'air d'entrer dans le casque. Ne jamais porter d'écharpe sous la jugulaire
8. *Ensure that visor can be opened with one gloved hand*
S'assurer que la visière peut être ouverte avec une main gantée
9. *Satisfy yourself that the back of your helmet is designed to protect your neck*
S'assurer que l'arrière de votre casque a une forme telle qu'il vous protège la nuque
10. *Always buy the best you can afford*
Toujours acheter le meilleur que vous pouvez vous offrir

INTERNATIONAL HELMETS STANDARDS

NORMES INTERNATIONALES DES CASQUES

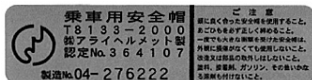
ECE 22 - 05 "P" (EUROPE)

The ECE mark consists of a circle surrounding the letter E followed by the distinguishing number of the country which has granted approval.



E1 for Germany, **E2** for France, **E3** for Italy, **E4** for Netherlands, **E5** for Sweden, **E6** for Belgium, **E7** for Hungary, **E8** for Czech Republic, **E9** for Spain, **E10** for Yugoslavia, **E11** for UK, **E12** for Austria, **E13** for Luxembourg, **E14** for Switzerland, **E15** (- vacant), **E16** for Norway, **E17** for Finland, **E18** for Denmark, **E19** for Roumania, **E20** for Poland, **E21** for Portugal, **E22** for the Russian Federation, **E23** for Greece, **E24** for Ireland, **E25** for Croatia, **E26** for Slovenia, **E27** for Slovakia, **E28** for Bielo Russia, **E29** for Estonia, **E30** (- vacant), **E31** for Bosnia and Herzegovina, **E32** for Letonie, **E34** for Bulgaria, **E37** for Turkey, **E40** for Macedonia, **E43** for Japan, **E44** (- vacant), **E45** for Australia, **E46** for Ukraine, **E47** for South Africa, **E48** New Zealand.

Below the letter **E**, the **approval** number should always begin with 05. Below the approval number is the serial production number. (Label on retention system or comfort interior).



(JAPAN) JIS T 8133 : 2000

(Label affixed inside the helmet).



(USA) SNELL M2005

(Label affixed inside the helmet).



For more details consult the F.I.M. Technical Rulebook

Technical Rules
Règlements Techniques
Trial

CTR

2008

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01.01 INTRODUCTION

For the main article, refer to the same number in the General section.

01.03 FREEDOM OF CONSTRUCTION

For the main article, refer to the same number in the General section.

01.05 CATEGORIES AND GROUPS OF MOTORCYCLES

Motorcycles are divided into categories and groups which must be observed for all meetings.

In principle, it is forbidden for different categories, groups and classes to compete together, unless the Supplementary Regulations state otherwise.

Category I

Motorcycles propelled by the action of only one driving wheel in contact with the ground in only one direction.

Group A1 - Solo Motorcycles

2-wheel vehicles making only one track on the ground.

Group B1

Vehicles with three wheels making two tracks on the ground, consisting of a motorcycle making one track and a Sidecar for a passenger making the other.

Group B2 - Motorcycles with permanent Sidecar

Vehicles with three wheels making two or three tracks on the ground in the direction of forward travel, with a permanently attached Sidecar forming a complete integral unit.

If three tracks are made, the centre-line of the two tracks made by the motorcycle wheels must not be more than 75 mm apart. A track is determined by the longitudinal centre-line of each of the vehicle's wheels in the direction of forward travel.

01.07 CLASSES

Groups are again separated into classes according to cylinder capacities as detailed below. Generally, these classes must be observed for all meetings.

Category I

Group A1 Motorcycles

Class	over (cc)	up to (cc)
50	–	50
125	50	125
OPEN	125	unlimited

Groups B1, B2 Sidecars

Same as groups A 1 and A 2 over 125 cc.

Category II

Group D – Special 3 wheel motorcycles

Group E – Snowmobiles

Group G – Quad Racers

Four wheel balloon tyred off-road vehicles having a wheel at each diagonal extremity, consisting of a complete integral unit having accommodation for a rider only sitting astride, steered by a handlebar.

Same classes as Category I, Group A1.

Category III

Group J – Electric Vehicles (see Art. 01.82 in the Road Racing Technical Rules).

01.11 MEASUREMENT OF CAPACITY

For the main article, refer to the same number in the General section.

01.17 SUPERCHARGING

For the main article, refer to the same number in the General section.

01.18 TELEMETRY

For the main article, refer to the same number in the General section.

01.21 DESIGNATION OF MAKE

For the main article, refer to the same number in the General section.

01.23 DEFINITION OF A PROTOTYPE

For the main article, refer to the same number in the General section.

01.25 GENERAL SPECIFICATIONS

For the main article, refer to the same number in the General section.

25.01

The use of titanium in the construction of the frame, the front forks, the handlebars, and the swinging arms, is forbidden.

Riders must ensure that if non-ferrous fasteners or spindles are used as replacements, dimensions are increased as required.

01.26 DEFINITION OF A FRAME OF A SOLO MOTORCYCLE

For the main article, refer to the same number in the General section.

01.27 STARTING DEVICES

Starting devices are compulsory.

01.29 OPEN TRANSMISSION GUARDS

For the main article, refer to the same number in the General section.

29.04

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

01.31 EXHAUST PIPES

For the main article, refer to the same number in the General section.

01.33 HANDLEBARS

For the main article, refer to the same number in the General section.

33.08

Stops, (other than steering dampers) must be fitted to ensure a minimum clearance of 30 mm between the handlebar with levers and the tank when on full lock to prevent trapping the rider's fingers.

33.11

The repair by welding of light alloy handlebars is prohibited.

01.35 CONTROL LEVERS

For the main article, refer to the same number in the General section.

01.37 THROTTLE CONTROLS

For the main article, refer to the same number in the General section.

37.03

Motorcycles must be equipped with a functioning ignition cut-out switch (engine stop button) and easily accessible on the handlebar.

01.39 FOOTRESTS

39.01

Footrests may be of a folding type but in this case must be fitted with a device which automatically returns them to the normal position, and an integral protection is to be provided at the end of the footrest which must have at least 8 mm radius (see diagram D).

01.41 BRAKES

41.03

Brake discs with sharp edges (saw tooth design) are forbidden. Recommended max. width for openings (slots) in brake discs: 3 mm; min. radius: 3 mm, max. radius: 5 mm.

41.04

An external protection made from a plastic material should recover the brake discs (fully in the front, partially in the back). Holes for aeration and evacuation of materials shall not be more than 10 mm in diameter.

01.43 MUDGUARDS AND WHEEL PROTECTION

Motorcycles must be fitted with mudguards.

43.02

The front mudguard must cover at least 100° of the circumference of the wheel. The angle formed by one line drawn from the front edge of the mudguard to the centre of the wheel and one drawn horizontally through the centre of the wheel must be between 45° and 60°.

43.03

The rear mudguard (except for Trial Sidecars and machines used entirely "off-road" in events such as "Indoor" or "Arena" Trial) must cover at least 80° of the circumference of the wheel. The angle formed by two lines, one drawn from the rear edge of the mudguard to the centre of the wheel and one drawn horizontally through the centre of the wheel shall not exceed 60°.

43.04

For events held entirely "off-road" ("Indoor" or "Arena" Trial), the rear mudguard must extend rearwards beyond the segment of a circle which is covered by a vertical line drawn through the rear wheel spindle and a line drawn at an angle of 25° rearwards to the vertical line.

01.47 WHEELS, RIMS, AND TYRES

For the main article, refer to the same number in the General section.

47.02

Any modification to the rim or spokes of an integral wheel (cast, moulded, riveted) as supplied by the manufacturer or of a traditional detachable rim other than for spokes, valve or security bolts is prohibited except for tyre retention screws sometimes used to prevent tyre movement relative to the rim. If the rim is modified for these purposes, bolts, screws etc., must be fitted.

01.49 TRIAL TYRES

49.01

The overall width of the tyre when fitted must not exceed 115 mm.

49.02

The tread depth (A) must not exceed 13 mm measured at right angles to the face of the tread. All blocks in the same circumference must be of the same depth (see diagram D bis).

49.03

The space between the blocks must not exceed 9.5 mm across the tyre (B) or 13 mm in a circumferential direction (C).

49.04

The space between shoulder blocks (D bis) must not exceed 22 mm.

49.05

The space across the thread (E) cannot extend completely across the tyre measured at right angles to the wall of the tyre, unless broken by a block.

49.06

All thread blocks (shoulder blocks excepted) must be nominally rectangular with sides parallel with or at right angles to the tyre axis (tyre must have same appearance when reversed and conform, in principle, with Diagram D bis).

49.10

Only tyres normally available from commercial or retail sources for use on the public highway are authorised.

49.10.1 They shall appear on the tyre manufacturers range catalogue or tyre specification lists available to the general public

49.10.2 They must be manufactured to comply with European Tyre and Rim Technical Organisation (ETRTO) requirements in respect of load and speed codes and have a minimum service description of 45M.

01.53 ADDITIONAL SPECIFICATIONS FOR SIDECARS

53.03

The seat must have a minimum dimension 300 mm x 150 mm and must be fixed at a minimum height of 300 mm above the Sidecar floor (see diagram N).

53.14

The minimum dimensions of a Sidecar available for passenger accommodation are:

Length: 1 350 mm – Width: 300 mm (See diagram N).

53.21

On a Sidecar Trial machine, the exhaust must discharge horizontally and towards the rear, at a maximum angle of 30° to the axis of the machine, and at the end be of constant diameter over a distance of 30 mm.

On the opposite side of a Trial Sidecar, the exhaust pipe must not extend more than 330 mm from the centre of the machine. On the other side, the exhaust pipe must not extend beyond the width of the Sidecar (see diagram N).

The furthest extremity of the exhaust pipe must not exceed the vertical line drawn at a tangent to the rear edge of the rear motorcycle tyre or the rear edges of the Sidecar platform whichever is shorter.

01.56 LIGHTING, WARNING EQUIPMENT AND SPEEDOMETERS

Motorcycles and their equipment must comply with the national legal requirements for road traffic of the country in which the vehicle is registered and with other rules specified in the Supplementary Regulations.

The electrical generator must operate continuously and normally with respect to current and voltage during the competition and at post competition control. The electrical connections must be retained.

The registration number of the motorcycle must appear on a plate fixed solid onto the rear mud guard. The registration plate shall be reproduced on a flexible plate, made from non cutting material and shall not exceed the width of the rear mudguard.

01.63 FUEL, OIL AND COOLANTS

All motorcycles must be fuelled with unleaded petrol, as this term is generally understood (with the exception of Track Racing, four stroke – single cylinder engines).

For the main article, refer to the same number in the General section.

01.65 EQUIPMENT AND PROTECTIVE CLOTHING **Clothing and footwear**

During practising and competition, the riders and passengers must wear protective clothing of cloth or leather and knee-length boots. Wearing gloves is optional.

01.67 WEARING OF HELMETS

For the main article, refer to the same number in the General section.

01.69 HELMET OPERATIVE INSTRUCTIONS

For the main article, refer to the same number in the General section.

01.70 RECOGNISED INTERNATIONAL HELMET APPROVAL MARKS

- Europe ECE 22-05, 'P', 'NP' ou 'J'
- Japan JIS T 8133 : 2000
- USA SNELL M 2005

(see International Helmet Standards in diagram section)

01.71 EYE PROTECTION

For the main article, refer to the same number in the General section.

01.73 NATIONAL COLOURS FOR HELMETS

For the main article, refer to the same number in the General section.

01.75 BADGE OF THE FIM

For the main article, refer to the same number in the General section.

01.76 NUMBER SASHES (BIBS)

Starting numbers must be in conformity with the following:

76.01

Trial World Championship:	Red numbers on a white background
FIM Junior Trial World Cup:	Blue numbers on a white background
FIM Youth Trial Cup 125cc:	Green numbers on a white background

76.02

The numbers shall be printed on a white area of 25 cm X 25 cm.

76.03

Height of numbers: 15 cm

76.04

Width of number: 6 cm

76.05

Width of stroke: 2 cm

76.06

Only the space outside the 25 x 25 cm area may be used for publicity.

76.07

Bibs manufactured from PLASTIC material are not allowed.

01.77 CONTROL

77.01 Verification

General

A rider is at all times responsible for his machine.

For the main article, refer to the same number in the General section.

77.02

Any rider failing to report as required below may be excluded from the meeting. The Clerk of the Course may forbid any person who does not comply with the rules mentioned below, or any rider who can be a danger to other participants or to spectators, to take part in the competitions.

77.02.1 The technical control must be carried out in conformity with the procedure and times fixed in the CTR Rules and the Supplementary Regulations of the event. The maximum number of persons present at the technical verification will be the rider, plus two others. In addition, for Team events, the Team Manager will also be allowed.

77.02.2 The rider or his mechanic must present a clean motorcycle in conformity to the FIM rules. He must also present a duly filled in and confirmed technical card.

77.02.3 The rider must present his equipment e.g. helmet and bib with prescribed starting number.

77.02.4 A rider may present one motorcycle for the **Individual Trial World Championship** and two for the Indoor **Trial World Championship**.

77.02.5 The Sound control must be carried out first. The exhaust silencer must be marked with paint. The Sound level will be recorded in the technical card.

77.02.7 An overall inspection of the motorcycle must be carried out in conformity with the FIM rules. Accepted motorcycles will be marked with paint or a sticker.

77.05 Dangerous machines

For the main article, refer to the same number in the General section.

01.79 SOUND LEVEL CONTROL

The sound level will be controlled to limits as mentioned in Art. 79.11.

For the main article, refer to the same number in the General section.

79.05

The RPM depends upon the mean piston speed corresponding to the stroke of the engine (See table).

The RPM will be given by the relationship :

$$N = \frac{30,000 \times cm}{l}$$

in which N = prescribed RPM of engine
 cm = fixed mean piston speed in m/s
 l = stroke in mm

79.06

Introduction on the use of the sound measuring system as directed by the EU:

Trial motorcycles have to be legal for use on public roads. Therefore the FIM sound measuring system and noise limits should be the same as those specified in the Directive 97/24/CE of the European Union for the homologation of motorcycles.

In Appendix III, Art. 2.2 of this Directive, the text specifies the conditions and method for measuring noise from the stationary motorcycle.

Art. 2.2.4.2 shows that the position of the microphone (0,5 metres from the exhaust outlet at 45°) which is identical to that in the current FIM rule, Art. 79.01.

Art. 2.2.4.3 specifies the conditions for the test, the engine turning speed will be stabilized at the following values:

- S/2 if S is >5.000 rpm
- 3S/4 if S is < or equal to 5.000 rpm
- S being the rpm at which the engine delivers its maximum power.

The rpm and the dB(A) reference value are different for each homologated model. These appear:

- in the Report from the Laboratory performing the sound level tests;
- in the Certificate relative to the measurement of the noise level of a type of motorcycle issued by the governmental body of the country in which the homologation was made;
- in the Certificate of Conformity of each motorcycle issued by the Manufacturer and supplied to each user and,
- on the vehicle identification plate fixed onto the frame of the motorcycle.

79.08

A machine which does not comply with the Sound limits can be presented several times.

79.11 Sound limits in force

According to Directive 97/24/CE of the European Union for the homologation of motorcycles (See Art. 79.06).

If a sound control is carried out after the competition, the maximum tolerance will be 1 dB/A.

79.17 Sound control during the competition

In a competition which requires sound control tests during the event, machines must comply with the Sound limits without the tolerance in Art. 79.16.

01.81 TIMEKEEPING

Since 01.01.1993, the responsibility for Timekeeping has been referred to the Sporting Commission.
