

# 2020 BSSO PRODUCTION CLASS Vespa Regulations V6



The BSSO Production Class is currently open to both geared Lambretta and Vespa motor scooters.

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 MODELS:

Any Large Frame PX, PE or similar Any Small Frame PK, Special, Primavera, SS or similar

#### 1.2 BODYWORK:

Bodywork must remain unaltered and as per manufacturer's original fitment. Side panels and mudguards may be replaced in identical fibreglass versions.

Handlebars must also be original model fitment and be fitted with 19mm Ball end levers.

All light lenses must be removed and suitably blanked off. The rear light housing must remain in position, so too any standard fitted legshield mounted glove box.

## 1.3 STEERING & SUSPENSION:

Forks must remain as per the manufacturer original fitment but may be interchanged between models (eg. PX Disc in to a non-disc large frame model and PK in to a non-PK small frame model).

Front and rear suspension may be uprated to aftermarket products.

Fitment of an aftermarket 'bolt-on' anti-dive kit is permitted and must be fitted in accordance with the manufacturer's instructions. The use of a steering damper is not permitted. Fork stops must be functional.

#### 1.4 BRAKES:

Conversion to an outboard hydraulic front disc brake assembly is 'compulsory'. For large frames, the PX Disc model forks and brake assembly can be interchanged. For small frame, the PK forks can be interchanged to allow use of a PX Disc assembly. Alternatively, fitment of any aftermarket hub mounted disc brake is permitted.

The rear brake pedal must remain in standard position and be cable operated.

All brake linings can be uprated to aftermarket types.

Rear set brakes or foot-pegs are not permitted.

#### 1.5 ENGINE CASING:

Standard OEM rotary engine casings. Alternatively, aftermarket rotary engine casings manufactured to OEM specifications offering no performance or reliability gain over the standard item.

No machining or welding of the casing is allowed, either internally or externally other than to allow clearance for fitment of a full circle reed crank.

No packing plates allowed either between the clutch cover or in the cylinder mounting.

Porting of the engine casing is allowed but only for matching of the cylinder transfers, matching to the inlet manifold or increasing the rotary pad inlet timing.

Rotary Inlet conversion for use of the approved Reed Block is allowed. However, only the engine casing can be matched to the reed bock and the inlet opening must not be enlarged beyond the original rotary pad sealing limits (the edge of the sealing pad must remain visible).

Flywheel and cylinder cowlings must be standard but may be trimmed/altered to aid fitment of the carburettor, reed block or exhaust manifold.

# **1.6 CYLINDER KITS:** (Type Specific)

Large frame: 200cc models to fit Malossi MHR 210cc cylinder, piston & head kit (VE part VM316349).

125/150cc models to fit Malossi 166cc cast iron cylinder, piston & head kit (VE part VM317181).

Small frame: all models to fit Malossi MHR 132cc cylinder, piston & head kit (VE part VM315829).

Each kit can be used in rotary or reed induction form. Each Malossi cylinder and head is to be used in standard 'bolton' form with no polishing, matching or tuning allowed. Only gaskets designed for the kit can be used to set your desired squish clearance. Metal can be removed from the cooling fins to allow for any required flywheel or carburettor clearance.

#### 1.7 INDUCTION KITS:

**Rotary Induction:** Any commercially available forward facing 28/30mm inlet manifold with rubber carb mounting. The manifold gasket face can be enlarged in conjunction with the engine casing (no welding).

**Reed Induction** (*Type Specific*): Malossi Reed Valve: Large frame 210cc VE Part VM204913 / 166cc VM205896, Small frame VE part VM206319. All can only be used with the supplied Malossi reed block/petals, no modifications allowed.

## 1.8 CRANKSHAFT:

Any un-modified aftermarket competition crankshaft designed specifically for rotary or reed valve induction maintaining the engine/cylinders original Conrod Length and Stroke. However, for rotary crankshafts the inlet timing web may be modified.

#### 1.9 IGNITION & FLYWHEEL:

Any original or aftermarket 'Road Ignition System' is allowed, including those with a 'fixed' advance/retard curve (no alternative map options) and must be used in kit form using the supplied stator, flywheel and CDI. Standard original Flywheels may be lightened. No modification or add-ons to the ignition system is allowed. All lighting coils must be retained and wiring visible. Use of a Lanyard is preferable.

## **1.10 EXHAUST:** (Type Specific)

Large Frame - Franspeed Race, SIP 'box' pipes (XL/Road 2.0) or the Malossi Power Classic 'box' pipe.

Small Frame - NFK Signature or Malossi Race (for the Malossi exhaust modification to the engine casing is allowed, only to provide required clearance for routing).

## **1.11 CARBURETTOR:** (Type Specific)

Dellorto VHSH 30mm or Dellorto 30mm PHBH. No polishing, add-ons or modification is allowed. Use of a thumb choke is permitted, so too an air filter.

#### 1.12 CLUTCH:

Any aftermarket uprated standard or completion clutch is allowed fitted with an original clutch cover, maintaining cable operation. No clutch cover packer is allowed. Internal modification to the clutch cover is permitted to aid clearance.

#### 1.13 GEARBOX & DRIVE:

Only complete original gearboxes/ratios allowed with the following permitted additions:

- Large frame motors can fit a 21/35t or 21/36t fourth gears.
- Small frame motors can run either 22/47t or 21/46t fourth gears using aftermarket items.

Primary gear ratios can be changed to suit different circuits.

# **1.14 TYRES:** (Type Specific)

Only the following  $3.50 \times 10^{\circ}$  tyre brands can be used and must be fitted to standard width split or tubeless rims: Dry Tyres: Sava/Mitas MC31 or MC35, PMT Blackfire.

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

For small frame models only, in case of fitment/fouling issues using a  $3.50 \times 10^{\circ}$  tyre, modification to the swing arm and clutch cover through removal of a small amount of metal is allowed. Alternatively, a  $90/90 \times 10^{\circ}$  tyre option of all the above brands is permitted where available.

# 1.15 GAUGES & CONTROLS:

Only a rev-counter is allowed, no other engine monitoring devices may be fitted. Any non rev-counter wiring must be taped together and be visible to deny use. Throttle position and operation must remain as standard and must be self-returning. The cable pulley wheel can be changed to aid a faster response.

#### **1.16 FUEL & TANK:**

Fuel must be either Super-Unleaded from a roadside station forecourt, AVGAS 100 LL (low lead version only) or a mixture of both. The use of specialist drum fuel, octane boosters or any kind of fuel additive other than two-stroke oil is specifically prohibited.

The fuel tank shall remain as per the manufacturer's original specification and position. The fuel tap position must remain as standard and be prominently marked to indicate the "OFF" position. All fuel supply pipes must be adequately secure.

	Version Amendments
V5	1.3 - Steering – a wording error on
28.01.18	interchangeable forks amended.
V6	1.10 - Additional small frame exhaust
31.01.19	(AGM motion)