2018 BSSO
Groups 5 & 6 Specials
Regulations v1

Section 15 *(General Regulations)* detailed within the Scooter section of the 2018 ACU Handbook apply in the first instance along with the following class restrictions and permissions:

1.1 GEARED SPECIAL CLASS REGULATIONS (GROUPS 5 & 6):
For Special Class Machines the MAXIMUM PERMITTED engine capacity is up to 160cc Grp.5 and up to 260cc Grp.6. Any modifications made must not prejudice the safety of the machine, rider, competitor or official.

1.2 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. Specifically for Vespa's (large and small frame) use of the automatic Piaggio Zip SP type single sided forks, suspension and disc brake set-up is now allowed including alterations to the frame/forks for correct fitment.

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.

1.3 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. 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.

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 AND LEG SHIELDS:
Any form of bodywork may be used subject to the regulations for Solo Motor Scooter Characteristics, Streamlining, Composite or moncocque construction and Use of Titanium and/or other exotic materials.

1.5 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.

1.6 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.

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

1.8 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.

1.9 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.

1.10 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.

1.11 SUSPENSION, COMPRESSION SPRINGS AND DAMPING:
May be changed providing the fitting is secure.

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

1.13 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.

1.14 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.

1.15 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.

1.16 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.

1.17 CYLINDER HEAD:
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.

1.18 CYLINDER BARREL:
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 soley 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.

1.19 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. Misano Cast Crankcase and the Casa Lambretta BSG Billet casings.

For the avoidance of doubt remanufactured casings must retain the original stud configuration of the requisite machine and be commercially available.

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

1.21 GEARCASE:
The gear casing must be as manufacturer's original specification

1.22 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 gears or sprockets and chain, may be changed to allow any combination of alternative final drive ratios to be achieved.