

SACU 2025 Lightweight Class Rules

Incorporating Lightweight Cup

Issued: December 2024

All machines competing in 2025 SACU Lightweight Races must comply with these regulations. The regulations are additional to the ACU Standing Regulations as laid out in the ACU Handbook. All SACU Championships are for riders who possess a valid ACU or SACU. The regulations are as follows and are correct at the time of printing but which are subject to any amendments made by the SACU which will be issued by means of a Bulletin. SACU will monitor the changes in regulations, making changes to the better of the sport where necessary. SACU will monitor and take advice on these regulations from the Isle of Man TT. Engine and frame numbers must not have been tampered with or deleted. Motorcycles must be based upon bikes originally homologated for road use.

Anything that is not authorised and prescribed in this rule is strictly forbidden.

Supertwin race number plates: green background with White numbers.

1. Machine Specification

Any four-stroke twin cylinder motorcycle originally sold for road use with a water cooled engine of up to 700cc may be used.

Single cylinder 4-stroke machines up to 800cc are also permitted, provided they use a production-based engine (these machines do not require road homologation but must not exceed 78bhp).

2. Frame & Swing Arm Frame

Frame must remain as originally produced by the manufacturer for the homologated machine. Surplus attachment brackets may be removed and/or replaced, sub frame attachment & instrument brackets are free. Rear sub frame may be replaced or modified. Swing arm may be replaced from a model of the same Manufacturer, provided the original attachment to frame and rear suspension remains as per original frame model. No bracing or strengthening is allowed.

3. Suspension

Forks may be changed or modified. Fork yokes/triple clamp may be changed. Original internal parts of the fork may be modified or replaced. Aftermarket damper kits or valves may be installed. Fork springs may be replaced. Fork caps may be modified or replaced beyond the homologated standard to allow external adjustments. Steering damper may be added or changed.

Rear suspension unit can be changed or modified, but the original attachment to the frame and swing arm must remain as homologated.

4. Brakes

Front and rear brake discs may be changed. Only ferrous materials are allowed for brake discs.

Front and rear brake calipers may be changed.

Front and rear brake pads may be changed.

Front and rear master cylinders may be changed.

Front and rear hydraulic brake lines may be changed. The split of the front brake lines for both front brake calipers must be made above the lower fork bridge (bottom yoke).

5. Wheels & Tyres

Wheels may be replaced with any size or make.

There is no nominated control tyre.

The use of Wets is permitted.

Slick tyres can be used.

Any modification (cutting, grooving) is forbidden.

6. Electric starter and kill switch

Where the motorcycle is originally fitted with an electric starter, the engine must be capable of starting on the starter button at Post Race Technical Controls.

The kill switch must be located on the handlebars and must be operational at all times.

Kill switches must be located in such a way that they are able to be operated by the rider with his hands still on the handlebar controls.

7. Bodywork, tank, fairing and seat unit

Fairing, mudguards and seat may be altered or replaced. Windscreen, if fitted, may be replaced with transparent material only.

The original instruments and fairing brackets may be removed, replaced or added to.

The petrol tank is free but capacity may be no greater than 20 litres. The unleaded baffle in the tank may be removed and the filler replaced. Fuel tank materials may be changed but must be metal (steel / aluminium / titanium). The use of carbon composite or plastic fuel tanks are not permitted unless they are as fitted to the standard motorcycle and remain unmodified.

The lower fairing has to be constructed to hold, in case of an engine breakdown, at least half of the total oil and engine coolant capacity used in the engine (minimum 5 litres). The lower edge of openings in the fairing must be positioned at least 50 mm above the bottom of the fairing.

8. Battery The size and type of the battery may be changed and relocated.

9. Engine

Original cylinder head, rods, pistons, valves, cylinders may be modified but the capacity must not exceed 700cc for water cooled engines or 800cc for single cylinder machines.

Pistons may be replaced or modified.

Camshafts may be altered or replaced.

Polishing and lightening of engine parts is permitted.

All engine cases containing oil and which could be in contact with the ground during a crash must be protected by a second cover made of composite material, metal such as aluminium alloy, stainless steel, steel or titanium.

Original OEM cylinder head, pistons, valves, cylinders may be modified, polished or lightened. Gas flow modifications normally associated with individual tuning is permitted.

Compression ratio of the engine may be changed.

Conrods may be modified or replaced but the material must remain the same type as found on the standard machine (steel rods can only be replaced by steel rods) and the rods must be the same weight or heavier than standard.

Crankshaft may be modified or changed but must be no lighter than that used on the standard machine.

Camshaft timing may be changed by the slotting of cam sprockets. Cam lift and dwell is free. The thermostat may be removed from the housing to aid cooling, if required.

10. Ignition/Fuel System and Throttle Bodies

The ECU must remain as fitted to the homologated machine or a machine of similar type and construction from a previous model and from the same manufacturer. However, it is permitted to use a secondary fuel and/or ignition module such as a Power Commander. Flashing the standard ECU is also allowed.

The use of an aftermarket ECU (e.g., Motec, IgniTech etc) is not permitted.

For machines under 651cc, the throttle bodies and injectors can be changed, bored out, polished and modified. The use of multiple injectors per cylinder is allowed.

For machines over 651cc, the throttle bodies and injectors must be as found on the homologated machine. No modifications are permitted with the exception of removal or fixing the position of any secondary butterflies only.

Bell mouths may be modified, removed or changed.

Air boxes may be modified or replaced.

11. Transmission

Gearbox may be changed or modified.

The number of gears must remain as found on the standard machine.

Additions to the gearbox or selector mechanism, such as quick shift systems are permitted.
Clutch springs: friction and drive plates may be replaced.

The use of slipper clutch assemblies is permitted.

Front and rear external drive sprockets, chain pitch, width and length can be changed

12. Electrics

The engine must start using the standard on board electric start.

The alternator may be modified or changed.

The original wiring harness may be modified or replaced.

It is recommended that machines be equipped with a red light on the instrument panel. This light must flash in the event of oil pressure drop.

All motorcycles must have a functioning red light mounted at the rear of the machine to be used in rain or low visibility conditions.

13. Breathers

All motorcycles must have a closed breather system. All oil breather lines must be connected and discharge in the air box only. The lines must discharge above the throttle bodies. They cannot discharge into the inlet tract or the exhaust air inlet system. The breather line must go engine to airbox direct or engine to catch tank to air box. All connections must be sealed so there are no direct atmosphere emissions.

It is not allowed to add a pump used to create a vacuum in the crankcase. If a vacuum pump is installed on the homologated motorcycle then it may only be used as homologated.

14. Exhaust System

Exhaust pipe and silencers may be altered or replaced from those fitted to the homologated motorcycle. The number of final exit(s) to the exhaust may be altered from that of the homologated machine.

15. Fuel

Fuel can be pump "road" fuel or pumped/canned race fuel, with a maximum 102 RON. No additives are permitted.

16. Radiator and Oil Cooler

Original radiator and oil cooler can be replaced. An oil cooler can be added if not fitted as standard. The radiator breather must vent into a catch tank with a minimum volume of 250cc.

17. Oil Pumps, Oil Sumps, Oil Lines and Water Pumps

All external engine oil drain plugs must be correctly torqued and be security lock wired.

Any external oil lines containing positive oil pressure must be of suitable material and construction.

All oil line fasteners should be lock wired or at the very least be secured with a high strength locking agent.

External oil filters (including those with a drilled HEX) must be secured using a suitable hose clamp (Jubilee type) and secured with lock wire in such a way as to prevent it from undoing.

For 2025 Triumph 660 Daytona models are allowed to compete in the Championship class, the above rules apply to them

with the exception of:

1. Engine

Engines must remain standard, no modification is allowed.

2. Ignition,

Fuel system, throttle bodies and Air Box. All must remain standard.

3. Electrics

All must remain standard

Bikes which qualify for MSVR Sportbike class Rules also qualify for SACU Lightweight Class, Open, not Cup

2025 Lightweight Cup

Rules as above, All bikes in the cup class must not produce more than 80 BHP at the rear wheel, riders will be expected to produce a dyno printout showing this figure, any bike checked during the season which is found to be over 80 BHP will be removed from the results in the Cup class and placed in the Championship Class

Bikes which qualify: Yamaha R7. Kawasaki ER6. Suzuki SV650. Kawasaki Z650, Kawasaki Ninja 650, 400 Junior Twins, Single cylinder up to 800cc Kawasaki Ninja ZX-4 RR. KTM 390

The purpose of the Cup class is to allow older bikes to race competitively, also for new bikes such as Yamaha R7 to race in standard form against older higher spec bikes, hopefully the 80BHP limit can be achieved by , Cutting rev limits and or retarding ignition timing slightly with the result being engines which last longer and more bikes on track

