

# **Scooter**

Standing Regulations

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**The National Sporting Code of the ACU and these Standing Regulations shall apply to all Scooter meetings, together with the Supplementary Regulations and any final instructions.**

## **SECTION 1 MEETINGS**

### **1.1 CATEGORIES OF MEETINGS**

- International Meetings
- European Open Meetings
- National Meetings
- Open Meetings
- Restricted Meetings

Permits for all Road Race competitions are issued by ACU Headquarters

### **1.2 INTERNATIONAL**

1. The Permit shall be issued by the ACU Headquarters for a meeting inscribed on the International Calendar of the FIM and having an FIM International Meeting Number (IMN).
2. An International meeting is open to Entrants and Riders of more than one nation who must hold an International Licence or a National Licence issued by the ACU valid for the particular meeting concerned.
3. All riders not holding a Licence issued by the ACU or SACU must carry proof of Insurance and a written Start Permission document issued by their FMN.

**Note:** This includes all riders holding a licence issued by the MCUI.

### **1.3 EUROPEAN OPEN**

1. The permit shall be issued by ACU Headquarters for a meeting inscribed on the Calendar of the Fédération Internationale de Motocyclisme Europe (FIME) and having a European Meeting Number (EMN).
2. A European Open meeting is open to Entrants and Riders of more than one European nation who must hold the appropriate Competition Licence valid for the particular meeting concerned.
3. All riders not holding a Licence issued by the ACU or SACU must carry proof of Insurance and a written Start Permission document issued by their FMN.

**Note:** This includes all riders holding a licence issued by the MCUI.

### **1.4 NATIONAL**

1. The Permit shall be issued by the ACU Headquarters.
2. A National meeting is open to Entrants and Riders who are the holders of a National or International Licence valid for the particular meeting concerned issued by any Federation.
3. All riders not holding a Licence issued by the ACU or SACU must carry proof of Insurance and a written Start Permission document issued by their FMN.

**Note:** This includes all riders holding a licence issued by the MCUI.

### **1.5 OPEN**

1. An Open permit is issued by ACU Headquarters.
2. An Open meeting is open to Entrants and Riders who hold a valid ACU or SACU Licence for the meeting concerned.

### **1.6 RESTRICTED**

1. A Restricted Permit is issued by ACU Headquarters.
2. A Restricted meeting is open to Entrants and Riders who hold a current ACU or SACU Licence valid for the meeting concerned.

3. The Supplementary Regulations issued for the event must specify all restrictions and requirements of eligibility.

### 1.7 ELIGIBILITY OF FOREIGN RIDERS IN OPEN AND RESTRICTED MEETINGS

1. The Supplementary Regulations issued for the event must specify the licence qualification and eligibility requirements of foreign riders.
2. All riders must have a current Licence and Start Permission from their own Federation valid for the event.

### 1.8 PRACTICE MEETINGS AND TEST DAYS

1. Permits for Practice Meetings and Test Days may be issued on application to the Permit Issuing Authority.
2. No such event may be held unless the appropriate Permit and Insurance has been issued.

### 1.9 CONDITIONS FOR ROAD RACE MEETINGS

1. The ACU Road Race Committee must approve the Organiser.
2. The Venue must hold a current Track Licence or Track Certificate issued by the ACU Road Race Committee.
3. The ACU Secretariat must approve the Supplementary Regulations for the event and issue an ACU Permit prior to publication and circulation.
4. For all ACU Championships an ACU decal, supplied by the ACU Secretariat, must be displayed on each machine. Any rider not complying will be disqualified from the results of the race.

### 1.10 FORCE MAJEURE

The Clerk of the Course has the right to alter, abandon, cancel or postpone all or any part of a meeting for reasons of force majeure. Such a decision shall not be subject to any protest.

## SECTION 2 LICENCE – COMPETITORS

### 2.1 GENERAL

1. To participate in Scooter Road Race events an annual Licence issued by the ACU is required. Residents in Scotland apply to the Scottish ACU.
2. First time applicants are required to complete a classroom based ACU Competitor Training Course. Riders and Sidecar Drivers must also satisfactorily complete an ACU Basic Rider Assessment. Full details from the ACU Road Race Department.
3. A Licence can be upgraded at any time during the year.
4. The parent or legal guardian must accompany all competitors, or participants in parades, under 18 years of age to every meeting. This person must attend at signing-on and be present throughout the meeting.

### 2.2 GRADES

1. **Clubman** Entry level for all first-time Scooter Road Race Applicants.
2. **National Clubman** Competitors may apply to be upgraded to a National licence after competing at 10 separate race days at 3 different venues during the current year and preceding 2 years. The competitor record card together with copies of the official result sheets pertaining to the signatures on the record card should be submitted to the ACU Road Race Department. Only one signature per day of competition is permitted. National Licence holders may apply for Start Permission to compete abroad.

### 2.3 LAPSED LICENCES

Licence holders who have allowed their licence to lapse for more than 5 years will be required to complete the ACU Competitor Training Course, after which a Clubman licence may be issued.

### 2.4 CAPACITY AND LICENCE RESTRICTIONS

Up to 125cc Production automatic scooter	11yrs	Clubman Licence
Up to 125cc Production based scooter	12yrs	Clubman Licence
Unrestricted Scooter	14yrs	National Licence
Unrestricted Scooter	15yrs	Clubman Licence

## SECTION 3 LICENCES AND REGISTRATIONS – OFFICIALS

### 3.1 QUALIFICATIONS AND CONDITIONS

Road Race Officials are divided into two categories: Those that are Licensed and those that are Registered.

**Licences:** Senior Road Race Officials are required to hold an ACU Licence of the appropriate Grade for the performance of their duties.

**Registration:** A Register is maintained of Officials not required to hold a Licence.

### 3.2 ROAD RACE OFFICIALS WHO REQUIRE A LICENCE

All the following licences are valid for 3 years.

	See Note Below	Attendance at Seminar/Training Session
Clerk of the Course	1	Every third year maximum
Chief Steward	2	Every third year maximum
Chief Technical Officer	3	Every third year maximum
Sound Inspector		Required for First Issue only
Measurer	4	Required for First Issue only
Timekeeper	5	Equipment and operators check

Clubs and Centres shall only nominate candidates whose aptitude and integrity for the position they can fully justify. Official ACU approval and the issue of a Licence is only after the candidates have proved to be competent according to the special requirements for each discipline. The respective Committees and Panels organize Seminars that are compulsory for certain Officials.

### 3.3 GRADES FOR CLERK OF THE COURSE

1. **Probationary** Any club may nominate a Probationary Clerk of the Course. Such a Registered Official may act as an Assistant to a National C Clerk of the Course at a Closed to Club event. To upgrade from Probationary to National C a registered official must act as an Assistant at 10 meetings and be recommended by the Clerk of the Course and must be nominated by a club for a specific future event.
2. **National Grade C** A Clerk of the Course who may officiate at a Closed to Club event where the use of slick tyres has NOT been authorised. May act as Deputy or Assistant Clerk of the Course at National Restricted events and Closed to Club events where slick tyres have been authorised. To upgrade from National C to National B a licence holder must officiate as Clerk of the Course at 5 Closed to Club events. He must also officiate as a Deputy to a National B Clerk of the Course at 5 events and be recommended by the Clerk of the Course at each. In addition members of the Road Race, Drag and Sprint Committee may be appointed to observe him. A Club must nominate him as being required to take charge of a specific future event.
3. **National Grade B** A Clerk of the Course who may officiate at a National Restricted event or a



Closed to Club event where slick tyres HAVE been authorised. May officiate as Deputy to a National Grade A.

To upgrade from National B to National A a Licence holder must officiate as a National B Clerk of the Course at 5 events. He must act as Deputy to a National A Clerk of the Course at 5 events and be recommended by the Clerk of the Course at each. In addition members of the Road Race, Drag and Sprint Committee may be appointed to observe him. A club must nominate him as being required to take charge of a specific future event.

4. **National Grade A** A Clerk of the Course who may officiate at any event held under an ACU Permit. May officiate as Deputy or Assistant at FIM (Non Championship) event.

#### **Note 1 Clerk of the Course**

Age Limits: Licences for Clerks of the Course who have attained their 70th birthday will be reviewed annually. Officials will be required to satisfactorily attend a seminar annually. The issuing of a licence will be subject to Road Race Committee approval.

#### **Note 2 Chief Steward**

Grades: There is only one grade of Steward's Licence for all Road Race disciplines.

Age Limits: Stewards may not normally officiate beyond the end of the season in which they attain their 70th birthday. The Road Race, Drag and Sprint Committee will review Stewards who reach the age of 70 for appointments on an annual basis.

#### **Note 3 Chief Technical Officer**

The Chief Technical Officer will be licensed by the Technical Panel to be in charge of the Technical Control at an event. The Technical Panel may restrict the disciplines of licence holders.

#### **Note 4 Measurer**

The Measurer is required for ACU National Championships and National events. The Licence is issued by the Technical Panel and may be restricted by discipline.

#### **Note 5 Timekeepers**

Will be required to pay for their Licence.

**Licence Fees:** All licences (exception Timekeepers licences) will be issued, free of charge, for a period of three years. No fee will be charged for attendance at Seminars organised by the Road Race Drag and Sprint Committee or the relevant Panel with the exception of FIM Seminars.

### **3.4 ROAD RACE OFFICIALS WHO DO NOT REQUIRE A LICENCE**

	<b>See Note Below</b>	<b>Attendance at Seminar/Training Session</b>
Incident Officer	1 and 4	May attend Clerk of the Course Seminar at ACU HQ for information purposes.
Secretary of the Meeting	2 and 4	Will receive Training at meetings and if required at Regional or ACU HQ Seminars.
Technical Official		Will receive training via the Chief Technical Officer at meetings. May attend Regional Training Seminars
Club Stewards	3	May attend Regional or ACU HQ Seminars for information purposes
Chief Marshal		May receive training at ACU HQ or Regional Training Days
Marshal		May receive training at Regional Training days and at meetings via the Chief Marshal.
Medical Officer		None required

Registration of the above officials and marshals will be renewed annually. All such Officials will receive an appropriate form of identification from the ACU.

#### **Note 1 Incident Officer**

Will collate all information and documentation, and prepare reports relating to serious accidents and to all incidents involving Officials or Spectators.

Note: A Deputy Clerk of the Course may undertake these duties. An Incident Officer may be nominated to attend a Clerk of the Course Seminar to assist with these duties.

**Note 2 Secretary of the Meeting**

Will be responsible for all administration connected with the organisation of a meeting.

**Note 3 Club Stewards**

Stewards of the meeting exercise judicial authority over the running of the meeting according to the National Sporting Code and Supplementary Regulations.

**Note 4 Incident Officer and Secretary of the Meeting Registration**

Currently there is no requirement for these officials to be registered for Road Race Disciplines.

## SECTION 4 PRACTICE

**4.1 TIME MUST BE PUT ASIDE FOR THE PRACTICE SESSIONS AND THESE MUST BE DEFINED IN THE SUPPLEMENTARY REGULATIONS FOR THE MEETING.**

1. Riders will commence practice under the instructions of the Start Officials.
2. The duration of each practice session will commence from the time the first rider joins the circuit and will finish not less than 10 minutes later.
3. The end of practice will be indicated by the waving of a chequered flag at which time the pit exit will be closed. A rider's time will continue to be recorded until he passes the finish line after the allotted time has lapsed.
4. 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 marshals posts. All riders must return slowly to the pit lane or as otherwise instructed by the Marshals under the direction of the Clerk of the Course.
5. When the practice is restarted the time remaining will be decided by the Clerk of the Course.

## SECTION 5 GRID POSITIONS

**5.1 POSITIONS**

1. Pole position, and the configuration of the grid, will be determined at the time of the Track Inspection.
2. Grid positions will be established according to the provisions of the Supplementary Regulations.

**5.2 TIMED PRACTICE**

Where timed practice is used and identical times are recorded by more than one rider in the official qualifying practice session for the race the rider first setting such a time will receive the better starting position.

A qualifying maxima may be specified in the Supplementary Regulations.

**5.3 BALLOTTED**

Where the Organiser decides that the grid positions will be by ballot this must be conducted by the competitors at the meeting.

**5.4 ALLOCATED**

Organisers wishing to allocate grid position will specify this and the method to be adopted in the Supplementary Regulations.

## SECTION 6 START PROCEDURES

Races may be started by one of the following methods:

**6.1 GROUP STARTS**

Which include the 45 degree echelon line up known as the Le Mans start.

## 6.2 INTERVAL STARTS

Where competitors are started individually or in groups at pre-determined intervals.

Starts may be made with engines running or engines stopped. For starts with engines stopped the Supplementary Regulations for the race must specify the authorised method of starting.

## 6.3 CLUBMANS RACES

1. Riders collect in the Assembly Area and proceed when directed to the Grid to take up their allocated Grid positions.
2. An Official will signal all the Riders to proceed on a warm-up lap (of the circuit being used for the race) by waving a Green Flag. On completion of the warm-up lap the riders each return to their allocated Grid positions.
3. Riders who do not go on to the Grid may join the warm-up lap from the Pit Lane on the instruction of the Officials, but in this case must start the race from the back of the Grid.
4. On the completion of the warm-up lap an Official will display a Red Flag at the front of the Grid.
5. When the grid is re-formed the Official with the Red Flag will leave the Grid indicating to the Riders that the race is about to commence.
6. Any Rider who stalls his engine on the Grid, or who has other difficulties, must remain on his motorcycle and raise an arm. It is not permitted to attempt to delay the start by any other means.
7. A Red light will be displayed for up to 5 seconds. The Red Light will then be extinguished to start the race. Alternatively, the National Flag may be lowered to start the race.
8. After the Riders have passed the exit of the Pit Lane any Riders waiting there may be permitted to join the race at the discretion of the Clerk of the Course and under the instructions of the Officials.
9. Should there be a problem on the Grid, the Starter may display a Yellow Flag or Yellow lights to indicate a delayed start. The Clerk of the Course may decide that the Riders will complete another warm-up lap and the race distance may be reduced.

## 6.4 NATIONAL RACES

1. Riders proceed as directed to the Grid upon the opening of the Pit Lane and take up their starting positions.
2. Riders take up their allocated positions on the Grid. Riders who encounter technical problems must go to the Pit Lane to make adjustments or to change machines.
3. Two minutes before the start of the race the Starter will signal all the Riders to proceed on a warm-up lap by waving a Green Flag. On completion of the warm-up lap the riders each return to their allocated Grid positions.
4. Riders not going on to the Grid may join the warm-up lap from the Pit Lane on the instructions of the Officials but in this case must start the race from the rear of the Grid.
5. On completion of the warm-up lap an Official will display a Red Flag at the front of the grid.
6. When the Grid is re-formed the Official with the Red Flag will leave the track indicating to the Riders that the race is about to commence.
7. Any Rider who stalls his engine on the Grid or who has other difficulties must remain on his motorcycle and raise an arm. It is not permitted to delay the start by any other means.
8. A Red Signal light will be displayed for up to 5 seconds. The Red Light will then be extinguished to start the race. Alternatively, the National Flag may be lowered to start the race.
9. After the Riders have passed the exit to the Pit lane any Riders waiting there may be permitted to join the race at the discretion of the Clerk of the Course and under the instructions of the Officials.
10. Should there be a problem on the Grid, the Starter may display a Yellow Flag or Yellow lights to indicate a delayed start. Riders will stop engines. One assistant per team may enter the grid

to assist the competitors. The Rider(s) responsible for the delay will start from the back of the Grid. The Riders will complete another warm-up lap and the race distance will be reduced by one lap.

### **6.5 ANTICIPATION OF THE START**

1. Anticipation of the Start is defined as when the motorcycle is moving forward when the Red Lights are on.
2. Any Competitor who takes up an incorrect Grid position will be judged to have anticipated the Start.
3. The Clerk of the Course will award a Time Penalty of up to 20 seconds to any Rider who anticipated the Start. The decision as to an anticipated Start is to be accepted as a Matter of Fact from which there is no right of Protest.

## **SECTION 7 FLAGS AND LIGHTS**

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

### **7.1 FLAGS AND LIGHTS USED TO PROVIDE INFORMATION**

#### **1 NATIONAL FLAG OR START LIGHTS**

1. Signal for the Start of the Race. A Red light will be displayed for up to 5 seconds. The Red Light will then be extinguished to start the race. Alternatively, the National Flag may be lowered to start the race.

#### **2 GREEN FLAG**

1. The track is clear.
2. This flag will be shown waved by the starter to signal the start of the warm up lap.
3. This flag must be shown motionless at each flag marshal post for the first lap of each practice session and of the warm up, for the sighting lap(s) and for the warm up lap.
4. This flag must be shown motionless at the flag marshal post immediately after the incident that necessitated the use of one or more yellow flags.

#### **3 YELLOW AND RED STRIPED FLAG**

1. Oil, water or other substance is affecting adhesion on this section of the track.
2. This flag must be shown motionless at the flag marshal post.

#### **4 YELLOW AND RED STRIPED FLAG: NATIONAL EVENTS ONLY**

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

#### **5 WHITE FLAG WITH DIAGONAL RED CROSS: NATIONAL EVENTS ONLY**

1. Drops of rain on this section of the track.
2. This flag must be shown motionless at the flag marshal post.

#### **6 WHITE FLAG WITH DIAGONAL RED CROSS + YELLOW AND RED STRIPED FLAG: NATIONAL EVENTS ONLY**

1. Rain on this section of the track.
2. These flags must be shown together motionless at the flag marshal post.

#### **7 BLUE FLAG**

1. National events and above. Not mandatory at Club level events.

2. May be shown waved, this flag indicates that a faster rider is about to overtake.
3. The use of this flag is optional at meetings of lower than National Status. Shown waved at the flag marshal post, this flag indicates to a rider that he is about to be overtaken.
4. During the practice sessions, the rider concerned must keep his line and slow down gradually to allow the faster rider to pass him.
5. During the race, the rider concerned is about to be lapped. He must allow the following rider(s) to pass him at the earliest opportunity.

## 8 YELLOW FLAG WITH BLACK DIAGONAL CROSS

1. This flag will be shown motionless at the finish line at track level to indicate the commencement of the final lap of the race.

## 9 CHEQUERED BLACK AND WHITE FLAG

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

## 10 CHEQUERED BLACK AND WHITE FLAG PLUS BLUE FLAG

1. The chequered black/white flag will be waved together with the blue flag presented motionless at the finish line on track level when a rider(s) precedes closely the leader during the final lap before the finish line.

## 7.2 FLAGS USED TO CONVEY INFORMATION AND INSTRUCTIONS

### 1 YELLOW FLAG AND OR YELLOW LIGHTS

1. Shown waved at each row of the starting grid, this flag indicates that the start of the race is delayed.
2. When shown stationary at the flag marshal post this flag indicates danger ahead, riders must slow down.  
No overtaking is permitted.
3. When shown waved at the flag marshal post this flag indicates that the danger is more imminent. The riders must be prepared to stop.
4. Overtaking is forbidden up until the point where the green flag is shown.
5. Any infringement of this rule during a practice session will result in the cancellation of the time of the lap during which the infraction occurred.
6. In case of infringement of this rule during the race, a time penalty will be imposed. In both cases, further penalties (such as fine – suspension) may also be imposed.
7. During the final inspection lap (by the Stewards and other Officials) this flag must be waved at the exact place where the flag marshal will be positioned during the practices, warm ups and races.

**Note:** Following an incident during a practice or race the Yellow Flags are usually displayed as follows:

1. Shown waved at the flag marshals' post immediately prior to the incident.
2. Shown stationary at the flag marshals' post preceding the post at which it is being shown waved.
3. Additional flags may be shown at the request of the Clerk of the Course.

### 2 WHITE FLAG

1. National events only. Not permitted at Club level.
2. An intervention vehicle is on the track.
3. Waved at the flag marshal post, this flag indicates that the rider will encounter the vehicle in the current section of the track.

4. It is forbidden for a rider to overtake another rider during the display of the white flag.
5. Overtaking the intervention vehicle is permitted.
6. As soon as such a vehicle stops on the track, the white flags must be maintained and the yellow flags must also be presented.

**Note:** At a meeting of below National status no Ambulance or Fast Intervention Vehicle will be allowed to be moved onto the course or its immediate verges whilst racing or practice is in progress on any part of the circuit. This means that in circumstances when an Ambulance or Fast Intervention Vehicle is required on the circuit, the Red Flags must first be displayed and the race or practice brought to an actual and effective halt before any vehicle is deployed.

### **3 RED FLAG WITH A WHITE DIAGONAL CROSS. ENDURANCE RACES ONLY.**

1. The race is neutralised.
2. Riders must slow down and be prepared to catch up a SAFETY CAR.
3. It is forbidden for a rider to overtake another rider during the display of this flag.
4. Overtaking the SAFETY CAR is forbidden.
5. Riders must line-up in single file behind the Safety Car.
6. This flag must be shown motionless at each flag marshal post,
7. At all meetings where this flag is used a riders briefing must be held.

### **4 RED FLAG AND RED LIGHTS**

1. When the race or practice is being interrupted, the red flag will be waved at each flag marshal's post. Riders must return slowly to the pits or as directed by the Marshals.
2. Any infringement of this rule will be penalised with one of the following penalties: fine – disqualification – withdrawal of Championship points – suspension.
3. The red flag will be shown motionless on the starting grid at the end of the sighting lap(s) and at the end of the warm up lap.
4. The red flag may also be used to close the track.
5. The red lights will be switched on at the start line for up to 5 seconds to start each race.

### **5 BLACK FLAG**

1. This flag is used to convey instructions to one rider only and is displayed motionless together with the rider's number.
2. The rider must stop at the pits at the end of the current lap and cannot restart.
3. Any infringement of this rule will be penalised with one or more of the following penalties: fine – disqualification – withdrawal of Championship points – suspension.

### **6 BLACK FLAG WITH ORANGE DISK (RADIUS 40 CM)**

1. This flag is used to convey instructions to one rider only and is displayed motionless together with the rider's number.
2. 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.
3. Any infringement of this rule will be penalised with one or more of the following penalties: fine – disqualification – withdrawal of Championship points – suspension.

## **7.3 FLAG DIMENSIONS**

The flag dimension should be approximately 80cms in the vertical and 100cms in the horizontal.

## **7.4 FLAG COLOURS**

The Pantones for the colours are as follows:

Orange: Pantone 151C

Black: Pantone Black C

Blue:	Pantone 286C or 298C
Red:	Pantone 186C
Yellow:	Pantone Yellow C
Green:	Pantone 348C

### 7.5 FLAG MARSHALS' POSTS

The position of the Flag Marshals' Posts will be fixed during the ACU Track Inspection.

### 7.6 MARSHALS' OVERALLS

It is recommended that Marshals' overalls be Orange (Pantone 151C) or white in colour. Waterproofs should be of the same colour or transparent.

## SECTION 8 BEHAVIOUR DURING PRACTICE AND RACE

### 8.1 RIDERS MUST OBEY THE FLAG SIGNALS, THE LIGHT SIGNALS, AND THE BOARDS WHICH CONVEY INSTRUCTIONS. ANY INFRINGEMENT OF THIS RULE WILL BE PENALISED ACCORDING TO THE PROVISIONS OF SECTION 7.

1. Riders must ride in a responsible manner which does not cause danger to other competitors or participants, either on the track or in the pit-lane. Any infringement of this rule will be penalised with one of the following penalties: fine – time penalty – disqualification – withdrawal of Championship points – suspension.
2. 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 marshals or at a place which does not provide an advantage to him. Any infringement of this rule during the practices or warm up will be penalised by the cancellation of the lap time concerned and during the race, by a time penalty. Further penalties (such as fine – disqualification – withdrawal of Championship points) may also be imposed.
3. 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 machine and holding it whilst any repairs or adjustments are made. The marshal may then assist him to re-start the machine.
4. If the rider intends to retire, then he must park his motorcycle in a safe area as indicated by the marshals.
5. If the rider encounters a problem with the machine 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 machine in a safe place as indicated by the marshals.
6. Riders are not permitted to return slowly to the pits for any reason during practice or racing.
7. Riders may enter the pits during the race, but taking the motorcycle inside the pit box is not permitted. Any infringement of this rule will be penalised with a disqualification. Riders who stop their engines in the pits may be assisted to re-start their motorcycle by the mechanics.
8. Riders are not allowed to transport another person on their machine or to be transported by another rider on his machine.
9. Riders must adopt a position with their feet on the footrests.
10. Riders who fall from their machine are not permitted to continue with the practice or race until passed fit by the Medical Officer and the machine re-inspected by technical control.
11. 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.
12. No signal of any kind may pass between a moving motorcycle and anyone connected with the motorcycle's entrant or rider, save for the signal from the time keeping transponder, or legible messages on a pit board or body movements by the rider.

- Automatic timing devices, provided they do not disrupt official timekeeping methods, are not considered as telemetry.
13. The carrying of on board cameras is only permitted with the prior approval, in writing of the Clerk of the Course. The installation of the camera must be approved by the Chief Technical Officer.
  14. A speed limit may be imposed in the Pit Lane.
    1. Any rider found to have exceeded the limit during the practice will be subject to a penalty as described in the Supplementary Regulations.
    2. Any rider who exceeds the pit lane speed limit during a race will be penalised with a time penalty as described in the Supplementary Regulations.
    3. The Clerk of the Course must communicate the offence to the pit of the rider.
  15. In the interest of safety, a rider may not stop his machine on the racing surface during the slow down lap, (exception see Art 8.17) when returning to the pits after the chequered flag.
  16. Stopping on the track during practices and races is forbidden. (exception see Art 8.17)
  17. During the practice sessions and warm ups, practice starts are permitted, when it is safe to do so, at the pit lane exit before joining the track and after the chequered flag is shown at the end of practice sessions and warm ups, when it is safe to do so. These practice starts must take place off the racing line.
  18. The spinning of rear wheels (burn-outs) is strictly forbidden. Breach of this rule will result in a penalty of disqualification.
  19. Any competitor who in any ACU or MCRCB Permitted Event participates on a machine for which he is not eligible through age or licence restrictions will be penalised by a fine of £500.00 and a suspension for one year from the date of the hearing.

## 8.2 PROTESTS

1. Any Rider, Passenger, Entrant or Official licensed by the ACU affected by a decision taken during a meeting held under an ACU Permit has the right to protest against that decision.
2. No protest may be lodged against a decision of statement of fact of the Race Direction to inflict or not:
  - A time penalty
  - A change 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.

## SECTION 9 NEUTRALISATION OF RACES – SAFETY CAR

A compulsory riders briefing on these Regulations must be conducted by the Clerk of the Course or his Deputy prior to any race in which the use of Safety Cars is intended. The Safety Cars if they are to go on the track must be equipped with Yellow Flashing lights. The words “Safety Car” should be clearly indicated on the back and the sides of the car. The Driver of the Safety Car should be the holder of an ACU or FIM Clerk of the Course or Competition Licence for Road Racing, a MSA Competition Licence or an ARDS Licence. All “Safety Car” drivers must be assisted in the car by a Race Official who is in constant contact with the Clerk of the Course.

If during a race of 20 miles or more an incident other than rain puts at risk the safety of the competitors and renders impossible the normal progress of the competition the Clerk of the Course (Grade National A or above or of Grade National B with the prior individual approval of the Road Race Committee) may decide to neutralize the race.

The following procedure will be adopted:

1. A Red Flag with a White Diagonal Cross must be displayed at the selected Marshals Posts during the whole of the neutralisation period.



2. A White Board showing the words "Safety Car" will be displayed at the Start Line during the whole of the neutralisation period.
3. Riders must immediately slow down. Overtaking is forbidden. The Track Marshals will record all infringements and report them to the Clerk of the Course.
4. The pit lane exit will be closed to competitors.
5. When the leading competitor approaches the start line at the end of the lap that the neutralisation was decided a "Safety Car" equipped with two flashing Yellow Lights on the roof will enter the track with two flashing lights switched on.
6. The competitors will end up in single file behind the "Safety Car" without overtaking it.
7. Competitors may now enter the pits but all other rules must be complied with.
8. After stopping at the pits competitors must line up at the pit lane exit and must only rejoin the circuit when instructed to do so by the official with a Green Flag or when the Green Light at that location is switched on. These instructions will be given 10 seconds after the last competitor in line behind the "Safety Car" has passed that point. Competitors must join the back of the line and MUST NOT overtake. The pit lane exit will then be closed and competitors must wait for the next lap.
9. During the last lap of the neutralisation period the "Safety Car" will switch off the Lights on the roof to indicate to the competitors that the "Safety Car" will enter the pit lane at the end of that lap and the race will resume.
10. When the "Safety Car" has left the track overtaking is forbidden up until the start line, where a Green Flag will be waved and the Red Flag with a White Diagonal Cross immediately withdrawn.
11. The pit lane exit will then be permanently re-opened.
12. The race will continue normally.
13. Unless otherwise decided by the Clerk of the Course, each lap completed by the "Safety Car" will be counted as a race lap. A Board displaying the new actual number of laps remaining will be displayed on the start line when the green flag is waved. If the race is eventually stopped under SR 9.1 whilst the "Safety Car" is deployed the result will be according to the position at the last completed lap before the "Safety Car" was introduced.
14. No Protest may be lodged against the decision of the Clerk of the Course regarding the number of laps remaining in order to complete the race.
15. All other rules of the race must be observed.

## SECTION 10 INTERRUPTION OF A RACE

### 10.1 IF THE CLERK OF THE COURSE DECIDES TO INTERRUPT A RACE DUE TO CLIMATIC CONDITIONS OR SOME OTHER REASON, THEN RED FLAGS WILL BE DISPLAYED AT THE FINISH LINE AND AT ALL FLAG MARSHALS' POSTS.

1. Riders must immediately slow down and return to the pit lane, or as directed by the marshals upon instructions from the Clerk of the Course.
2. Only riders still racing when the red flag is displayed will be counted as finishers.
3. The results will be the results taken at the last point where the leader had completed a full lap without the red flag being displayed calculated as in the principle set out in the following example:

Example of a race consisting of 30 laps:

If a Red Flag is shown when the leader is on his 10th lap after completing his 9th lap and all other riders have not completed the 9th lap, then the race result will be 9 laps completed, and the second part will consist of 21 laps.

Exception: if the race is interrupted after the chequered flag, the following procedure will apply:

4. For all the riders to whom the chequered flag was shown before the interruption, a partial classification will be established at the end of the last lap of the race.

5. For all the riders to whom the chequered flag was not shown before the interruption, a partial classification will be established at the end of the penultimate lap of the race.
6. The complete classification will be established by combining both partial classifications as per the lap/time procedure.
7. If the results calculated show that less than three laps have been completed by the leader of the race and by all other riders on the same lap as the leader, then the race will be null and void and a completely new race will be run. If it is found impossible to re-start the race, then it will be declared cancelled and the race will not count for any Championship.
8. If three laps or more have been completed by the leader of the race, and all other riders on the same lap as the leader, but less than two-thirds of the original race distance, rounded down to the nearest whole number of laps, then the race will be restarted. If it is found impossible to restart the race, then the results will count and half points will be awarded in any Championship.
9. If the results calculated show that two-thirds of the original 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.
10. Exception: Where a race is interrupted at a meeting of below National Status the Clerk of the Course is permitted to decide that the race has been completed or to run a new race over a distance appropriate to the prevailing conditions.

## **SECTION 11** RE-STARTING A RACE THAT HAS BEEN INTERRUPTED

### **11.1 IF A RACE HAS TO 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 CLERK OF THE COURSE WILL ANNOUNCE A TIME FOR THE NEW START PROCEDURE TO BEGIN WHICH, CONDITIONS PERMITTING, SHOULD NOT BE LATER THAN 10 MINUTES AFTER THE INITIAL DISPLAY OF THE RED FLAG.**

1. The results of the first race must be available to the riders before the second part of a race can be started.
2. The start procedure will be identical to a normal start with sighting lap(s), warm-up lap etc.
3. Conditions for the re-started race will be as follows:
  1. In the case of the situation described in Article 10.7 above (less than 3 laps completed) All riders may re-start.
  2. Motorcycles may be repaired or changed. Refuelling is permitted.
  3. The number of laps will be the same as the original race.
  4. The grid positions will be as for the original race.
4. In the case of situation described in Article 10.8 above (3 laps or more and less than two-thirds completed)
  1. Only riders who are classified as finishers in the first race may re-start. Article 12.3.
  2. Motorcycles may be repaired or changed. Re-fuelling is permitted.
  3. The number of laps of the second race will be the number of laps required to complete the original race distance with a minimum of 5 laps.
  4. The grid position will be based on the finishing order of the first race.
  5. 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.
5. Exception: Provisions of Article 10.10 may apply according to the status of the meeting. (The discretion of the Clerk of the Course to decide at meetings of lower than National status.)

## SECTION 12 FINISH OF A RACE AND RACE RESULTS

### 12.1 FINISH OF A RACE

1. When the leading rider has completed the designated number of laps (or the designated time in the case of Endurance) for the race, a Chequered Flag will be displayed at the finishing line.

### 12.2 THE CHEQUERED FLAG WILL CONTINUE TO BE DISPLAYED TO THE SUBSEQUENT RIDERS.

1. After the Chequered Flag is displayed to the leading Rider no other Rider is permitted to enter the track from the Pit Lane.
2. If a Rider closely precedes the leader during the final lap before the finish line the Official will show to the Riders and to the Leaders simultaneously the Chequered Flag and the Blue Flag. This will indicate to the Leader that he has completed the race and to the Rider closely preceding the Leader that he still has to complete the final lap.
3. In the case of a photo finish between two or more Riders the decision shall be taken in favour of the Rider whose Front Wheel leading edge crossed the finish line first. In the case of Ties, the Riders concerned will be ranked according to the best lap times they achieved in the race.
4. The Clerk of the Course may require machines to be presented for post Practice or Race verification. Where this is required the Riders must be informed prior to the start of the Practice or Race that they must attend the "Parc Ferme".

### 12.3 RACE RESULTS

1. When the Race has been completed as described above the Results will be based on the order in which the Riders crossed the finish line and the number of laps that they have completed.
2. When the Race has been declared completed by the Clerk of the Course following an Interruption under Article 10.3, the result will be established according to the procedure described in Articles 10.4–10.6 for a race interrupted after the Chequered Flag.
3. In either of the cases described in 1) and 2) above. To be counted as a Finisher and be included in the results a Rider must have completed 75% of the actual race distance. He must also have crossed the finish line on the track and not in the Pit Lane within two minutes after the winner and be in contact with his machine.
4. A new Lap record can only be established during a race.
5. Both for the Practice and for the Race, the lap time is the subtraction of the time between two consecutive crossings of the finish line.

## SECTION 13 SAFETY

### 13.1 MEDICAL SERVICES – MINIMUM REQUIREMENTS FOR ROAD RACE MEETINGS

	PERSONNEL				VEHICLES	
	Doctors MO	Paramedic(s) PM	First Aid personnel	Ambulance(s)	Fast Intervention Vehicle	Special Notes
Road race	2 MOs	PMs can assist MOs but not replace them	5	2	1	(i)
Road race Test day	1 MO	1 PM	2	1	1	

The following applies to all events run under this code:

1. **Medical Officer (MO) – Doctor** A medical practitioner (Doctor) fully registered with the

General Medical Council (GMC), and holding appropriate personal medical malpractice insurance cover (excludes NHS Crown Indemnity).

2. **Paramedic (PM)** A State Registered Paramedic with the HPC (Health Professions Council) Paramedics must have appropriate personal medical malpractice insurance cover.
3. **Ambulance** A vehicle registered as an ambulance with the DVLA (Driver and Vehicle Licencing Agency) or similar government licencing authority and complying with FIM minimum equipment regulations for a type C vehicle; that is:  
 Medical: A stretcher (preferably standardised), oxygen supply, apparatus to immobilise limbs and vertebral column. First aid medicaments and materials.  
 Technical: Radio communication. Visible and audible signals.  
 Staffing: An ambulance must be staffed by two First Aid Personnel (who can be the two minimum First Aid Personnel).  
 An ambulance may act as a Medical Centre BUT if so it must be a vehicle in addition to the minimum ambulance requirement.
4. **First Aid Personnel** A person holding a current certificate of First Aid competency. (Where an event is open to the public event organisers should ensure that all First Aid personnel are insured against malpractice for the event concerned).
5. **Fast Intervention Vehicle (FIV)**
  1. A Fast Intervention Vehicle is a compulsory requirement at all Road Race events.
  2. Such a vehicle requires a driver, a Doctor, and appropriate medical equipment. If the driver is not a First Aid Person, then such a Person must be present in the vehicle. This vehicle must be immediately available to proceed to an incident, if called to do so, upon instructions from the Clerk of the Course.
  3. A FIV must not be used in place of an ambulance.
  4. A Fast Intervention Vehicle must be equipped with visible signals (flashing lights).
  5. At a meeting of below National status no ambulance or Fast Intervention Vehicle is allowed to be moved onto the course or its immediate verges whilst racing or practice is in progress on any part of the circuit. This means that in the circumstances when an Ambulance or Fast Intervention Vehicle is required on the circuit, the Red Flags must first be displayed and the race or practice brought to an actual and effective halt before the vehicle is deployed.  
**Note:** This restriction is not applicable where the Clerk of the Course has decided to neutralise the race by use of the Safety Car in accordance with the provisions of Section 9 of the Road Race Regulations.
  6. During Sighting Lap: Stationary or moving Ambulances, Fast Intervention Vehicles, and the like, may be encountered anywhere on the circuit when riders are dispatched from the Assembly Area on their "sighting lap" to the start line prior to the start of a race. This "sighting lap" is not considered to be either Practice or Racing and riders must always be prepared to encounter such vehicles. When such a vehicle or vehicles are on the track the Yellow Flags will be displayed in the appropriate section of the course.

**Special Notes**

- 2 MOs must be present at the start of every meeting and be present for the duration of the meeting unless accompanying a patient to hospital. If vehicles or First Aid personnel leave the circuit to convey a patient to hospital then the minimum requirements for the event to continue are 1 MO, 1 FIV, 2 Ambulances and 4 First Aid personnel.
6. **Medical Examination** At any time during a meeting the Clerk of the Course may require a competitor to undergo a medical examination to determine his fitness to participate. The decision of the Medical Officer is a matter of fact without right of protest.  
**Concussion** If a competitor is involved in an incident which results in him being diagnosed by the Medical Officer/Paramedic as suffering from concussion, the rider is not permitted to participate any further in that event.

Organisers are to notify ACU Head Office as soon as possible of any concussion injuries and then will subsequently:

- a) Place the rider on the ACU Stop List
- b) Inform Organisers of forthcoming events that the Rider has suffered a concussion injury and is therefore placed on the ACU Stop List
- c) Inform the Rider that he needs to see a Doctor and obtain a letter/doctor's certificate which confirms he is fit to resume competitive racing/participate in a practice/test session.

The recovery time for anyone diagnosed with concussion is as follows:

- a) Over 20 years: Excluded immediately and suspended for a period of nine days.
- b) 16–19 years: Excluded immediately and suspended for a period of twelve days.
- c) 15 and under: Excluded immediately and suspended for a period of twenty three days.

The rider is not permitted to ride during the obligatory suspended periods outlined above and then only once he is in possession of a doctor's certificate/letter after the suspended period has expired.

A rider may be signed off to ride by the CMO at an event once he has observed the obligatory suspended period outlined above.

If a competitor has been injured on a Saturday and is suffering from concussion, and the Organiser is aware that the rider was intending to ride or is scheduled to ride somewhere else the next day, the Organiser will inform the Organiser of the event being held the next day so they are aware of the rider's injuries and as such he is prevented from participating in that event.

### 13.2 TRACK SAFETY PRECAUTIONS

1. The safety precautions of circuits will be as laid down for each Permanent Course Licence or Temporary Course Certificate following an inspection of the course.
2. It should be generally realised that the organisers of speed events have a legal responsibility to the general public and therefore it is the duty of these organisers to ensure that all reasonable precautions are taken to protect the public.
3. Whilst organising Clubs are insured under the Promoter's Third Party Policy in respect of their legal liability, it is a condition of the policy that the promoters of an event must comply strictly with the National Sporting Code and any additional requirements as may be specified by the Permanent Course Licence or Temporary Course Certificate.  
Clubs failing to do so stand in grave danger of any claims being repudiated to the Club by the insurers under the terms of the policy covering legal liability.
4. The safety precautions to be adopted are provided with the Permanent Course Licence or Temporary Course Certificate for the particular course but the following general requirements must be observed.
5. The attention of organisers is drawn to the provision of the NSC which stipulates that no alteration of the requirements contained in the Permanent Course Licence or Temporary Course Certificate shall be made without the prior approval, in writing, of the ACU.
6. It is recognised that circumstances may arise in which it is necessary to make certain alterations to the course on the day of the meeting but any such alterations must be approved by the Stewards of the Meeting and details given in their report to the permit issuing authority.

### 13.3 FIRE EXTINGUISHERS

Each working vehicle in the Paddock must have a 2kg (minimum) dry powder fire extinguisher available for immediate use. This extinguisher must show the date of the last annual inspection. Noncompliance with this regulation will incur a penalty imposed by the Clerk of the Course.

### 13.4 FIRE EXTINGUISHERS AT CIRCUITS

At all race and speed events, there must be a valid certificate, issued annually immediately prior to the

start of each season's racing by the manufacturer or his agent, to the effect that all fire extinguishers are in effective working order. This certificate must be available for inspection by the Stewards. All fire posts must be clearly marked. In addition to the fire equipment at each post there must be:

1. Fire extinguishers in the paddock and assembly area.
2. At least two fire extinguishers in the Technical Control Area.
3. Fire extinguishers in every medical room/centre.
4. During events of National status or below where machines may be refuelled and more than five gallons (22 litres) of fuel is held in any one pit, there shall be a minimum of one fire tender and crew in attendance, appropriately equipped and with immediate access to the pit area. International events must comply with appropriate FIM requirements.

### 13.5 WARNING AND PROHIBITION SIGNS AT CIRCUITS

For full details regarding Warning Notices and Prohibition Notices please refer to the Safety Precautions section of this Handbook.

#### 1 WARNING NOTICES

The following requirements regarding the display of Warning notices are applicable to all Road Racing events.

1. WARNING NOTICE (A) (29 × 20 inches.) Warning notices as detailed below must be displayed on each side of every entrance to the course, including the entrance to car parks and paddock.  
These notices must be prominently displayed where they can be easily read by the public before any admission charge is paid, or where no admission charge is made before entry is gained into the circuit.  
Where it is not possible to define the limits of the site and to control admission of the public (e.g. M.O.D Land and heath land) warning notices must be profusely displayed around the course and also in the car parks.
2. WARNING NOTICE (B) (20 × 15 inches.) Those parts of the course to which the public may be admitted and where it is neither practical nor necessary to erect a barrier, e.g. those parts of the course which are straight and are only used by the public to reach other parts of the course, may be indicated by the erection of the special type of Warning Notice (B). These notices should be displayed at least 30ft from the course. It is recommended that the limit of these areas should also be defined by a boundary tape.

#### 2 PROHIBITION NOTICES

The following requirements regarding the display of Prohibition notices are applicable to all Road Racing events.

PROHIBITED AREA NOTICE (C) (29 × 20 inches.) Areas where the public are not permitted must be clearly defined by the display of an adequate number of "Prohibited Area" notices (B). Notices should be displayed within the prohibited area, facing the public.

### 13.6 DECLARATION – ADMISSION TICKETS, ARMBANDS AND PASSES

Subject to the provision of the Sunday Observance Act 1780, no person may be allowed to any part of the circuit without a suitable pass or ticket. All tickets and passes must bear the following wording shown below in full and if the wording appears on the reverse side then the words "For Conditions of Admission See Over" must be clearly printed on the face thereof. Where a ticket is cancelled by being torn in half, the full wording and, where applicable, the "For conditions of admission see over" must appear on each half. Where a charge is made for admission into special or "reserved" enclosures a ticket bearing the approved declaration must be issued in exchange for payment to enter these enclosures.

**Declaration.**

WARNING. MOTOR SPORT CAN BE DANGEROUS. Despite the organisers taking all reasonable precautions, unavoidable accidents can happen. Please comply with all instructions of marshals and notices and remain in permitted areas only. THEY ARE CONCERNED WITH YOUR SAFETY. All vehicle passes must bear the same wording and comply with the above requirements.

**13.7 DECLARATION ON THE OFFICIAL PROGRAMME**

The declaration as outlined above should be printed in full on the outside front cover of all Official Programmes. Where this is not possible it must be printed in full in the programme and the words "For conditions of admission see inside" printed on the outside cover.

**13.8 SIGNING ON**

All riders, passengers, officials and press must sign a declaration on the relevant signing on form (available from the ACU).

1. Age Limits for Officials  
All event Executive and Administrative Officials shall be 18 years of age or over.
2. Age Limits for Marshals
  1. All Assistant Officials whose function is to be carried out at the immediate trackside must be at least 16 years of age.
  2. All Assistant Officials who are under 18 years of age must have obtained parental agreement to carry out the duty and the signing-on signature must be countersigned by the person responsible for the official at the event.
  3. When using the services of officials under 18 years of age for any duties at any event special attention must be given to any risks which may be associated with the duty, and to the previous experience of the official.

**SECTION 14 GENERAL TECHNICAL SPECIFICATIONS****14.1 PROTECTIVE CLOTHING**

During practice and racing riders and passengers must wear the following clothing and footwear:

1. A complete all in one leather suit of at least 1.2mm in thickness on all parts of the suit. Suits zipped together at the waist are not permitted. Non-leather material may be used if it meets with the following requirements.
2. The following characteristics of the material must be at least equivalent to 1.5mm of cowhide (not split leather)  
Fire retardant quality – Resistance to abrasion – Coefficient of friction against all types of asphalt – perspiration absorbing qualities – Medical test – non toxic and non allergenic – Fabric of a quality that does not melt. It must be non-flammable.
3. The following areas must be padded with at least a double layer of leather or enclosed plastic foam at least 8mm thick:  
Shoulders, elbows, both sides of the torso and hip joint, the back of the torso, knees.
4. Competitors must wear complete undergarments if they use suits which are not lined. Suitable undergarments may be of the Nomex type, they may also be of silk or simply cotton. Synthetic materials which may melt and which could harm the riders skin in an accident are not allowed, neither for the suit nor for the undergarments.
5. Competitors footwear must be of leather or an approved substitute material and of a minimum height of 200mm to provide, with the suit, complete protection (i.e. no exposed areas.)
6. Competitors must wear leather protective gloves.
7. The use of metallic material in any item of clothing or personal protection which regularly comes into contact with the track is prohibited (i.e. metal studs in knee sliders, boots etc.).

## 14.2 HELMETS

Helmets bearing the current ACU gold stamp and in sound condition and properly fitted must be worn by all riders and passengers while practising and racing. Overseas riders may use helmets as approved by their own FMN.

## 14.3 IDENTIFICATION DISCS

While practising and racing, riders and passengers are required to wear an identification disc around the neck, attached by a material approved by the technical officer. Thin chains should be avoided. The disc must be permanently marked with the wearer's full name and date of birth.

Identification discs shall be of a durable material, circular in shape, between 20mm and 25mm in diameter and having rounded edges with no sharp or ragged projections.

## 14.4 BODY JEWELLERY

It is recommended that any body piercing studs, ring etc. are removed.

# SECTION 15 GENERAL TERMS & REGULATIONS FOR MOTOR SCOOTERS

## 15.1 INTRODUCTION

These Regulations specify the requirements for construction of Motor Scooters for use in Road Races, Sprints and Hill Climbs.

## 15.2 TERMS & DEFINITIONS

1. Machine(s): A term used to refer to a permitted Solo Motor Scooter within the confines of these Standing Regulations.
2. Solo Motor Scooters: Except as specially authorised by the ACU, a 'Solo Motor Scooter' is a two wheeled motor vehicle on which the driver may sit on a seat and have free and open space in front of the seat for passage of his legs, with the following additional characteristics:
  - a). The minimum size of the space forward of the seat must be a regular or irregular trapezium with its top measuring 250mm along a line projected forward from the top of the seat parallel with a line drawn through the centres of the two road wheels and measured from the front extremity of the seat towards the steering column. Its depth vertically downwards must not be less than 250mm and its base not less than 100mm. The minimum space must be clear at all times of any obstruction of a permanent or temporary nature except where any such obstruction was fitted as manufacturer's original equipment (e.g. Vespa 90SS, Gilera Runner, Gilera DNA).
  - b). The maximum permitted wheel rim size, where fitted as original equipment, shall not exceed 356mm/14 inches.
  - c). It shall have been manufactured by a manufacturer recognised by the ACU and not less than one hundred machines of that type equipped with the manufacturer's original or optional equipment and must have been made and sold in the U.K. An Accountant's Certificate may be required as proof.
3. Engine: For the purpose of these regulations, the 'Engine' is deemed to comprise of the cylinder barrel, crankcase, side-casing and all internal components within the units.
4. Forced induction: An engine shall be considered as having 'Forced Induction' when in respect of one engine cycle the total volume of induced gaseous mixture exceeds the capacity of the measured cylinder (measured geometrically).
5. Original Equipment: As fitted by the machine manufacturer, as it left the production factory.
6. Aftermarket Parts & Accessories: Parts manufactured by recognised business's intended solely for motor scooter use.
7. Homologated/Homologation: Refers to the approval process 'commercially available parts' may



have to go through before a Solo Motor Scooter can utilise them before competition use in any meeting or event sanctioned by both the ACU and BSSO.

8. Commercially Available: All homologated/aftermarket parts must be commercially available to the general public either direct from manufacturers/distributors stock or to order.
9. Standing Regulations: ACU National Sporting Code 3.02
10. Supplementary Regulations: ACU National Sporting Code 3.03

### 15.3 GENERAL REGULATIONS

For the purposes of these Regulations and any events for which they are applicable, the regulations detailed herein section 15 are applicable in the first instance to ALL Solo Motor Scooters classes and machine types. Additional requirements or exclusions apply where they are specifically stated otherwise within a category of Solo Motor Scooter 'class specific' regulations.

For all regulation sections, in cases of doubt, misworded entries, grey areas, contradiction, exceptions or intent not expressed herein, the Technical Committee will refer to and uphold the 'Spirit of the Class' at all times.

NOTE: All shown Regulations must be cross referenced with the BSSO website ([www.scooterracing.org.uk](http://www.scooterracing.org.uk)) for consideration of any subsequent updates not contained herein.

### 15.4 INCLINATION

It must be possible for the motor scooter, not being loaded, to be inclined to an angle of 26° from the vertical without any part of it, other than the tyres, coming into contact with the ground.

### 15.5 ENGINE POSITION

The engine must be positioned in the frame in an identical position and manner to that of the original motor scooter.

### 15.6 COMPOSITE OR MONOCOQUE CONSTRUCTION

The use of composite (i.e. skinned bonded honeycomb) or Monocoque construction is forbidden in all classes with the exception of those parts of the Motor Scooter which were so constructed as part of the manufacturer's original specification.

### 15.7 STEERING

Steering shall be through the front wheel only by means of non-adjustable handlebars securely fixed to the steering head of the motor scooter and having a MINIMUM overall width of 510mm.

The angle of rotation of the handlebars, measured horizontally at ground level to each side of a straight ahead position, must be a MINIMUM of 20° and steering stops must be fitted to limit angular movement to a MAXIMUM of 65° and/or to allow a MINIMUM clear space of 25mm between the handlebars and any part of the bodywork, tank or similar attachments.

Whatever the position of the handlebars and suspension no part of the front wheel or forks must pass within 20mm of any bodywork or streamlining.

### 15.8 USE OF TITANIUM & OTHER EXOTIC MATERIALS

The use of TITANIUM and similar "exotic" metals is forbidden in the construction of the frame, front forks, handlebars/handlebar casing, swinging arm and wheel spindles in all classes.

### 15.9 MIRRORS

Rear view mirrors of any material are forbidden in all classes.

### 15.10 FRICTION LININGS, DISC PADS AND BRAKE HOSES

May be changed to allow for aftermarket, higher performance materials to be used.

**15.11 STAND/SIDE STAND MOUNTING LUGS**

May be removed.

**15.12 THROTTLE CONTROLS**

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

**15.13 CONTROL LEVERS**

All handlebar levers must be ball-ended. The ball-end must be at least 19 mm in diameter and be a permanently fixed integral part of the lever. Each control lever (both hand and foot) must be mounted on an independent pivot. Handlebar grips must be securely fixed to the ends of the handlebars.

**15.14 PROJECTIONS**

There shall be as few sharp projections as possible. Where there are projections, they must be covered in such a way as to prevent injury, occasioned by accidental contact, to the rider. All tubular ends must be securely fitted with rounded ends.

**15.15 GLASS**

All glass in lights must be removed and on instruments securely taped to retain it in place in the event of breakage. Where any glass is removed the exposed aperture must be securely covered or in-filled to retain the original appearance.

**15.16 AIR INTAKES**

Cooling air intakes, where permitted, must be so constructed that there is no forward projection/protrusion to catch or foul in the event of an accident.

**15.17 FUEL**

Fuel must be from a roadside station forecourt with a maximum 100 octane rating. AVGAS 100 LL (low lead version only) can also be used with all relevant taxes paid. The use of specialist drum fuel, power/octane boosters or any kind of fuel additive other than two-stroke oil, is specifically prohibited. Fuel samples may be taken for analysis.

**15.18 OIL DRAIN/FILLER PLUGS AND CATCH TANKS**

All oil drain, level and filler plugs must be drilled and wired securely in position. Any oil breather pipe fitted must discharge into a catch tank mounted in an easily accessible position and having a minimum capacity of 500 ml. The catch tank must be empty at technical inspection.

**15.19 ELECTRICAL SYSTEMS AND BATTERY**

All machines must be fitted with an easily accessible ignition switch mounted in the vicinity of the handlebar/headset and within a radius of 200mm of the centre line of the top of the fork stem. Switches must be of a positive locking type in both the on and off positions and when in the "OFF" position must not allow the engine to run. The "OFF" position of all switches must be prominently marked in capital letters of at least 10mm in height with dark coloured letters on a light background and vice versa. Any batteries fitted must be of a sealed type.

**15.20 EXHAUSTS**

Exhaust systems must fulfil all current ACU requirements concerning noise control. The systems must be constructed in a manner not prejudicial to the safety of the rider or any other competitor or official and be mounted in a safe manner. Exhaust fumes must not be discharged in a manner as to raise dust, foul the tyres or brakes or inconvenience any other rider. The furthest extremity of any exhaust pipe must not project beyond any part of the machine or its bodywork or streamlining; nor

must the end of any exhaust pipe point upwards or downwards at an angle greater than 10° from the horizontal

### 15.21 LIQUID COOLING

Liquid cooling, where allowed, can only be through 'neat' water, no additives or inhibitors are allowed.

### 15.22 TYRES

Only treaded tyres designed manufactured as suitable for use on motor scooters will be permitted. At pre-competition technical inspection all tyres must have a minimum depth of tread of 1.6 mm remaining across the entire original tread area. The use of slick's, recut moulded tyres or any non-skid attachment to tyres is prohibited.

### 15.23 COMPULSORY ALTERATIONS

The following alterations must be made:

- a) Kick start pedals must be removed.
- b) Centre, side and prop stands, luggage carriers, mirrors and rear registration plates must be removed.
- c) Where an oil/fuel breather pipe is fitted the outlet must discharge into a catch tank located in an easily accessible position and which must be emptied before the start of the race.
- d) Engine bore & stroke must be clearly displayed in minimum 10mm high lettering and be positioned on the right hand side rear competition number plate or to the lower right hand side panel.

## SECTION 16 SOLO MOTOR SCOOTER REGULATIONS – GEARED & AUTOMATIC CLASSES

### 16.1 Geared Standard Class (Groups 3 & 4)

### 16.2 Geared Special Class (Groups 5 & 6)

### 16.3 Production Evo Class

### 16.4 Automatic Standard Class (Group 10)

### 16.5 Automatic Special Class (Groups 5a & 6a)

### 16.1 'GEARED STANDARD CLASS' REGULATIONS (GROUPS 3 & 4)

For Standard Class Machines the MAXIMUM PERMITTED engine capacity is up to 160cc in Group 3 and up to 211cc in Group 4. Any modifications made must not prejudice the safety of the rider, any other competitor or official. General Regulations apply and permitted modifications for the parts specified for each Class are detailed below:

#### 16.1.1 FRAME & FRONT FORKS

The frame and front forks must have originated from the same Motor Scooter type and the main structure of the frame & forks shall remain as per the manufacturer's original specification, retaining its original geometry and mounting points for engine and suspension. Altering the rake, inclination, length and/or other dimensions is prohibited. Frame bracing is prohibited in the standard classes.

#### 16.1.2 BODYWORK AND LEGSHIELDS

The Motor Scooter shall have a body and legshields in the form of an apron and footboards of the platform type as per the manufacturer's original machine specification. All detachable external panel work, e.g. side panels, legshields, footboards and front mudguards, which form part of the manufacturer's original specification, shall be securely fixed in place. Side panels, front mudguards and the top section of the headlight & handlebar casing may be replaced with properly manufactured components of similar appearance and structural strength to the original specification.

Minor modifications to panelling will be permitted to allow the fitting of larger carburettors, footrests, exhausts, and similar, but trimming or reducing and/or adding to original specification dimensions are prohibited. For the avoidance of doubt any such trimming modifications must not exceed beyond 10mm of the required aperture to allow for the fitment of these items. [See Guidance Note]

The tail-light unit and headlight and handlebar casings shall remain in their original position although glass must be removed.

### **16.1.3 HEADLIGHT & HANDLEBAR CASING**

Any shape of handlebar casing is permitted provided that it is manufactured to the original manufacturer's specification for the same machine type and that it is fitted in the original mounting position only.

No further deviation relating to the angle of inclination or similar will be permitted i.e. aftermarket dropped handlebars. As such alterations to cast handlebar assemblies are prohibited except for Lambretta Vega and Luna type machines where lowering of the handlebar grips is permitted providing the grips remain in the same horizontal and vertical planes relative to the ground and they are fixed to the original casting base. [See Guidance Note]

### **16.1.4 SEATING**

Any type of seating may be used provided it is properly padded and securely fitted in place, but it shall not extend beyond the rear of the bodywork of the machine unless so positioned in the manufacturer's original specification. No part of the seat must be more than 900mm above the ground when the motor scooter is not loaded.

### **16.1.5 MUDGUARDS**

For Standard Class Machines mudguards are not compulsory except where they form part of the external bodywork and are required to be fitted in accordance with the Regulation pertaining to bodywork above. Where optional mudguards are fitted they must be adequate for the purpose, properly and safely constructed, and securely mounted.

### **16.1.6 WHEELS & BRAKING**

All wheels and hubs must be of metal construction and the rim diameter must not exceed 407mm. Tyres must not deviate from original specification section by more than 13mm.

For Standard Class Machines wheels must either be as manufacturer's original specification including Tino Saachi alloy split rims, or homologated AF/SIP tubeless rims.

### **16.1.7 FOOTRESTS & FOOT CONTROLS**

Footrests, which may comprise the original platform, must be provided and be so designed and positioned that easy access is available to all control pedals. Riders must adopt a position with their feet on the footrests or they will be disqualified.

Proprietary (i.e. branded aftermarket) and self-manufactured rear sets are acceptable for use on Standard Class machines. Any such item, whether off the shelf or self-manufactured will be assessed for safety and operability during technical inspection. Affected bodywork may be adapted to allow their safe fitting and operation – any such alteration to bodywork is limited to a maximum of 10mm from the Footrest and/or foot control, allowing for suspension travel where appropriate. [See Guidance Note]

The related control cable may be changed to allow for quick release and/or maintenance and the method of fitting may be changed to provide safer retention i.e. replacing the circlip style fitting used on later machines with a tapped bolt solution.

Where riders chose to retain the original manufacturer positioning for foot controls these shall remain as per the original manufacturer's specification and positioning.

### **16.1.8 STREAMLINING**

For Standard Class Machines the provision of streamlining is prohibited.

### **16.1.9 SUSPENSION, COMPRESSION SPRINGS AND DAMPING**

For Standard Class Machines all suspension links, legs, yokes, swing arm or other similar component of the front and/or rear suspension assembly shall remain as manufacturer's original specification. Springs, dampers and "suspension units" may be replaced with non-original components but must be mounted in secure manner identical to that of the original component for the marque/model. Anti-Dive systems are permitted for use in Solo Standards Classes.

### **16.1.10 BRAKES**

The braking system must consist of two efficient brakes operated independently, one on each of the two road wheels.

For Standard Class Machines brakes must be as manufacturer's original specification except that the method of operation may be changed. The use of single outboard front disc brakes are permitted for use in all standard classes providing that the hub from the original manufacturers model/marque is retained.

### **16.1.11 INDUCTION SYSTEMS**

Carburettors may be altered or replaced. For Standard Class Machines any form of carburation may be used but changes to the method of induction (i.e. use of reed or rotary valves unless originally fitted) are not permitted. The use of fuel injection or forced induction is prohibited.

### **16.1.12 EXHAUST SYSTEMS**

For Standard Class Machines exhaust systems must be basically fitted in the standard position and follow the original routing. The direction of the Header Pipe exit from the cylinder and routing may be altered to allow for maximum ground clearance. However, the exhaust shall exit following the manufacture's original side routing of the machine providing that the tailpipe does not exceed beyond the rear most extremity of the frame. [See Guidance Note]. The use of variable exhaust valves on expansion systems is prohibited.

### **16.1.13 FUEL TANK**

For Standard Class Machines the fuel tank shall remain as the manufacturer's original specification and position.

All fuel tanks must be provided with a securely fitted filler cap fitted in such a way that it does not protrude from the bodywork and cannot be torn off in an accident. A fuel feed tap must be fitted in an easily accessible position and be prominently marked to indicate the "OFF" position. Any fuel tank breather pipe must be fitted with a non-return valve and must discharge into a leak-proof catch tank having a minimum capacity of 500 ml, which must be empty at technical inspection. All fuel pipes must be adequately secured.

### **16.1.14 ENGINE AND DRIVE UNITS**

For Standard Class Machines: The engine and drive unit must have originated from the same type of motor scooter as the frame and the drive must be transmitted to the road through the rear wheel of the motor scooter. The unit shall be properly and safely finished with all necessary studs, nuts, bolts and washers securely fitted. There shall be no evidence of oil leaks.

### **16.1.15 CYLINDER HEAD(S)**

For Standard Class Machines Liquid cooling of the cylinder head(s) is not permitted unless it formed part of the manufacturer's original specification for the engine used. Replacement cylinder

heads are permitted for use in the standard class providing that the method of fixing is as per the manufacturer's original specification.

#### 16.1.16 CYLINDER BARREL(S)

For Standard Class Machines cylinder barrel(s) must be configured as manufacturer's original specification (though not necessarily produced by the original manufacturer) in regard to stud mounting, shape, size, configuration, position and number of ports, induction method, external appearance, materials and method of manufacture, except that:

- a) Ports may be enlarged, but they may not be bridged nor the cylinder barrel(s) slotted. Their position may not be changed, additional ports may not be provided and the provision of additional material on either the inside or the outside of the barrel is prohibited.
- b) The bore size of a cylinder may be increased by not more than 10mm.
- c) The cylinder length, between the base gasket and the head gasket faces may be reduced by not more than 10mm.
- d) Sleeving will only be permitted in order to return the barrel(s) to their original bore specification. Sleeving may not be used to alter the number, position or configuration of ports, or to reduce the bore size to less than its design dimension.
- e) The use of chrome, nicasil or any similar hard facing material to form the cylinder bore is prohibited except where provided as part of the manufacturer's original specification or standard equipment of a homologated cylinder.
- f) The total thickness of any packing piece(s) or gasket(s) used between the base of the cylinder and the crankcase must not exceed 10mm. The use packing pieces may as a means of increasing the available port area is strictly prohibited.

The use of homologated remanufactured performance cylinders are now permitted. Those currently homologated for use are as follows:

Vespa machines in Standard Class 3 & 4 – Polini, Parmakit, Quattrini M1, Pro Cup, Falc., Malossi and Pinasco. All cylinders must continue to use the original casing induction method, no reed valves are permitted. The use of twin-induction cylinders are forbidden.

Lambretta machines in Class 4 – Mugello Cylinders V1 – V4, AF Rapido Cylinders, MB BGM Cylinders, Casa Cylinders. All cylinders must continue to use the original induction method, no reed valves are permitted.

#### 16.1.17 CRANKCASE

Crank casings must be as manufacturer's original specification, except that:

- a) Modifications may be made to permit the use of a larger section tyre subject to the limitations defined within these regulations below.
- b) Modifications may be made to any existing crankcase porting except that the provision of additional material on either the inside or the outside of the casing is prohibited.
- c) Notwithstanding the exception in 'b' above, the provision of additional material to effect genuine repairs to a crankcase will be permitted provided that the final dimensions and appearance do not exceed the manufacturer's original specification.

#### 16.1.18 CRANKSHAFT

The crankshaft shall remain as manufacturer's original specification, except that:

- a) The ignition mounting may be altered.
- b) Stroke size may not be altered except that when a crankshaft designed for use in any other motor scooter by the same manufacturer is used; the crankshaft stroke shall be as originally specified for the crankshaft employed.
- c) Modifications may be made in respect of inlet timing.
- d) The crankshaft may be "padded" but must originate from a motor scooter engine produced by the same manufacturer as the engine unit in use.

- e) The connecting rod may be altered or changed.
- f) The crankshaft may be altered to accommodate the use of modified connecting rod assemblies.

### 16.1.19 GEARCASE

The gear casing must be as manufacturer's original specification.

### 16.1.20 GEARBOX & GEARING

The gearbox must be as manufacturer's original specification for the engine type, except that the original gear cluster may be altered to provide alternative ratios. The thickness of the original loose gears may be altered but the original gear teeth must remain. The number of ratios must remain unchanged. The use of non-standard ratios within the Standard Classes is strictly prohibited. Remanufactured Gear Box Components are permitted providing that they comply with this regulation.

**Lambretta** – Primary drive sprockets and chain may be changed to allow alternative final drive ratios to be achieved. However, the final drive specification must remain as standard in respect of width and pitch utilising only standard Lambretta chain lengths and standard Lambretta clutch bell/crank sprocket sizes/ratios. For the avoidance of doubt the use of alternative chain lengths, or front and rear sprocket ratios outside of the original available Lambretta range is strictly prohibited.

**Vespa Small Frame** – The use of alternative Primary Gear sets is allowed, as long as the particular items used are "Commercially Available" to all competitors. A mix of components in the gearbox is allowed, as long as they are "Commercially Available" to all competitors.

**Vespa P Range & Large Frame Machines** – The use of alternative Primary Gear sets is allowed, as long as the particular items used are "Commercially Available" to all competitors. A mix of components in the gearbox is allowed, as long as they are "Commercially Available" to all competitors.

### 16.1.21 GUIDANCE NOTES

1. Minor modifications to panelling will be permitted to allow the fitting of larger carburettors, footrests, exhausts, and similar but trimming or reducing and/or adding to original specification dimensions are prohibited. For the avoidance of doubt any such trimming modifications must not exceed beyond 10mm of the required aperture to allow for the fitment of these items.
  - a) Carburettor – A hole in the panel is permissible to allow for improved air intake or the fitting of a suitable bell mouth extension/air filter. The size of this hole must not exceed 10mm beyond the outside diameter of the Carburettor and/or the bell mouth extension/air filter.
  - b) Footboards – Trimming to allow for the fitment of the exhaust and or rear sets is permissible. The extent of trimming must not exceed 10mm beyond that required allowing for the safe and foul free fitting of the component within the confines of the maximum suspension travel.
  - c) Side Panels – Trimming to allow for the fitment of the exhaust and or rear sets is permissible. The extent of trimming must not exceed 10mm beyond that required allowing for the safe and foul free fitting of the component within the confines of the maximum suspension travel
2. Any shape of handlebar casing is permitted provided that it is manufactured to the original manufacturer's specification and that it is fitted in the original mounting position only. As an example, any model of Lambretta Series 3 headset would be permissible on a similar Series 3 machine. For the avoidance of doubt fitting a Series 3 Li or SX style handlebar/headset assembly to a Series 3 GP would be allowed. But the fitting of a Series 2 or Series 1 assembly to a Series 3 machine and vice versa would not be permitted.
3. For Standard Class Machines exhaust systems must be basically fitted in the standard position and follow the original routing. The direction of the Header Pipe exit from the cylinder and routing may be altered to allow for maximum ground clearance. The exhaust shall exit

following the manufacture's original routing to the right hand side of the machine. As an example, the exhaust on a Full Frame Series 1-3 Lambretta may follow a routing away from the cylinder towards the rear of Moto Scooter and on the left hand side of the machine when sitting in a forward facing position. The pipes routing shall then follow the original direction of the exhaust as per the manufacturers design for road going machines. The exhaust shall exit following the manufacture's original routing to the right hand side of the machine.

## 16.2 'GEARED SPECIAL CLASS' REGULATIONS (GROUPS 5 & 6)

For Special Class Machines the MAXIMUM PERMITTED engine capacity is up to 160cc Group 5 and up to 260cc Group 6. Any modifications made must not prejudice the safety of the rider, any other competitor or official. General Regulations apply and permitted modifications for the parts specified for each Class are detailed below:

### 16.2.1 FRAME & FRONT FORKS

The frame and front forks must have originated from the same Motor Scooter type and the main structure of the frame & forks shall remain as per the manufacturer's original specification, retaining its original geometry and mounting points for engine and suspension. Altering the rake, inclination, length and/or other dimensions is prohibited with the exception that the steering column tube may be shortened and the method of compression/suspension altered.

The main frame member extending from the steering head to the rear suspension mounting, and including the original engine mountings, must remain unaltered unless the Motor Scooter was originally manufactured so as to contravene this Regulation.

Any "non-original" portions of the main frame tube or steel monocoque frame must be constructed of good quality seamless drawn steel tube of a circular or non-circular section, welded or brazed together. If circular, the outside diameter shall not exceed 100mm, if non-circular, the maximum cross section shall not exceed 100mm measured at right angles to any flat face. The use of electrode metal arc welding is not recommended.

Aluminium and/or other alternative materials of a comparable strength and durability may be used to construct a replacement frame loop and/or seating position but must remain consistent with the regulations outlined in Solo Motor Scooter Characteristics, Streamlining, Composite or monocoque construction, Use of Titanium or other 'exotic' materials unless the Motor Scooter was originally manufactured so as to contravene this Regulation.

### 16.2.2 FRAME BRACING

Bracing to the frame of Group 5 & 6 Special Class machines in the area between the fork stem tube and frame loop is permitted for use in these classes only. However, nothing can be added to it or mounted on it. Specifically, all braces must be removable and the machine must function normally without it fitted.

Braces may only be of single tube or bar made of steel or aluminium, with a maximum diameter of 40mm, securely fitted in a manner (as outlined below) so as not to prejudice the safety of the rider or others.

**Lambretta** – A line drawn through the centre of the brace along its axis must pass through a point no further than 50mm vertically from the weld joint between the frame and steering tube and the rear must be within the area that would be covered by the "bridge piece" on a standard machine.

**Vespa (Large & Small frame)** – A line drawn through the centre of the brace along its axis must pass through a point within the curve described by the transition from the frame to the steering column. The rear must be within 50mm of the joint between the top of the horizontal frame tube pressing and the rear body.

### 16.2.3 BODYWORK AND LEG SHIELDS

Any form of bodywork may be used subject to the regulations for Solo Motor Scooter Characteristics,



Streamlining, Composite or monocoque construction and Use of Titanium and/or other exotic materials.

#### **16.2.4 HEADLIGHT & HANDLEBAR CASING**

Any type of replacement handlebar casing/assembly is permitted provided that it is fitted securely fixed to the steering head of the Motor Scooter. The angle of the handlebar may be adjusted to suit the riders preferred position.

#### **16.2.5 SEATING**

Any type of seating may be used provided it is properly padded, securely fitted in place and no part of the seat is more than 900mm above the ground when the motor scooter is not loaded.

#### **16.2.6 MUDGUARDS**

For Special Scooters mudguards are not compulsory. Where fitted they must be adequate for the purpose, properly and safely constructed, and securely mounted.

#### **16.2.7 WHEELS & BRAKING**

All wheels and hubs must be of metal construction and the rim diameter must not exceed 407mm. For Special Class Machines wheels must either be as manufacturer's original specification including Tino Saachi alloy split rims, or homologated AF/SIP tubeless rims.

#### **16.2.8 FOOTRESTS AND FOOT CONTROLS**

Footrests must be provided and be so designed and positioned that easy access is available. Riders must adopt a position with their feet on the footrests or they will be disqualified. Aftermarket and self-manufactured rear sets are acceptable for use. Any such item, whether off of the shelf or self-manufactured will be assessed for safety and operability during technical inspection.

#### **16.2.9 STREAMLINING**

For Special Class Machines any streamlining fitted must comply with the following:

- a) The streamlining must be easily detachable for technical inspection and be so designed and fitted to allow complete liberty of movement to the rider when the vehicle is in motion and when getting on and off the vehicle, without any part of it having to be displaced.
- b) Aerofoils or spoilers are not permitted.
- c) The front road wheel, with the exception of the tyre, must be visible from either side.
- d) The extreme forward part of the streamlining must not project forward of a vertical line drawn 50mm in front of the front wheel axle.
- e) The extreme rearward part of the streamlining must not project rearward of a line drawn vertically at 330mm to the rear of the centreline of the axle of the rear wheel.
- f) Normal mudguards are not considered as streamlining.
- g) It must be possible to see the rider completely with the exception of the forearms, in the normal driving position, from either side and from above.
- h) It is forbidden to use any transparent material to avoid the application of these Regulations.
- i) No part of the seat or saddle or anything to the rear of these must be more than 900mm above the ground when the motor scooter is not loaded.
- j) Whatever the position of the handlebars, there must be a clear space of at least 25mm between the streamlining and the extremities of the handlebars, including any attachments thereto, and a clear space of at least 20mm between the streamlining and any other part of the steering mechanism or front wheel.

#### **16.2.10 SUSPENSION, COMPRESSION SPRINGS AND DAMPING**

May be changed providing the fitting is secure.

### 16.2.11 BRAKES

The braking system must consist of two efficient brakes operated independently, one on each of the two road wheels.

### 16.2.12 INDUCTION SYSTEMS

Carburettors may be altered or replaced. For Special Scooters any form of induction system may be used with the exception of forced induction which is prohibited.

### 16.2.13 EXHAUST SYSTEMS

Any exhaust type is permissible however, for Special Scooters where high-level exhaust systems are used they must have an adequate heat shield fitted to prevent contact with the systems by the rider in a normal riding position and also by the rider or others in the event of an accident.

### 16.2.14 FUEL TANK

For Special Scooters fuel tank(s) must be soundly constructed, entirely of metal. All fuel tanks must be provided with a securely fitted filler cap fitted in such a way that it does not protrude from the bodywork and cannot be torn off in an accident. A fuel feed tap must be fitted in an easily accessible position and be prominently marked to indicate the "OFF" position. Any fuel tank breather pipe must be fitted with a non-return valve and must discharge into a leak-proof catch tank having a minimum capacity of 500 ml, which must be empty at technical inspection. All fuel pipes must be adequately secured.

### 16.2.15 ENGINE AND DRIVE UNITS

For Special Class Machines: The engine and drive unit must have originated from the same type of motor scooter as the frame and the drive must be transmitted to the road through the rear wheel of the motor scooter. The unit shall be properly and safely finished with all necessary studs, nuts, bolts and washers securely fitted. There shall be no evidence of oil leaks.

### 16.2.16 CYLINDER HEAD(S)

For Special Class Machines the cylinder head may be changed and Liquid cooling of the cylinder head(s) is permitted providing that the method of fixing is as per the manufacturer's original engine specification. Liquid cooling can only be through neat water, no additives or inhibitors are allowed.

### 16.2.17 CYLINDER BARREL(S)

In regard to port shape, size, configuration, position and number of ports, and external appearance, materials and method of manufacture, the cylinder barrel(s) must have originally conformed to the manufacturer's original specification (though not necessarily produced by the original manufacturer). For Special Class Machines the following Homologated Kit Barrels are permitted for racing use – AF Rayspeed RB & TS1 Cylinders, Monza, Super Monza, Harry Barlow ProKit, Casa Lambretta Reed Valve kits.

Permitted alterations, additions and limitations are as follows:

- a) Ports may be enlarged
- b) Ports may be bridged and the position of the ports may be changed
- c) Additional ports may be added and the provision of additional material on either the inside or the outside of the barrel is also permitted to allow for the area to be enlarged
- d) The bore size of a cylinder may be increased by no more than 10mm.
- e) The cylinder used must have been originally designed for the engine type, must retain the original method and position of fitting and both the cylinder and the crankcase must retain the centres of the original stud holes used for bolting the cylinder to the crankcase. For the avoidance of doubt the cylinder must retain the position of the original stud configuration for the fitment of the cylinder to the crankcase and be solely secured by them.

- f) The crankcase to cylinder gasket face must be parallel to that of the original crankcase.
- g) Liquid cooling of the Cylinder is permitted for use in the Specials Class. However it must be possible to identify the origin of the cylinder. For example, the manufacturer's name or model cast into the outer wall of the cylinder and/or port configuration. For the avoidance of doubt liquid cooling, or any other modification, to the cylinder will not be permitted if the modification is so extensive as to preclude identification of the origin of the cylinder. Liquid cooling can only be through neat water, no additives or inhibitors are allowed.

### 16.2.18 CRANKCASE

The crank casing must retain the original mounting points for support within the frame and the principal external dimensions must remain as manufacturer's original specification.

Any modification to the crank casing to permit usage of modified crankshaft assemblies will not be permitted if the modification is so extensive as to preclude the fitting of the standard crankshaft as produce by the original manufacturer of the engine unit used.

The use of remanufactured crank casings are permitted for use in the Special Classes; Quattrini & SIP for the Vespa Small Frame and Pinasco Master & Slave for the P-range series.

For Lambretta's, the [www.lambretta.it](http://www.lambretta.it). Misano Cast Crankcase and the Casa Lambretta BSG Billet casings. For the avoidance of doubt these casings must retain the original stud configuration of the requisite machine and be commercially available.

### 16.2.19 CRANKSHAFT

Any type of crankshaft may be used subject to the limitations specified under the Crankcase regulation above.

### 16.2.20 GEARCASE

The gear casing must be as manufacturer's original specification

### 16.2.21 GEARBOX & GEARING

Modifications may be made to the number of drive ratios, the ratios themselves and to the gears.

Alterations to the gear casing will not be permitted if the modification is so extensive as to preclude the fitting of a standard gear set as produced by the original manufacturer of the engine unit used.

The use of 5 Speed Gearboxes are permitted for use in the Specials Class providing that they comply with this Standing regulation.

The Primary drive sprockets and chain may be changed to allow any combination of alternative final drive ratios to be achieved.

## 16.3 'PRODUCTION EVO CLASS' REGULATIONS

Production Evo Class regulations are divided into TWO marques; Lambretta (16.3.1 to 16.3.15) & Vespa (16.3.16 to 16.3.30). General Regulations apply and permitted modifications for the parts specified for each Class are detailed below:

### 16.3.1 LAMBRETTA MODELS

Any Series 3, GP, SX or LI model is allowed of Italian, Indian or Spanish origin.

### 16.3.2 BODYWORK

Standard bodywork with no trimming of panels except for hole in the side panel for carburettor and a small cut to rear of the r/h running board for clearance of the exhaust tail pipe. Also, a small hole can be made to the headset and/or the mudguard to assist safe routing of the front brake line. Centre stand and splash plate must be removed.

Metal or Fibreglass panel work is allowed, Fibreglass legshields are not allowed.

No dropped handlebars allowed but any series 3 standard headset can be used.

No light lenses front or rear and headlight opening must be blanked off. Rear light housing must be in position.

19mm Ball end brake and clutch levers must be fitted.

### **16.3.3 SUSPENSION**

Any Lambretta specific rear shock that is commercially available. It must be mounted in the standard position. e.g. no movement of original rear suspension fixing positions. Front forks as original internally sprung with uprated springs and bushes. Any commercially available external front dampers allowed. Steering dampers are not allowed.

### **16.3.4 BRAKING**

Rear brake as original with commercially available shoes. Rear brake pedal must remain in the standard position.

No foot pegs, foot rests or rear-sets allowed. Front brake as original drum or inboard disc.

Conversion of inboard to hydraulically operated piston is allowed. Alternatively, an external single hydraulic disc (Scoots RS type) with drum style hub can be used. Single outboard only is permitted, No anti dive allowed.

### **16.3.5 ENGINE**

Standard 150 engine casing with standard mag flange. No welding to either and no pack plate between mag housing and engine casing. No material may be removed from the mag housing or engine casing. No matching of transfers allowed. Bump stop to remain intact. Rubber engine mounts may be uprated. Side casing with kick-start removed and welded up, or pedal removed and rubber cap secured over exposed kick-start shaft end. No packing plate allowed between side casing and engine.

### **16.3.6 CYLINDER KIT**

Type specific AF.Raypeed RB20 performance kit and cylinder head in standard form with no polishing or tuning allowed. Only gaskets supplied with the kit can be used. No pack pieces.

Standard Vertex or Wossner piston can be used. No machining or modifications to piston windows allowed.

Standard inlet with standard reed block. Only the use of standard Vetronite reed petals, as supplied with the kit is permitted.

### **16.3.7 CRANKSHAFT**

Any 58mm Stroke crankshaft (NOT FULL CIRCLE) with 116mm con-rod. Big end pin can be Tig welded in position.

### **16.3.8 IGNITION & FLYWHEEL**

Ignition on/off positions to be clearly marked.

Road stator plate for electrics with flywheel in use. Standard weight, intermediate or lightened flywheel may be used. No advance/retard mechanisms for ignition timing may be used. Ignition timing must be fixed. Original fan cowling and cylinder cowling must be in place for cooling. Centre of fan cowling may be removed. No additional cooling scoops or ram cooling allowed.

### **16.3.9 EXHAUST**

Type specific Franspeed RB race pipe specially designed for this class.

### **16.3.10 CARBURETTOR**

Type Specific – Dellorto VHSB 30 round slide, Dellorto VHSA 30 flat slide or Dellorto 30 PHBH round slide.

No polishing. No Power jet or modifications to standard carb. No force induction, or ram pipes to be fitted to carb.

Use of a thumb choke is permitted.

### **16.3.11 CLUTCH**

Any commercially available standard or Cassette clutch allowed, 4, 5, 6 or 7 plates with cable action as original. No chaincase packer or side casing modifications allowed.

### **16.3.12 GEARBOX & DRIVE**

Type Specific – only SIL GP200 (Indian) gearbox is allowed.

Front & rear sprockets sizes may be altered to suit rider and circuit. However, the use of alternative chain lengths, or front and rear sprocket ratios outside of the original available Lambretta range is strictly prohibited. An uprated chain tensioner is allowed.

### **16.3.13 TYRES**

Type Specific – only the following 3.50 × 10" tyres brands can be used and must be fitted to standard width Lambretta split or tubeless rims:

Dry Tyres: Sava/Mitas MC31 or MC35, Continental Twist Race

Wet Tyres: Sava/Mitas MC20 road and race compounds, Continental Move or Michelin City Winter Grip

### **16.3.14 GAUGES & CONTROLS**

Only a rev-counter is allowed, no other monitoring devices can be fitted. Any non rev-counter wiring must be taped together as to deny use.

Throttle position must remain as standard, operated only through the original throttle tube mechanism and must be self-returning. The cable pulley wheel however, can be changed to aid a quicker response.

### **16.3.15 FUEL TANK**

The tank shall remain as the manufacturer's original specification and position. The tank must be provided with a securely fitted filler cap fitted in such a way that it does not protrude from the bodywork and cannot be torn off in an accident. A fuel feed tap must be fitted in an easily accessible position and be prominently marked to indicate the "OFF" position. All fuel pipes must be adequately secured.

### **16.3.16 VESPA MODELS**

Any Vespa PX type or Small Frame is allowed of Italian, Indian or Spanish origin.

### **16.3.17 BODYWORK**

Any model PX, and Small Frame Vespa. Bodywork as manufacturer's original standard appearance. Handlebars to be as original specification, no drops.

Metal panels or fibreglass panels may be used, with the exception of no fibreglass legshields.

No light lenses front or rear and headlight opening must be blanked off. Rear light housing must be in position.

19mm Ball end levers must be fitted.

### **16.3.18 SUSPENSION**

Forks must be standard in appearance, uprated front damper is allowed.

Hydraulic front disc brake is allowed on safety grounds. The use of steering dampers is not allowed.

The rear suspension unit to be fitted in the standard position, but can be uprated for performance and safety

**16.3.19 BRAKING**

The rear brake pedal must be standard, with cable operation in its original position. No rear set brakes or foot-pegs.

**16.3.20 ENGINE**

Standard engine casings with no welding either internal or external. No material may be removed from the casing. Rubber engine mounts may be uprated. Side casing with kick-start removed and welded up, or pedal removed and rubber cap secured over exposed kick-start shaft end. No packing plate allowed between clutch cover. All engine cowlings must be of standard design but may be trimmed for fitment of carburettor.

**16.3.21 CYLINDER KIT(S)**

Type Specific – PX 200 using Malossi 210cc MHR cylinder & head. PX 125/150 using Malossi 166cc cylinder & head. Small frame using Malossi 135cc MHR cylinder kit & cylinder head.

Each Malossi cylinder and head is to be used in standard form with no polishing or tuning allowed. No matching of transfers is allowed. Only gaskets supplied with the kit can be used. No pack pieces.

**16.3.22 CRANKSHAFT(S)**

PX125/150/200 – 57mm competition crankshafts only.

Small Frame – 51mm competition crankshafts only.

**16.3.23 IGNITION & FLYWHEEL**

Ignition on/off positions to be clearly marked.

The electronic ignition system must be standard and static timed. No Variable timing system or additional advance and retard system is allowed. Standard flywheels of intermediate weight or lightened may be used.

**16.3.24 EXHAUST**

Type Specific – PX125/150/200 Franspeed LH version only. Small Frame NFK Signature only.

**16.3.25 CARBURETTOR**

Type Specific – PX125/150/200 Dellorto 30mm PHBH, standard induction carb kit & manifold. Small Frame Dellorto 25mm PHBL, standard induction carb kit and manifold. No polishing, no pwerjets, no force induction or ram pipes. Use of a thumb choke is permitted.

**16.3.26 CLUTCH**

Any commercially available up-rated standard or completion clutch is allowed with cable action as original. No clutch cover packer is allowed.

**16.3.27 GEARBOX & DRIVE**

Only standard gear boxes are allowed. However, the PX200 gearbox can be fitted with a T5 4th gear and the clutch drive cog can be changed to from 23t to 22t. The PX125/150 clutch gear can also be changed from 20t/21t to 22t.

**16.3.28 TYRES**

Type Specific – only the following 3.50 × 10" tyres brands can be used and must be fitted to standard width Lambretta split or tubeless rims:

Dry Tyres: Sava/Mitas MC31 or MC35, Continental Twist Race

Wet Tyres: Sava/Mitas MC20 road and race compounds, Continental Move or Michelin City Winter Grip

### **16.3.29 GAUGES & CONTROLS**

Only a rev-counter is allowed, no other monitoring devices may be fitted. Any non rev-counter wiring must be taped together as to deny use.

Throttle position must remain as standard, operated only through the original throttle tube mechanism and must be self-returning. The cable pulley wheel however, can be changed to aid a quicker response.

### **16.3.30 FUEL TANK**

The tank shall remain as the manufacturer's original specification and position. The tank must be provided with a securely fitted filler cap fitted in such a way that it does not protrude from the bodywork and cannot be torn off in an accident. A fuel feed tap must be fitted in an easily accessible position and be prominently marked to indicate the "OFF" position. All fuel pipes must be adequately secured.

## **16.4 'AUTOMATIC STANDARD' CLASS' REGULATIONS (GROUP 10)**

For Automatic Standard Class Machines the MAXIMUM PERMITTED engine capacity is 80cc for Group 10. Any modifications made to the engine must not prejudice the safety of the rider, any other competitor or official. General Regulations apply and permitted modifications for the parts specified are detailed below:

### **16.4.1 FRAME AND FORKS**

The frame and front forks must have originated from the same Motor Scooter and the main structure of the frame & forks shall remain as per the manufacturer's original specification, retaining its original geometry and mounting points for engine, forks and suspension. Altering the rake, inclination, length and/or other dimensions is prohibited. Frame bracing is prohibited in all standard classes.

### **16.4.2 BODYWORK**

The original silhouette, including mudguards and rear carriers where fitted as original equipment, must be retained with the exception of points for access and extra cooling to the front apron whereby holes must not exceed 10mm diameter.

### **16.4.3 STREAMLINING**

Streamlining is not permitted. The use of front screens or number boards acting as screens are prohibited.

### **16.4.4 HANDLEBARS**

The handlebars and casing should be as of original specification for the machine type and remain unaltered.

### **16.4.5 SEATING**

The seat must be as original equipment however, the removal of padding or a change in padding is permitted as long as no part of the seat is more than 950mm above the ground when the machine is unloaded.

### **16.4.6 MUDGUARDS**

The use of mudguards is not compulsory except where the mudguard is part of the standard silhouette of the machine.

### **16.4.7 WHEELS & TYRES**

The wheels must conform to the original specification of the machine been raced.

**16.4.8 FOOTRESTS & CONTROLS**

The footrests and controls must be as original. No foot pegs allowed unless fitted as original equipment.

**16.4.9 BRAKES**

The braking systems must be as of manufacturer's original specifications.

**16.4.10 FRICTION LININGS, DISC PADS AND BRAKE HOSES**

The replacement of friction linings, brake pads, brake discs, callipers and hoses with aftermarket items is permitted but must comply with original dimensions.

**16.4.11 SUSPENSION, COMPRESSION SPRINGS AND DAMPING**

The use of aftermarket suspension, compression springs and damping is permitted as long as it is manufactured specifically for the machine.

**16.4.12 FUEL TANKS**

The fuel tank must be as original equipment fitted in the original position. All fuel tanks must be provided with a securely fitted filler cap, fitted in such a way that it does not protrude from the bodywork and cannot be torn off in an accident. Use of fast flow fuel taps are permitted.

**16.4.13 ELECTRICAL SYSTEMS AND BATTERY**

All automatic scooters must be fitted with an ignition cut-out switch that is also operated by a lanyard which must be attached to the rider at all times when the engine is running. Any aftermarket commercially available ignition system can be used.

**16.4.14 ENGINE POSITION**

The engine must be fixed in the frame to the original mounting points. However, the cradle may be changed to an aftermarket version from Polini or Malossi.

**16.4.15 CRANKCASE**

Must be as of original manufacturer's specifications with the exception of altering the case to allow the fitment of the permitted cylinder kit or crankshaft. No welding is allowed of any kind. In addition, the use of Malossi-C1 casings are permitted.

**16.4.16 CYLINDER KITS**

Any commercially available cylinder kit and its matching cylinder head up to the class cc limit is allowed. Both items must mount directly to the original cylinder studs and spacing and be secured solely by them. No additional material can be added to enlarge ports or transfers. Porting of the cylinder and modifying the cylinder head combustion is permitted.

**16.4.17 CRANKSHAFTS**

- a) The crankshaft may be changed for any aftermarket commercially available item but it must have been designed specifically for the engine type.
- b) Aftermarket crankshafts may use a different Stroke size from standard as long as they are designed specifically for use of the intended cylinder kit.
- c) 44mm long stroke cranks can also be used as long as they were designed for the same engine type and the resulting cubic capacity remains within class limits.

**16.4.18 INDUCTION SYSTEMS**

The method of induction must be as of manufacturer's original specification with the exception of fuel injection machines where carburettor induction can be used. The use of any make of carburettor or



size is permitted. Reed blocks can be swapped for commercially available aftermarket items however, material from the inlet port maybe removed but no additional material can be added to the reed block or engine casing.

#### **16.4.19 EXHAUST SYSTEMS**

Any aftermarket item can be used, as long as it is commercially available and follows the route of the original standard item.

#### **16.4.20 GEARCASE**

Must be as of manufactures specifications exceptions will be made where an aftermarket production alternative is available.

#### **16.4.21 TRANSMISSION & GEARING**

The use of any commercially available transmission and gearing is permitted. However, no packers are allowed between the gearcase and side casing.

#### **16.4.22 KICKSTARTS**

Kick start levers can remain in place and can be swapped for aftermarket items. However, they must not cause a projection that may injure the rider or other competitor in the event of an accident.

### **16.5 'AUTOMATIC SPECIALS CLASS' REGULATIONS (GROUPS 5A & 6A)**

For Automatic Special Class Machines the MAXIMUM PERMITTED engine capacity is 100cc in Group 5a, for Group 6a 260cc two stroke/500cc four stroke. Any modifications made to the engine must not prejudice the safety of the rider, any other competitor or official. General Regulations apply and permitted modifications for the parts specified are detailed below:

#### **16.5.1 FRAME & FORKS**

The frame and front forks must have originated from the same Motor Scooter type and the main structure of the frame & forks shall remain as per the manufacturer's original specification, retaining its original geometry and mounting points for engine and suspension. Altering the rake, inclination, length and/or other dimensions is prohibited.

The main frame member extending from the steering head to the rear suspension mounting, and including the original engine mountings, must remain unaltered unless the Motor Scooter was originally manufactured so as to contravene this Regulation.

Any "non-original" portions of the main frame tube or steel Monocoque frame must be constructed of good quality seamless drawn steel tube of a circular or non-circular section, welded or brazed together. If circular, the outside diameter shall not exceed 100mm, if non-circular, the maximum cross section shall not exceed 100mm measured at right angles to any flat face. The use of electrode metal arc welding is not recommended.

Front forks may be updated or changed for a performance aftermarket design as long as they were manufactured for the use in your machine.

#### **16.5.2 BODYWORK**

Any form of bodywork is permitted including the use of aftermarket items. Streamlining is also permitted.

#### **16.5.3 STREAMLINING**

For Special Class Machines any streamlining fitted must comply with the following:

- a) The streamlining must be easily detachable for technical inspection and be so designed and fitted to allow complete liberty of movement to the rider when the vehicle is in motion and when getting on and off the vehicle, without any part of it having to be displaced.

- b) Aerofoils or spoilers are not permitted.
- c) The front road wheel, with the exception of the tyre, must be visible from either side.
- d) The extreme forward part of the streamlining must not project forward of a vertical line drawn 50mm in front of the front wheel axle.
- e) The extreme rearward part of the streamlining must not project rearward of a line drawn vertically at 330mm to the rear of the centreline of the axle of the rear wheel.
- f) Normal mudguards are not considered as streamlining.
- g) It must be possible to see the rider completely with the exception of the forearms, in the normal driving position, from either side and from above.
- h) It is forbidden to use any transparent material to avoid the application of these Regulations.
- i) No part of the seat or saddle or anything to the rear of these must be more than 950mm above the ground when the motor scooter is not loaded.
- j) Whatever the position of the handlebars, there must be a clear space of at least 25mm between the streamlining and the extremities of the handlebars, including any attachments thereto, and a clear space of at least 20mm between the streamlining and any other part of the steering mechanism or front wheel.

#### **16.5.4 HANDLEBARS**

Any type of replacement handlebar casing/assembly is permitted provided that it is fitted securely fixed to the steering head of the Motor Scooter. The angle of the handlebar may be adjusted to suit the riders preferred position.

#### **16.5.5 SEATING**

Any type of seating may be used provided it is properly padded and securely fitted in place. It shall not extend beyond the rear of the bodywork of the machine unless so positioned in the manufacturer's original position. No part of the seat must be more than 950mm above the ground when the motor scooter is not loaded.

#### **16.5.6 MUDGUARDS**

For Special Scooters mudguards are not compulsory. Where fitted they must be adequate for the purpose, properly and safely constructed, and securely mounted.

#### **16.5.7 WHEELS & TYRES**

The wheels must conform to the original specification of the machine been raced.

#### **16.5.8 FOOTRESTS AND FOOT CONTROLS**

Footrests must be provided and be so designed and positioned that easy access is available. Riders must adopt a position with their feet on the footrests or they will be disqualified. Aftermarket and self-manufactured rear sets are acceptable for use. Any such item, whether off of the shelf or self-manufactured will be assessed for safety and operability during technical inspection.

#### **16.5.9 FOOTRESTS & CONTROLS**

Footrests, which may comprise the original platform, must be provided and be so designed and positioned that easy access is available to all control pedals (See Projections). Drivers must adopt a position with their feet on the footrests or they will be disqualified.

#### **16.5.10 BRAKES**

Must consist of two independent brakes operated independently, one on each wheel. The use of aftermarket or alternative callipers, discs, pads and hoses is permitted.

**16.5.11 SUSPENSION, COMPRESSION SPRINGS AND DAMPING**

The use of aftermarket suspension, compression springs and damping is permitted.

**16.5.12 FUEL TANKS**

The mounting of the fuel tank can be moved from its original position but must be done so securely. Any tanks that are not of the manufacturer's specification must be created solely of metal. All fuel tanks must be provided with a securely fitted filler cap, fitted in such a way that it does not protrude from the bodywork and cannot be torn off in an accident. Use of fast flow fuel taps are permitted.

**16.5.13 ELECTRICAL SYSTEMS AND BATTERY**

All automatic scooters must be fitted with an ignition cut-out switch that is also operated by a lanyard which must be attached to the rider at all times when the engine is running. Any aftermarket commercially available ignition system can be used.

**16.5.14 AIR INTAKES**

The use of air intakes are permitted providing that there is no forward projection/protrusion as to catch or foul in the event of an accident.

**16.5.15 ENGINE POSITION**

The engine must be fixed in the frame to the original mounting points. However, the cradle may be changed to an aftermarket version from Polini or Malossi.

**16.5.16 CRANKCASE**

The crank casing must retain the original mounting points for support within the frame and the principal external dimensions must remain as manufacturer's original specification. Any modification to the crank casing to permit usage of modified crankshaft assemblies will not be permitted if the modification is so extensive as to preclude the fitting of the standard crankshaft as produce by the original manufacturer of the engine unit used.

**16.5.17 CYLINDER BARREL(S)**

The use of any commercially available cylinder is permitted. Modifications to the same are allowed providing the following is adhered:

- a) The cylinder used must have been originally designed for the engine type.
- b) The bore size of a cylinder cannot be increased by more than 10mm.
- c) It must mount directly to the original engine cylinder studs and spacing and be secured solely by them.
- d) The crankcase to cylinder gasket face must be parallel to that of the original crankcase.
- e) The manufacturer's name or model cast into the outer wall of the cylinder must remain in situ and be visible.

**16.5.18 CYLINDER HEAD(S)**

Any cylinder head can be used. However, it must however mount directly to the original cylinder studs and spacing and be secured by them.

**16.5.19 CRANKSHAFT**

Any type of crankshaft may be used.

**16.5.20 INDUCTION SYSTEMS**

The use of any carburettor type or size is permitted. The use of different induction methods is permitted with the exception of forced induction.

**16.5.21 EXHAUST SYSTEMS**

Any exhaust type is permissible. However, for Special Scooters where high-level exhaust systems are used they must have an adequate heat shield fitted to prevent contact with the systems by the rider in a normal riding position and also by the rider or others in the event of an accident.

**16.5.22 GEARCASE**

Any commercially available gearcase is permitted.

**16.5.23 TRANSMISSION & GEARING**

The use of any commercially available transmission and gearing is permitted.

**16.5.24 KICKSTARTS**

Kick start levers can remain in place and can be swapped for aftermarket items. However, they must not cause a projection that may injure the rider or other competitor in the event of an accident.

**SECTION 17 TECHNICAL REGULATIONS FOR PRODUCTION CLASS SOLO MOTORSCOOTERS**

**Unless specifically mentioned in these Regulations the Standing Regulations for Solo Motor Scooters for use in Road Race, Sprints and Hill Climb shall apply**

For 'Production' Class machines (Automatic or Geared) the MAXIMUM PERMITTED engine capacity is:

Group 11 up to 125cc, Group 12 up to 250cc, Group 13 up to 500cc, Group 14 up to 650cc. Any modifications made to the engine must not prejudice the safety of the rider, any other competitor or official. General Regulations apply and permitted modifications for the parts specified are detailed below:

**17.1 BASIC SPECIFICATION**

Motor scooters must be as manufacturer's original specification except for the modifications detailed below. No other alterations, modifications or changes from manufacturer's original specification will be permitted.

**17.2 SEATING**

Any type of seating may be used provided it is properly padded and securely fitted in place, but it shall not extend beyond the rear of the bodywork of the machine unless so positioned in the manufacturer's original specification. No part of the seat must be more than 900mm above the ground when the motor scooter is not loaded.

**17.3 IGNITION SYSTEM**

The ignition system must be of the manufacturer's original type for the motor scooter. The timing position may be altered. NO other modifications will be permitted.

**17.4 GEARING**

The gear casing, gearbox and gear cluster must be as manufacturer's original specification. NO modifications will be permitted.

**17.5 INDUCTION SYSTEM**

The induction system must be of manufacturer's original type for the motor scooter. NO increase in internal bore will be permitted. Jetting may be altered.

### 17.6 BORE AND STROKE

The bore and stroke of the motor scooter must be clearly marked in letters and numbers at least 10mm in height, on the right hand side rear competition number plate.

### 17.7 FUEL FEED & FUEL TANKS

Original manufacturer's tank and position must remain and be provided with a securely fitted filler cap, fitted in such a way that it does not protrude from the bodywork and cannot be torn off in an accident. A fuel feed tap must be fitted in an easily accessible position and be prominently marked to indicate the 'OFF' position. Any fuel tank breather pipe must be fitted with a non-return valve and must discharge into a leak proof catch tank having a minimum capacity of 500ml and be empty at technical inspection. All fuel pipes must be adequately secured.

### 17.8 FRONT SUSPENSION

Anti-dive systems are permitted in all solo standard classes.

## SECTION 18 TECHNICAL SPECIFICATIONS FOR STREET CLASS SOLO MOTORSCOOTERS

**Unless specifically mentioned in these Regulations the Standing Regulations for Solo Motor Scooters for use in Road Race, Sprints and Hill Climb shall apply**

For Street Class machines (Automatic or Geared) the MAXIMUM PERMITTED engine capacity is 500cc. Any modifications made to the engine must not prejudice the safety of the rider, any other competitor or official. General Regulations apply and permitted modifications for the parts specified are detailed below.

### 18.1 MACHINE ELIGIBILITY AND BASIC SPECIFICATION

Street Class motor scooters must have a current full MOT (no daytime or other derivatives allowed) including Road Tax (vehicle excise duty) and remain fully legal for use on the UK Public Highway. Each machine entered will be checked via the DVLA Vehicle Enquiry web page for continued compliance, corresponding documentation must be presented at technical inspection. All lights, indicators and horn must be retained in situ and in working order when presented for technical inspection. Any alterations or additions to the machine post MOT must be declared at technical inspection and if deemed outside of the 'Spirit of the Rules' or in such cases unfit towards passing a UK MOT, the machine will be declined for racing.

### 18.2 SEATING

Any type of seating may be used provided it is properly padded and securely fitted in place, but it shall not extend beyond the rear of the bodywork of the machine unless so positioned in the manufacturer's original position. No part of the seat must be more than 950mm above the ground when the motor scooter is not loaded.

### 18.3 FOOTRESTS

Drivers must adopt a position with their feet on the footrests/runner boards or they will be disqualified.

### 18.4 PROJECTIONS

All racks, spare wheels, bars, mirrors, etc must also be removed

### 18.5 NUMBER PLATES/GLASS/PLASTIC LENSES

All lights, lenses, instrument panels and indicators for machines registered post 01.08.1986, must remain in situ and be securely covered or taped to retain them in place in the event of breakage.

Aftermarket Rev Counters being the exception but must have plastic lens. Numbers plates must also be retained in situ and require taping or covering.

### **18.6 FUEL TANK AND TAPS**

All fuel tanks, including aftermarket types must be secured to the main chassis and located in the area of the original manufacturer's position and be provided with a securely fitted filler cap, fitted in such a way that it does not protrude from the bodywork and cannot be torn off in an accident. A fuel feed tap must be fitted in an easily accessible position and be prominently marked to indicate the 'OFF' position. Any fuel tank breather pipe must be fitted with a non-return valve and must discharge into a leak proof catch tank having a minimum capacity of 500ml and be empty at technical inspection. All fuel pipes must be adequately secured.

### **18.7 FORKS/BRAKES/SUSPENSION**

The front forks must have originated from the same motor scooter type/marque as the frame. The main structure of the forks shall remain as the manufacturer's original specification and measurement but the suspension can be uprated to aftermarket items. Front Anti-Dive systems are permitted for use along with outboard disc brakes. The standard braking system must consist of two efficient brakes operated independently, one on each of the two road wheels. Friction linings, discs, pads and brake shoes may be changed to aftermarket higher performance items. Aftermarket or self-manufactured rear sets are acceptable for use on Street Class machines but any such item will be assessed for safety and operability during technical inspection.

### **18.8 BODYWORK/FRAME CONSTRUCTION**

The main frame member extending from the steering head to the rear suspension mounting must remain basically unaltered. Frame bracing is prohibited. Bodywork/panel work may be trimmed, cut or removed and shall have no sharp projections. Where there are projections, they must be covered in such a way as to prevent injury, occasioned by accidental contact, to the rider. All tubular ends must be securely fitted with rounded ends.

### **18.9 ENGINE AND DRIVE UNITS**

All Machines must comply with the following requirements:

- a) The engine and drive unit must originate from a recognised motor scooter.
- b) The engine and drive unit does not have to necessarily originate from the motor scooter frame in which the engine is to be installed.
- c) The drive must be transmitted to the road through the rear wheel of the motor scooter.
- d) The unit shall be properly and safely finished to MOT standard with all necessary studs, nuts, bolts and washers securely fitted. There shall be no evidence of oil leaks.

### **18.10 CYLINDER HEAD(S)**

The use of aftermarket and upgraded cylinder heads are permitted.

### **18.11 CRANKCASE**

The crank casing must retain the original mounting points for support within the frame and the principal external dimensions must remain as manufacturer's original specification. Any modification to the crank casing to permit usage of modified crankshaft assemblies will not be permitted if the modification is so extensive as to preclude the fitting of the standard crankshaft as produce by the original manufacturer of the engine unit used.

### **18.12 CRANKSHAFT**

Any type of crankshaft may be used subject to the limitations specified under the Crankcase regulation above.

**18.13 CYLINDER BARREL(S)**

The use of any commercially available cylinder is permitted. Modifications to the same are allowed providing the following is adhered:

- a) The cylinder used must have been originally designed for the engine type.
- b) The bore size of a cylinder cannot be increased by more than 10mm.
- c) It must mount directly to the original engine cylinder studs and spacing and be secured solely by them.
- d) The crankcase to cylinder gasket face must be parallel to that of the original crankcase.
- e) The manufacturer's name or model cast into the outer wall of the cylinder must remain in situ and be visible.

**18.14 GEAR CASE**

Any commercially available gearcase is permitted.

**18.15 GEARBOX & GEARING**

Modifications may be made to the number of drive ratios, the ratios themselves and to the gears. Alterations to the gear casing will not be permitted if the modification is so extensive as to preclude the fitting of a standard gear set as produced by the original manufacturer of the engine unit used. For Engines which originate from geared machines: The use of 5 speed gear boxes for both the Lambretta and Vespa are permitted in Street Class. The Primary drive sprockets and chain may be changed to allow any combination of alternative final drive ratios to be achieved. For Engines which originate from automatic machines: The use of any commercially available transmission and gearing is permitted as long as the automatic transmission is retained.

## **SECTION 19** TECHNICAL SPECIFICATIONS FOR MOTORSCOOTER SIDE CAR COMBINATIONS (GROUP 7)

**19.1 INTRODUCTION**

These Regulations specify the requirements for construction of Motor scooter Combinations for use in Road Races, Sprints and Hill Climbs.

**19.2 GENERAL**

1. The sidecar must be placed on the left side of the motor scooter and the three road wheels must be disposed to give two tracks.
2. Hinged sidecars and steerable sidecar wheels are forbidden.
3. Neither the driver nor the passenger may be attached to the machine.

**19.3 CONSTRUCTION**

1. The frame must employ as part of its construction, the original type of engine fixing into the chassis giving effective support to the engine.
2. The remainder of the frame must be constructed of good quality seamless drawn steel tube of a circular or non-circular section, welded or brazed together. If circular, the outside diameter shall not exceed 100mm, if non-circular, the maximum cross section shall not exceed 100mm measured at right angles to any flat face.
3. The above does not restrict the swinging arm.
4. Reinforcement of the steering head is allowed to a maximum of 230mm from the centre line of the steering head.
5. Monocoque construction is forbidden.
6. The use of composite construction is forbidden with the exception of the sidecar platform. (i.e. Aluminium or carbon fibre skinned honeycomb).
7. The use of TITANIUM and similar "exotic" metals is forbidden in the construction of the

frame, front forks, handlebars, swinging arm and wheel spindles. The use of light alloys is forbidden for wheel spindles.

#### 19.4 DIMENSIONS

Weight: The MINIMUM weight, without fuel, shall be 130kg. The use of ballast to reach this weight is forbidden.

Width: The overall MAXIMUM shall be 1700mm.

Wheelbase: The MAXIMUM shall be 1650mm.

Track: The MINIMUM shall be 760mm. The distance is measured from the centre of the track left by the rear wheel to the centre of the track left by the sidecar wheel.

Ground Clearance: The MINIMUM clear space to be maintained beneath the entire under surface of the machine when loaded with fuel, driver and passenger is 65mm.

#### 19.5 STREAMLINING AND BODYWORK

1. The streamlining must be easily detachable for technical control and be so designed and fitted to allow complete liberty of movement to the driver and passenger when the vehicle is in motion and when getting on and off the vehicle, without any part of it having to be displaced. The fairing may also be of the 'fully enclosed' type (as per ACU Formula 2 rules).
3. Rear view mirrors are forbidden.
4. A solid and effective protection must be fitted between the driver and the engine and must prevent direct contact between the driver's body or clothing and escaping flames or leaking fuel or oil.
5. Any type of seating may be used provided it is properly padded and securely fitted in place.
6. The extreme forward part of the streamlining must not project forward in plan beyond the most forward part of the front tyre by more than 400mm.
7. The extreme rearward part of the streamlining must not project rearward in plan beyond the most rearward part of the rear tyre by more than 400mm.
8. Whatever the position of the handlebars, there must be a clear space of at least 20mm between the streamlining and the extremities of the handlebars, including any attachments thereto, and a clear space of at least 20mm between the streamlining and any other part of the steering mechanism or front wheel.

#### 19.6 PROJECTIONS

1. There shall be as few sharp projections as possible. Where there are projections, they must be covered in such a way as to prevent injury, occasioned by accidental contact, to the driver and passenger.
2. All tubular ends must be securely fitted with rounded ends.

#### 19.7 DRIVE GUARD

An adequate guard must be fitted to prevent the drive being accidentally touched. Drive chains must be guarded from sprocket to sprocket.

#### 19.8 GLASS

All glass in lights and on instruments must be securely taped to retain it in place in the event of breakage.

#### 19.9 AIR INTAKES

Cooling air intakes must be so constructed that there is NO forward projection/protrusion to catch or foul in the event of an accident.



### 19.10 ENGINE AND DRIVE UNITS

1. The engine and drive unit must have originated from a motor scooter and the drive must be transmitted to the road through the rear wheel of the motor scooter.
2. The unit shall be properly and safely finished with all necessary studs, nuts, bolts and washers securely fitted. There shall be no evidence of oil leaks. THE MAXIMUM PERMITTED ENGINE CAPACITY IS 260cc.
3. Any modifications made must not prejudice the safety of the driver, any other competitor or official and must be within the following parameters for the parts specified:  
Cylinder Barrel(s) and Crankcase
  1. In regard to shape, size, configuration, position and number of ports, and external appearance, materials and method of manufacture, the cylinder barrel(s) must have originally conformed to the manufacturer's original specification (though not necessarily produced by the original manufacturer) or be included in the ACU list of approved kit barrels.
  2. The bore size of a cylinder may be increased by no more than 10mm.
  3. The cylinder used must have been originally designed for the engine type, must retain the original method and position of fitting and both the cylinder and the crankcase must retain the centres of the original stud holes used for bolting the cylinder to the crankcase. It must therefore be possible, with the exception of interference from a modified cylinder spigot, to fit the cylinder to a standard crank casing as produced by the original manufacturer of the engine unit used.
  4. The crankcase to cylinder gasket face must be parallel to that of the original crankcase.
  5. The crank casing must retain the original mounting points for support within the frame and the principal external dimensions must remain as manufacturer's original specification.
  6. Any modification to the crank casing to permit usage of modified original type crankshaft assemblies will not be permitted if the modification is so extensive as to preclude the fitting of the standard crankshaft as produced by the original manufacturer of the engine unit used.
  7. Modifications may be made to facilitate the use of water-cooling but the engine must comprise a single unit.
  8. Liquid cooling, or any other modification, to the cylinder will not be permitted if the modification is so extensive as to preclude identification of the origin of the cylinder.
4. GEARCASE/GEARBOX – The gearcase must be basically as the manufacturer's original specification. Modifications may be made to the number of drive ratios, the ratios themselves and to the gears. Alterations to the gear casing will not be permitted if the modification is so extensive as to preclude the fitting of a standard gear set as produced by the original manufacturer of the engine unit used.

**Note:** For the purposes of this Regulation, the 'engine' is deemed to comprise the cylinder barrel(s), crankcase and all internal components within these units.

### 19.11 ENGINE POSITION

The engine must be positioned behind the steering head and in front of the rear wheel and be so located that the centre line of the engine (by definition, a position midway between the centre lines of outermost cylinders) is no more than 160mm from the centre line of the rear wheel of the motor scooter.

### 19.12 INDUCTION SYSTEMS

Any form of induction system may be used with the exception of forced induction (see 13 below), which is prohibited.

### 19.13 FORCED INDUCTION

An engine shall be considered as having Forced Induction when in respect of one engine cycle, the

total volume of gaseous mixture induced exceeds the capacity, measured geometrically, of the engine working cylinder(s). The intra-cylinder injection of fuel shall not be considered as forced induction.

#### **19.14 FUEL**

Fuel will be a maximum of a 100 ll octane. The use of power boosters and/or octane boosters is specifically prohibited.

#### **19.15 EXHAUST SYSTEMS**

1. The exhaust systems must fulfil all the current ACU requirements concerning noise control.
2. The systems must be constructed in a manner not prejudicial to the safety of the driver, the passenger, or any other competitor or official. Exhaust fumes must not be discharged so as to raise dust, foul the tyres or brakes or inconvenience a passenger or any other driver.
3. The furthest extremity of any exhaust system must not project beyond any part of the machine or its bodywork or streamlining; nor must the end of any exhaust pipe point upwards or downwards at an angle greater than 10° from the horizontal.

#### **19.16 FUEL TANK**

1. The fuel tank(s) must be soundly constructed, entirely of metal, with a securely fitted filler cap, and sufficiently independently protected from the ground. The fuel filler cap must be fitted in such a way that it does not protrude from the fairing and cannot be torn off in an accident.
2. A fuel feed tap must be fitted in an easily accessible position and be prominently marked to indicate the "OFF" position.
3. Any fuel tank breather pipe must be fitted with a non-return valve and must discharge into a leak-proof catch tank having a minimum capacity of 500 ml, which must be empty at technical control. All fuel pipes must be adequately secured.

#### **19.17 OIL DRAIN/FILLER PLUGS AND CATCH TANKS**

1. All oil drain, level and filler plugs must be tight and drilled and wired in position.
2. Any oil breather pipe fitted must discharge into a catch tank mounted in an easily accessible position and having a minimum capacity of 500 ml.
3. The catch tank must be empty at technical control.

#### **19.18 STEERING**

1. Steering shall be through the front wheel only by means of handlebars firmly secured to steering members turning the front wheel and its supports directly with no intermediate push or pull rods.
2. Hub centre steering, remote steering linkages and the use of articulated joints in the steering mechanism are not permitted. By definition an articulated joint is one allowing movement in more than one plane.
3. Handlebars and all steering bearings must be located on the sprung portion of the front suspension. The extreme width of the handlebars must be not less than 450mm.
4. The minimum angle of rotation of the handlebars, each side of a straight ahead position and measured horizontally at ground level, is to be 30° and stops must be fitted in order to limit angular movement to 65° and to allow a minimum of 20mm clearance between the handlebars and any tank, similar attachments or streamlining.
5. Whatever the position of the handlebars and suspension no part of the front wheel or forks must pass within 20mm of any bodywork or streamlining.
6. It is permissible to displace the steering head up to a maximum of 75mm determined by measuring the off set from the centre line of the rear wheel.

**19.19 WHEELS AND TYRES**

1. All wheels must be of metal construction and be within an allowance of 5° from the vertical.
2. The diameter of any fully inflated tyre, measured over the outside of the tyre, shall be NOT LESS THAN 407mm and NOT MORE THAN 560mm.
3. At technical control ALL moulded tread tyres must have a minimum depth of tread of 1.6mm across the entire original tread area. Recut moulded tyres are not permitted.
4. When conditions permit, slick (untreaded) tyres may be used and these may be professionally grooved. The surface of the slick tyre must contain three or more hollows at 120-degree intervals or less, indicating the limit of wear on the centre and shoulder areas of the tyre. When at least two of these indicator hollows become worn on different parts of the periphery, the tyre must no longer be used.
5. Intermediate Pattern Types. For wet weather conditions which call for a “TREADED” tyre other than a full “WET” tyre, an “INTERMEDIATE” pattern tyre must be used. The tyre pattern must be professionally cut and consist of a minimum of three circumferential grooves each 0.18 inches in width. The depth may be cut to show the canvas, but must never sever the canvas fibres.

**Note:** At technical control the surface of the tyre must contain three or more hollow “WEAR” indicators at 120 degree intervals indicating the limit of wear across the tread area.

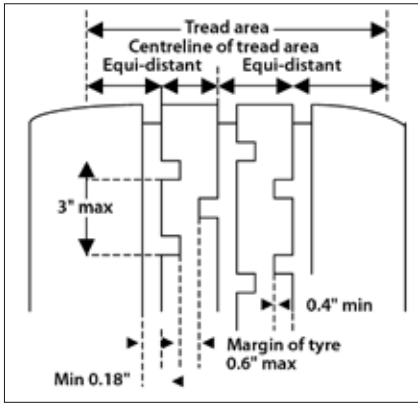
One groove must be cut in the centre of the tread area, with the remaining grooves located equidistant between the centre groove and the edge of the tread area.

In addition to the circumferential groove, “SLITS” across the tread area must be cut from each groove, 0.18 inches in width, 0.4 inches minimum in length. Spacing must be equi-distant around the periphery of the tyre and no more than 3 inches apart.

To give inter groove relationship between the “SLITS”; their position must be staggered.

The margin of tyre surface between the ends of the opposed “SLITS” must be no greater than 0.60 inches.

See FIGURE 1 for example calculation and a diagrammatic explanation of the above dimensions.



**Figure 1**

6.2 inches x 13 inches “SLICK” tyre with a rolling diameter of 19.8 inches

$$\frac{TTD}{3} = \frac{3.142 \times 19.8}{3} = \frac{62.203}{3} = 20.734$$

**19.20 FRONT SUSPENSIONS**

The front suspension is to be either a leading or trailing fork, or links, with the wheel equally supported on each side. Wishbones are not permitted.

**19.21 REAR SUSPENSION**

The rear suspension, if fitted, is to be of the swinging arm type. A single sided swinging arm is allowed.

**19.22 BRAKES**

The braking system must consist of at least two brakes operated independently on the front and rear road wheels, each giving complete control. Braking of the sidecar wheel is optional.

### 19.23 MUDGUARDS AND WHEEL PROTECTION

1. The rear wheel mudguard must cover at least 240 degrees of the rear wheel. The side nearest to the sidecar wheel must be enclosed.
2. The sidecar wheel must be enclosed from the sidecar platform and level with the sidecar platform around the periphery.
3. For rear exit sidecars the sidecar wheel must be totally enclosed down to platform level.

### 19.24 DRIVER

1. The driver in the normal driving position must be completely visible, with the exception of his forearms and lower legs, from the side opposite to the sidecar and from above.
2. It is forbidden for the driver's legs to be enclosed. The driver's position must be such that the driver's feet are positioned behind the knees when viewed from above and the footrests so designed and positioned that easy access is always available to any control pedal.

### 19.25 PASSENGER

The passenger must be able to lean out to either side of the sidecar. For this purpose the vehicle must be fitted with suitable handholds, which must be of the "closed loop" type.

### 19.26 ELECTRICAL SYSTEMS AND BATTERY

1. All vehicles must be fitted with an easily accessible ignition switch, mounted in the vicinity of the handlebar/headset and within a radius of 200mm of the centre line of the top of the fork stem.
2. Switches must be of a positive locking type in both the on and off positions and when in the "OFF" position must not allow the engine to run. The "OFF" position of all switches must be prominently marked in capital letters of at least 10mm in height with dark coloured letters on a light background and vice versa.
3. Any electric fuel feed pump must be wired in such a way as to cut out when the ignition switch is in the "OFF" position.
4. Batteries, if fitted, must be of the leak-proof type.

### 19.27 THROTTLE CONTROLS

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

### 19.28 CONTROL LEVERS

1. All handlebar levers must be ball ended, the ball to be at least 19mm in diameter and to be a permanently fixed integral part of the lever.
2. Each control lever (both hand and foot) must be mounted on an independent pivot.
3. Handlebar grips must be securely fixed to the ends of the handlebars.

## SECTION 20 TECHNICAL SPECIFICATIONS FOR FORMULA 125 MOTORSCOOTER SIDECAR COMBINATIONS

**Unless specifically mentioned in these Regulations the Standing Regulations for the construction of Group 7 Motor Scooter Regulations detailed above shall apply.**

### 20.1 CONSTRUCTION

1. The frame must be of good quality drawn steel tube of circular or non-circular section, welded or brazed together. If circular the outside diameter must not exceed 100mm. If non-circular the maximum cross section shall not exceed 150mm. measured at right angles to any flat surface.
2. The above does not restrict the swinging arm. The use of composite construction is forbidden with the exception of the sidecar platform, i.e. Aluminium or carbon fibre honeycomb.

3. The use of Titanium or other similar 'exotic' materials in the construction of the frame, forks, handlebars, swinging arm and wheel spindles is forbidden.

## 20.2 DIMENSIONS

Width: The overall maximum shall be 1524mm (60") measured over the extremities of the streamlining.

Wheelbase: The maximum shall be 1829mm (72") measured between the centres of the front and rear wheels.

Track: The minimum shall be 760mm. The maximum shall be 1170mm. The track being the distance measured between the rear and sidocar wheel, the point of measurement being at right angles to a line drawn between the centre line of the front and rear wheels of the combination and a line at right angles passing through the sidocar wheel.

Ground clearance: The minimum clear space to be maintained beneath the entire under surface of the machine when loaded with fuel, driver and passenger must be 65mm.

## 20.3 STREAMLINING AND BODYWORK

1. This must be easily detachable for technical control purposes and be so designed and fitted to allow complete liberty of movement to the driver and passenger when the vehicle is in motion and when getting on and off the vehicle without any part of the streamlining being displaced.
2. Fairings and Rear view mirrors are allowed.
3. A solid and effective protection must be fitted between the driver and the engine to prevent direct contact between the driver's body or clothing from escaping flames or leaking oil.
4. Any type of seating may be used provided it is properly padded and securely fitted in place.
5. The extreme forward part of any streamlining must not project forward in plan beyond the most forward part of the front tyre by more than 400mm.
6. The extreme rearward part of the streamlining must not project rearward in plan beyond the most rearward part of the rear tyre by more than 400mm.

## 20.4 DRIVEGUARDS

A metal guard must be fitted to prevent accidental contact with the chain or sprocket. Drive chains must be guarded from sprocket to sprocket.

## 20.5 ENGINE AND DRIVE UNITS

1. Permitted engine: 125cc. i.e. Aprillia.
2. Drive must be transmitted to the road through the rear wheel of the machine.
3. The engine unit must be properly and safely finished, all studs, bolts, nuts and washers fitted securely in place.
4. There shall be no evidence of oil leaks.
5. Any modifications made to the engine unit must not prejudice the safety of the driver and passenger or other competitor or official and must be within the specifications of the engine and drive unit regulations.
6. Cylinder Barrel and Crankcase
  1. In regard to the shape, size, configuration, position and number of sports, external appearance, materials and manufacture, the cylinder barrel must conform to the manufacturers original specification (though not necessarily produced by the same manufacturer).
  2. The bore size of a cylinder may be increased.
  3. The cylinder used, must have been originally designed for the engine type, must retain the original method and position of fixing, (the number and position of studs in the crankcase at the gasket face must be as manufacturers original specification).
  4. The crankcase to cylinder gasket face must be parallel to that of the original crankcase. The crankcase porting may be altered.

5. The crankcase must retain the original mounting points, which must be used to support the engine in the frame.  
External dimensions of the crankcase must remain as manufacturers original specification.
6. The Crankshaft must remain as the manufacturers original specification, although the connecting rod may be modified or substituted.
7. Alternative pistons may be used to change the characteristics of the engine. The cylinder barrel gasket faces may be machined to allow for the difference in compression height of the piston used.
8. Liquid cooling of the engine case will not be permitted.

## 20.6 ENGINE POSITION

The engine must be positioned between the steering headstock and the rear wheel.

## 20.7 INDUCTION SYSTEMS

Any form of induction system may be used with the exception of superchargers.

## 20.8 FUEL – UNLEADED

1. A fuel tank with a breather pipe must be fitted with a non-return valve and discharge into a minimum of 500ml. catch bottle.
2. Fuel must be commercially available brand of petrol, as supplied from a wayside petrol station. (Aviation fuel, Avgas, is not included).
3. No additives other than lubricants are permitted, (power boosters, octane boosters are prohibited).

## 20.9 STEERING

1. Steering will be through the front wheel only, by means of handlebars with a minimum width of 450mm.
2. The minimum angle of rotation of the handlebars each side of the straight-ahead position must be 30°, stops must be fitted to limit the angular movement of the handlebars to 65°. Whatever the position of the handlebars and suspension, no part of the front wheel or forks must pass within 20mm. of any bodywork or streamlining.
3. It is permissible to displace the steering head up to a maximum of 75mm. determined by measuring the off set from the centre line of the rear wheel.
4. Machines with off set steering heads must maintain two tracks.

## 20.10 WHEELS AND TYRES

1. All wheels rims must be of metal construction and a maximum diameter of 407mm.
2. The wheel when fitted in position must rotate within 5° of the vertical plane.
3. At technical control all moulded treaded tyre must have a minimum of 1.6mm. of tread across the entire original tread area. (recut moulded tyre are not permitted).
4. Sidecar wheels may be Kart type 'slick' tyre, the surface of the tyre must contain three or more wear indicators positioned at 120° around the tyre circumference.
5. When at least two of these become worn on different parts of the tyre, the tyre may no longer be used.
6. Wheel spindles must pass through the fork legs/swinging arm assemblies which must provide a positive location for the spindle when assembled, split pin locking and/or nylon locking nuts must be used to prevent the axle coming loose.

## 20.11 REAR SUSPENSION

1. The rear suspension, if fitted is to be the swinging arm type. Movement of the arm i.e. for the purpose of chain adjustment can be by means of eccentric cams.

**Note:** any adjustment used must not allow the wheelbase to exceed the maximum permitted dimension.

## **SECTION 21** TECHNICAL SPECIFICATIONS FOR CLASSIC (GROUP 8) MOTORSCOOTER SIDECAR COMBINATIONS

**Unless specifically mentioned in these Regulations the Standing Regulations for the construction of (Group 7) Motor Scooter Regulations detailed above shall apply.**

### **21.1 INTRODUCTION**

These Regulations specify the requirements for construction of Classic Motor scooter Combinations for use in Road Races, Sprints and Hill Climbs.

### **21.2 CONSTRUCTION**

1. The chassis must incorporate, as an integral part, the complete Lambretta spine frame including engine mountings.
2. The remainder of the chassis must be constructed of good quality seamless drawn steel tube of a circular or non-circular section, welded together.
3. Reinforcement of the steering head is allowed to a maximum of 230mm from the centre line of the steering head.
4. The use of composite construction is forbidden with the exception of the sidecar platform. (i.e. Aluminium or carbon fibre skinned honeycomb).
5. The use of TITANIUM and similar "exotic" metals is forbidden in the construction of the chassis, front forks, handlebars and wheel spindles. The use of light alloys is forbidden for wheel spindles.

### **21.3 DIMENSIONS**

Width: The overall MAXIMUM shall be 1520mm.

### **21.4 STREAMLINING AND BODYWORK**

1. The streamlining must be easily detachable for technical control and be so designed and fitted to allow complete liberty of movement to the driver and passenger when the vehicle is in motion and when getting on and off the vehicle, without any part of it having to be displaced.
2. Aerofoils or spoilers are not permitted.
3. Rear view mirrors are forbidden.
4. A solid and effective protection must be fitted between the driver and the engine and must prevent direct contact between the driver's body or clothing and escaping flames or leaking fuel or oil.
5. Any type of seating may be used provided it is properly padded and securely fitted in place.
6. The extreme forward part of the streamlining must not project forward in plan beyond the most forward part of the front tyre by more than 400mm.
7. The extreme rearward part of the streamlining must not project rearward in plan beyond the most rearward part of the rear tyre by more than 400mm.
8. Whatever the position of the handlebars, there must be a clear space of at least 25mm between the streamlining and the extremities of the handlebars, including any attachments thereto, and a clear space of at least 20mm between the streamlining and any other part of the steering mechanism or front wheel.

### **21.5 ENGINE AND DRIVE UNITS**

1. The engine and drive unit must have originated from a Lambretta motor scooter.
2. The unit shall be properly and safely finished with all necessary studs, nuts, bolts and washers securely fitted. There shall be no evidence of oil leaks.

3. The MAXIMUM PERMITTED bore is 70mm. The MAXIMUM PERMITTED stroke is 60mm.
4. Any modifications made must not prejudice the safety of the driver, any other competitor or official and must be within the following parameters for the parts specified:
5. CYLINDER HEAD – Liquid cooling is not permitted.
6. CYLINDER BARREL – Cylinder barrel must be as manufacturer’s original specification either a TS1 or RB22 kit barrel.
7. PORTS – Ports may not be enlarged, but they may not be bridged nor the cylinder barrel slotted. The position may not be changed, additional ports may not be provided, and the provision of additional material on either the inside or the outside of the barrel is prohibited.
8. PACKING PIECES – The total thickness of any packing piece(s) or gasket(s) used between the base of the cylinder and the crankcase must not exceed 10mm. Packing pieces may not be used as a means of increasing the available port area.

### 21.6 CRANKCASE

Crank casing must be as manufacturer’s original specification, except that:

1. Modifications may be made to permit the use of a larger section tyre subject to the limitations in Regulation 18 below.
2. Modifications may be made to any existing crankcase porting except that the provision of additional material on either the inside or the outside of the casing is prohibited.
3. Notwithstanding the exception in B above, the provision of additional material to effect genuine repairs to a crankcase will be permitted provided that the final dimensions and appearance do not exceed the manufacturer’s original specification.

### 21.7 CRANKSHAFT

The crankshaft must be a commercially available type designed to fit a Lambretta motor scooter with a MAXIMUM permitted stroke of 60mm and shall remain as manufacturer’s original specification, except:

1. The ignition mounting may be altered.
2. The crankshaft may be “padded”.

### 21.8 GEARCASE

1. The gearcase must be as manufacturer’s original specification except that a spacer may be used to facilitate the use of extra clutch plates.
2. The gearbox must be as manufacturer’s original specification for the engine type, except that the original gear cluster may be altered to provide alternative ratios. The number of ratios must remain unchanged.

**Note:** For the purposes of this Regulation, the ‘engine’ is deemed to comprise the cylinder barrel(s), crankcase and all internal components within these units.

### 21.9 ENGINE POSITION

The engine unit must be in the original position.

### 21.10 INDUCTION SYSTEMS

The engine shall be normally aspirated.

### 21.11 WHEELS AND TYRES

1. All wheels must be of metal construction and be within an allowance of 5° from the vertical.
2. The diameter of the front and sidecar wheels MUST be 10 inches and the tyres thereon have a MAXIMUM section of 5J. The diameter of the rear wheel MUST be 10 inches with a wider section standard pattern rim permissible and allowing a MAXIMUM tyre size of 10 inches by 4.00.



3. At technical control ALL tyres must have moulded treads and must have a minimum depth of tread of 1.6mm across the entire original tread area. Recut moulded tyres are not permitted.

### 21.12 REAR SUSPENSION

Rear suspension is not permitted.

### 21.13 CONTROL LEVERS

1. All handlebar levers must be ball ended, the ball to be at least 19mm in diameter and to be a permanently fixed integral part of the lever. Each control lever (both hand and foot) must be mounted on an independent pivot. Handlebar grips must be securely fixed to the ends of the handlebar.

**The following information does not form part of the Standing Regulations but is provided as a quick guide to the requirements of the SRs.**

It is hoped, by the promoters of this class, that this limited specification will enable close racing at an affordable cost. For the benefit of all who compete in the class, cheating will not be tolerated.

1. Complete Lambretta spine frame.
2. Engine in original position driving the rear wheel.
3. Lambretta cast iron or TS1 barrel.
4. No water-cooling for head or barrel.
5. Porting to Standard class specification, i.e. no bridged ports or extra ports.
6. Maximum stroke 60mm. Maximum bore 70mm.
7. No 'alloy' welding of barrels.
8. Passenger exit can be in front of or behind the sidecar wheel, whichever is preferred.
9. The use of titanium or similar 'exotic' material is forbidden.
10. Treaded tyres only at all times.
11. Front and sidecar wheels 10 × 5J maximum.
12. Rear wheel must be standard pattern rim or wide version with 4.00 × 10 maximum scooter tyre.
13. Maximum chassis dimensions – wheelbase 1650mm – width 1520mm.  
Track – minimum 760mm. Ground clearance when fully loaded – 65mm.
14. Centre hub steering and sidecar wheel steering is forbidden.
15. Independently operated brakes on front and rear wheels – sidecar brake is optional.