



European Endurance Legend Cup

Technical Regulations

ENGINES

- Engines are preferred to have working starter motors and generators
- Any machine not having a working starter motor will start at the back/rear of the grid irrelevant of the team's qualification time
- Engine tuning or modification in the Superstock class is forbidden. Superstock machines engines must remain as manufactured. Only replacement / aftermarket clutch springs, plates and oil filters are allowed
- It is mandatory to preserve the particularities of the series models such as the number of cylinders, the number of gear ratios, the number of camshafts, etc
- The engine crankcases must remain in conformity with the original. However, internal modifications to these housings are permitted
- The cylinder block, cylinder head and cylinder head cover must correspond to the original model of the engine
- Crankshaft and rods are free
- Camshafts are free
- The addition of a pump to create a vacuum in the crankcase is forbidden
- Side covers can be modified or replaced
- Ducati 900SS engines up to 1989, prior to but not including the DS or EVO engine are allowed (Appendix 2)

CLUTCH

- The original clutch can be changed or replaced
- No electric source may be used for clutch operations
- The clutch system (in oil bath or dry) and its control (cable / hydraulic) must remain as standard fitment
- No form of slipper clutch or traction control is permitted

TRANSMISSIONS

- All gears, shafts, shift drum and shift forks are free
- The gearbox output gear shall be covered by a metal guard
- A metal casing must completely cover the primary chain on motorcycles with a separate box.
- It is mandatory to install a protection (sharks fin) of the chain between the lower part of the chain and the crown / rear sprocket

IGNITION /CONTROL UNIT (ECU)

- The ignition control unit software can be flashed on all classes except Superstock
- Flashing the Superstock ignition is forbidden
- The ECU location can be changed (changed places)
- Spark plugs, spark plug connectors and power leads can be replaced
- Direct coils are not allowed (inserted in the candle cap - Stick coils)

CARBURETTORS

- Carburetors can be round-type, no restriction in the size used
- Carburetors must be of a type used within the Post Classic period
- Injection or forced feeding (turbo/supercharger) of any type is forbidden
- Injection only allowed as original equipment, example: GPZ1100B1
- Flat slide carburetors can only be fitted to Superstock GSX-R750 (standard type) and Superbike class
- Airbox can be removed and carburetors re-jetted (all classes)

FORKS

- The period look of forks and fork yokes must be maintained
- The use of upside-down forks is forbidden
- Fork tubes/slider to be plain in appearance
- No replacement suspension system or electronically controlled prototype can be used
- The steering damper can be added or replaced by an accessory damper
- The steering damper cannot act as a steering angle limitation device
- Cartridge kits to forks are accepted

SHOCK ABSORBERS

- A modification of the angle of the dampers is allowed
- The rear damper(s) can be replaced, but an identical system should be used (double or single)
- No replacement suspension system or electronically controlled prototype can be used

FRAMES

- Original manufacturers standard frames are permitted in all classes
- Standard frames can be braced with period modifications including Superstock
- Aftermarket frames are allowed in Legend and Superbike classes (See Appendix 1)

SWINGING ARMS

- The period look of swinging arms must be maintained
- Must be the manufacturers original fitment or period aftermarket to the main frame.
- Period style bracing is permitted

FUEL TANK

- The fuel tank must not exceed 24 litres and be in period appearance
- Carbon fibre is not allowed for tank construction
- The fuel tank must be fixed on the frame, by the front and the back, by a system resistant in case of a fall
- The fuel tank is preferred to have a flame retardant material (eg Explosafe[®])
- Single fast fill opening is accepted only. Twin fill must have one filler/hole disabled

BRAKES

- Remote master cylinders are permitted, but radial master cylinders are forbidden, except in the Superbike class,
- Either manufacturers original fitment or period alternative brakes are permitted
- The rear master cylinder can be modified
- Floating discs of the bobbin type are permitted
- Discs must be circular in shape; discs "petals" (wavy discs) are forbidden
- Only brake discs of ferrous material are allowed
- Carbon fibre/ceramic brake discs are forbidden
- Quick change systems are forbidden
- PFM style finger fitments are forbidden
- Quick couplers of brakes are forbidden
- The brake pads, shoes and hoses are free

WHEELS

- Wheels are free from restriction in material construction. Magnesium, aluminium alloy and steel spoke wheels are all authorised if they are of classic and period appearance
- Carbon wheels are forbidden
- Quick release systems on both wheels are authorised

EXHAUST SYSTEMS

- Exhaust systems must look period
- No underseat exhausts
- For safety reasons, the edges of the exhaust outlet(s) should be rounded to avoid sharp edges
- The exhaust silencer bracket must be removed by screws and nuts. "Zeus" quick couplings are not allowed
- Exhaust systems must meet the organisers local sound limit requirements, but is otherwise free from restriction

TYRES

- Slicks: Use is forbidden in all classes
- Hand Cut Tyres: Use is forbidden in all classes
- Wets: Use is forbidden in all classes

BODYWORK AND APPEARANCE

- This outline taken from front, rear and both sides must accurately represent a period silhouette and is a crucial part of eligibility
- Appropriate single seat covers and/or race bodywork in the original dimensions and outline are authorised.

INSTRUMENTS AND CONTROLS

- Must be of a type and style used in the period
- Digital temperature or voltage gauges are acceptable
- Digital dashes are forbidden
- Handlebars and hand controls are free

RADIATORS AND COOLING SYSTEMS

- The original / standard radiator or oil cooler can be modified or replaced
- The oil cooler must not be mounted on or above the rear fender
- The radiator lines connected to the engine can be changed
- The appearance of the front, rear and side profiles of the machine must conform to the approved form after the addition of additional radiators or oil coolers

LIGHTS

- Front and rear lighting must be period in physical appearance
- LEDs will only be permitted if they are fixed in the original lights or have the appearance of classic lights
- Each light circuit includes a front headlamp and a non-flashing rear light
- The first and second circuit are controlled by two switches with ON / OFF position and are positioned on the left side of the handlebars
- The third circuit shall have a switch with the ON / OFF positions and shall be positioned on the left side of the handlebars (see diagram in Appendix 4 to this Regulation)
- A 60cm² retro-reflective device will be attached to the rear of the motorcycle
- The lateral identification LEDs can not be alternative (flash) and limited to green, blue or white
- The rear, left and right identification numbers may be bright

NUMBER PLATES

- The machines must bear solid, rectangular shaped number plates with rounded corners, measuring at least 285 mm wide and 235 mm high
- The figures must have the following minimum dimensions: 140 mm high, 25 mm thick and 80 mm wide, spaced 15 mm apart
- The plates, three in number, must be arranged, one frontal front centre or front right or left, the other two on each side, necessarily at the rear of the bike
- The machines must bear solid, rectangular shaped number plates with rounded corners, measuring at least 285 mm wide and 235 mm high
- Class colors are defined as follow :
 - Classic :
 - Number plates are WHITE (RAL 9010) and BLACK numbers (RAL 9005) : **100**
 - Legend :
 - Number plates are BLACK (RAL 9005) and WHITE numbers (RAL 9010) : **100**
 - Superstock :
 - Number plates are RED (RAL 3020) and WHITE (RAL 9010) numbers : **100**
 - Superbike :
 - Number plates are GREEN (RAL 6002) and WHITE numbers (RAL 9010) : **100**

FUEL

- Pump fuel, special gasoline or AVGAS are allowed and limited to a maximum of 105 RON
- Methanol, E85, additives, Power Boosters and Nitromethane are prohibited

DEROGATION / DEVIATION FROM TECHNICAL REGULATIONS

- Derogations / deviation from technical regulations above may be granted by the organising committee of the event for motorcycles which were originally produced with elements (wheels, fork tubes, etc.) whose characteristics differ from those mentioned in the Class listings
- These possible derogations / deviations will only be granted by the Organising Committee after receipt of a detailed written request accompanied by the technical and photographic appendices

APPENDIX 1 - FRAMES

AUTHORISED AFTERMARKET FRAMES; LEGEND and SUPERBIKE CLASSES ONLY

- Corki
- Egli
- Harris
- Martin
- Moko
- Nico Bakker
- PEM
- PEMDA
- P&M
- Rau
- Rickman
- Rob North
- Seeley
- Spondon
- Verlicchi
- Others with official paperwork

UNAUTHORISED FRAMES

- All aluminium Delta Box are forbidden

APPENDIX 2

Some examples of bikes allowed for each class. Note – this is NOT a list of all eligible bikes.

CLASSIC: 31/12/1968 to 31/12/1981

- BMW R65, BMW Rxx/6
- BSA Rocket III
- Ducati Bevel 750, 750S, 860, 900SS, 900-MHR, 900-SD, 90-SSD,
- Ducati Pantah 500SL, 600SL, 650SL
- Ducati TT2-600
- Honda CB-750, CB-750/BO, CB-900/BO
- Laverda SF-750, SF-1000
- Kawasaki Z-900, Z-1000, Z-1R, Z-650, Z-750, KZ-750, 1000-J
- Suzuki GT-750, GS-750, GS-1000
- Triumph Rob North
- Yamaha XS-650, XS-750, XS-850, XS-1100

LEGEND: 31/12/1975 to 31/12/1984

- Bimota SB5
- Ducati TT1-750, TTF1-750
- Honda CB-1100F, CB-1100 R, CBX-1000
- Moto Guzzi Lemans II, IV
- Suzuki TR-750, RG-500 Gamma, GSX-1100E, GSX-1100S, GSX-1100 EFE,
- Yamaha FJ-1100

SUPER STOCK: 31/12/1972 to 31/12/1986

- BMW R65, R75
- Ducati 750-F1
- Honda CB-750 BO, CBX-750, VF-750, VFR-750 (RC24 I, II)
- Kawazaki GPZ-750, GPZ-750R, GPX-750R
- Suzuki GSXR-750 G/H
- Yamaha RDLC-500, FZ-750 (1 and 2 series only, series 2 must conform to series 1 silhouette half fairing)

SUPERBIKE: 31/12/1975 to 31/12/1986

- BMW K100, K100-RS, (2 valves)
- Honda VF-1000R, VF1000F
- Kawazaki GPZ-900R, GPZ-1100, GPZ-1000 RX,
- Suzuki GSXR-1100 G/H
- Yamaha FJ-1200 (1TX)
- All CLASSIC & LEGEND models with wheels and/or brakes from the SUPERBIKE class specification, or SUPERSTOCK models with modified engines

DUCATI Engine

Ducati engines may be installed in the Legend and Superbike class as follow:

- ALLOWED : engine based on the 904 cc (92 x 68 mm) installed in 1989 on the SS
- NOT ALLOWED : engines based on the 992 cc (94 x 71.5 mm) installed in 2005 on the Multistrada 1000DS
- NOT ALLOWED : engine based on 1078 cc (98 x 71.5 mm) installed in 2010 on the Monster EVO

APPENDIX 3

Machines will be inspected in Technical Control to make sure they comply with this Regulation or with the National Motorcycle Federation (NFM) regulations if it differs

This will include items like: rounded ends on handlebars and footrests; guards over the drive chain at the gearbox sprocket and at the bottom of the rear wheel sprocket; oil containment under the engine; clearance between the handlebars; tank and fairing and so on

Please refer to the Standing Regulations of the NFM and Supplementary Regulations of the meeting

Virtually all regulations between countries are much the same but there are variations

APPENDIX 4

Lighting System Wiring Diagram

