

CLASS REGULATIONS

SUPERKART

SK3.1. Class. 450 National

SK3.2. Introduction. This class is a performance equivalent to the existing 250 National class and is limited to series production 4 stroke single cylinder engines of a maximum of 450cc designed to have no more than five gears, or modified to have no more than five gears. Engines must be readily available production units.

Where engine manufacturers have different specifications of the same base engine, (e.g. Moto X, Super Moto etc) crossover of parts will be permitted between these engine model types but each variant must be registered. Regulations as per Motorsport UK Yearbook 2021.

Engines may be registered on a three-yearly basis. The next period for inclusion of new engines commences 01.01.2022.

SK3.3. Chassis. Any chassis complying with Motorsport UK Yearbook Regulations for gearbox karts. All chassis main parts must be firmly secured together on to the chassis frame. Flexible connections are only authorised for the conventional steering knuckle support, and for the steering system. All other devices with the function of one, two or three dimensional joints are forbidden. The chassis frame is the central and main supporting element of the entire vehicle. It must have the necessary strength in order to be able to absorb the loads which are produced when the vehicle is in motion. Any hydraulic, pneumatic or elastomeric elements for damping chassis oscillation are forbidden. Minimum wheelbase is 106cm.

SK3.3.1. Bodywork and bumpers. CIK-homologated bodywork is only permitted if fitted with bumpers (front & side) specified in U17.2 to U17.12.11 and U17.14 through to U 17.17.4 of the Motorsport UK Yearbook.

SK3.4. Engine. 4-stroke series production single-cylinder engines up to a maximum of 450cc. All components except ignition, piston, connecting rod and cam clamping blocks must be OEM parts as at the time of manufacture. The connecting rod must be magnetic material. All OEM parts must be on the manufacturers parts list for the model type registered.

Apart from those listed in the tuning regulations below all other OEM parts cannot be modified.

Eligible Engines are as follows :-

- Honda CRF 450R (2004, 2005 & 2006)
- KTM SMR, EXC, SX & SX-F (2003-2007 - 2010-2012)
- KTM SXF (2013 - 2015)
- Yamaha YZ450F Z,A,B & D (2010 – 2013)
- Husqvarna FC (2016 - 2018)
- Rotax Can Am DS450 XXC XMC (2015)
- TM SMX (2015 - 2017)

SK3.4.1. Tuning regulations. Modifications to the engine are allowed according to the following list:

- (a) The OEM cylinder head may be gas flowed and polished
- (b) Slipper Clutches are permitted
- (c) The addition of a fuel pulse pump adapter is permitted
- (d) In the interests of reliability the fitting of an alternative oil feed system to the engine is permitted

(e) In the interest of reliability, the fitting of an alternative oil feed system to the engine is permitted.

(f) Carburettors and injection bodies must be from the OEM parts list for the engine, which can be modified

The following must not be varied:

g) Stroke

h) Bore (outside maximum limits)

i) Connecting rod centre line and connecting rod centres

j) Crankshaft

k) Camshafts

l) External appearance of the engine must be as original except for the ignition system and oil feed system

m) Number of carburettors if fitted (1 only).

n) All systems of injection and/or spraying of products other than permitted fuel are forbidden.

o) Fuel injection is permitted only if Original Equipment Manufacture on the model being registered.

p) It is not permitted to have an electronic connection to a carburettor unless this was standard OEM at manufacture.

Because it is common practice for engine manufacturers not to put unique numbers on replacement crankcases should a competitor need to change crankcases it is required that the crankcases being replaced be presented to the relevant Championship Eligibility scrutineer who will transfer over the number from the engine crankcases being replaced onto the new crankcases.

SK3.4.2. Ignition. The ignition system type is open but the electronic unit box and the coil must receive only one feeding energy source of the rotor/stator or of a battery and one crankshaft pick-up signal in order to set the ignition signal. The advance and cartography may under no circumstances be modifiable whilst the kart is in motion.

SK3.4.3. Noise control. As per 2021 Motorsport UK Yearbook U.16.16 and Karting Yearbook Appendix 3.

SK3.5. Transmission. Maximum of five gears. The engine manufacturer's ratios within the registration must be maintained.

SK3.6. Brakes. As specified in The Motorsport UK Yearbook section U16.10.1 to U16.10.10

SK3.7. Wheels and tyres. 6" diameter wheels and tyres only must be used with a max. tyre width of 8". Only CIK-homologated tyres are permitted from the periods 2014 to 2022, unless stated otherwise in the Championship Regulations.

SK3.8. General.

SK3.8.1. Weight. The minimum weight with driver on the completion of any part of the event will be 199kg with just bumpers and side bars. If a wing is fitted to the above the weight will be 204kg. The weight with any other form of bodywork will be 218kg.

SK3.8.2. Number plates. Red background, with white numbers. U17.26-27 applies, unless varied in Championship Regulations.

SK3.8.3. Age. The class is open to any driver aged 17 years or above.