



# 2023 BSSO Group 5a & 6a Specials Regulations V4



**Section 15 (*General Regulations*) detailed within the Scooter section of the latest ACU Handbook apply in the first instance along with the following class restrictions and permissions:**

## **1.1 '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:

## **1.2 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.

## **1.3 FRAME BRACING:**

Bracing to the frame in the area between the fork stem tube and frame loop is permitted for use. 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 machine, rider or others:

Positioning – Due to the various motor scooters eligible for this class, as we build upon valid positioning dimensions for each machine you must first seek a concession for use from the BSSO Technical Chairman (providing a sketch with intended dimensions). A line drawn through the centre of the brace along its axis must pass through a point to the lower third of the vertical steering tube and the rear must be within the area on the horizontal of the frame below the seat area.

The Brace must have a safety in-fill fitted using a non-metal non-shatter material fixed below the brace bar and positioned so as not to leave an open space greater than 10mm top and bottom and 100mm to each mounting side. It must be securely attached to the brace bar using a minimum of four metal P-clip fasteners and a minimum of four metal L-shape brackets to the runner board/legshields. Up to three 50mm diameter holes can be added to omit any potential 'wind sail' effect. No sharp edges shall be present.

## **1.4 BODYWORK:**

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

## **1.5 STREAMLINING:**

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

- 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.
- Aerofoils or spoilers are not permitted.
- 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.

#### **1.6 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.

#### **1.7 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.

#### **1.8 MUDGUARDS:**

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

#### **1.9 WHEELS & TYRES:**

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

#### **1.10 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 the shelf or self-manufactured will be assessed for safety and operability during technical inspection.

#### **1.11 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.

#### **1.12 BRAKES:**

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

#### **1.13 SUSPENSION, COMPRESSION SPRINGS AND DAMPING:**

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

#### **1.14 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.

#### **1.15 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.

**1.16 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.

**1.17 ENGINE POSITION:**

The engine and drive unit must have originated from the same type/or model of motor scooter as the frame and must be fixed in position using the original mounting points, without modification. However, the cradle may be changed to an aftermarket version utilising the original same mounting positions.

**1.18 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. Polini and Malossi aftermarket remanufactured engine casings, designed specifically for use in 2t LC Piaggio Zips with non-standard stud spacing, are allowed (refer 1.19.f below for their permitted use of cylinder kits, only in conjunction with these crankcases).

Any modification to any crankcase 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 produced by the original manufacturer of the engine unit used.

**1.19 CYLINDER BARREL(S)**

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

- 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.
- f) 2t LC Piaggio Zip Cylinder kits designed specifically for use with aftermarket Polini or Malossi crankcases utilising their non-original stud spacing are allowed (1.18), up to a maximum of 100cc configuration.

**1.20 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 (unless in the case of 1.19.f. rule).

**1.21 CRANKSHAFT:**

Any type of crankshaft may be used (also refer 1.18)

**1.22 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.

**1.23 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.

**1.24 GEARCASE:**

Any commercially available gearcase is permitted but it must have been manufactured as a direct replacement for the intended motor scooter model.

**1.25 TRANSMISSION & GEARING:**

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

**1.26 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.

	<b>Version Amendments</b>
V2 31.01.19	<i>1.17 / 1.24 - removal of concession allowing fitment of a 'non-original' type engine (AGM motion).</i>
V3 09.01.22	<i>1.18 &amp; 1.19 – aftermarket crankcase and cylinder kit 1 year allowance (AGM motion)</i>
V4 12.11.22	<i>1.18 &amp; 1.19 – aftermarket crankcase and cylinder kit now affirmed (AGM motion)</i>