

# 2014 DUCATI TRIOPTIONS CUP

# CHAMPIONSHIP SPORTING and TECHNICAL REGULATIONS

[to be read in conjunction with the 2014 MCRCB YEARBOOK]

# **PLEASE NOTE:**

The Promoter/Organiser reserve the right to issue amendments to this document from time to time.

Version 1

18<sup>th</sup> November 2013

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# **Document Updates**

Version	Date	Reason for change	
1.0	18/11/13	First version of the document for 2014 season, 899 ECU part	
		number and dyno curve will be supplied when available	

# 1 The 2014 Ducati TriOptions Cup

# 1.1 Championship Organisation, Jurisdiction and Regulation

MotorSport Vision Racing ("MSVR") on behalf of Ducati UK Limited is the Promoter ("Promoter") and Organiser ("Organiser") of the 2014 Ducati TriOptions Cup ("Championship").

The Championship is designated a National Cup by the Motorcycle Circuit Racing Control Board ("MCRCB"), the series Governing Body and accordingly will operate under its jurisdiction. The MCRCB Sporting Code, Judicial, General and Championship Regulations are published in the 2014 MCRCB Yearbook.

# 1.2 Rider Eligibility

To be eligible to enter a race in the Championship all riders must be registered riders with the Championship, hold the minimum of a 2014 Clubman licence (as in, have a completed ACU signature card or other ACU-accepted documented evidence of prior race experience to qualify as a full clubman licence holder) or above, issued by the ACU or the Scottish ACU.

#### 1.2.1 International Riders

Riders from outside of the EU must hold an International Licence issued by the FIM. All overseas riders (inc. Ireland) must have "start permission" from their FMNR to include personal accident insurance and repatriation insurance. The MCRCB and the Promoter/Organiser will not be held responsible for repatriation.

#### 1.3 Registration and Entries

Each rider shall pay a non-refundable fee to the Promoter to become a registered rider of the Championship and receive certain benefits. The fee represents a commitment to race in all rounds of the Championship. The Promoter has the right at their absolute discretion accept, reject, or withdraw any registration for the Championship.

All riders must apply for UK race entries through MSVR who will publish race entry forms, supplementary regulations, and administer race entries at each round of the Championship. The Promoter has the right at their absolute discretion to accept, reject, or withdraw any race entry for the Championship.

#### 1.4 Championship Events

The Championship will consist of sixteen races held over eight events during 2014:

ROUND	DATE	VENUE	ORGANISER
1	18/19/20/21 April	Brands Hatch Indy	MSVR
2	23/24/25 May	Donington Park GP (supporting WSBK)	MSVR
3	27/28/29 June	Knockhill	MSVR
4	18/19/20 July	Brands Hatch GP	MSVR
5	8/9/10 August	Oulton Park	MSVR
6	23/24/25 August	Cadwell Park	MSVR
7	19/20/21 September	TT Circuit Assen	MSVR
8	3/4/5 October	Silverstone GP	MSVR

The Promoter/Organiser reserves the right to amend the championship calendar.

# 1.5 Championship Points and Leaderboard

Championship points will be awarded in accordance with the final race results of each race as published by the Race Organisers, and will be allocated as 25 points for a race win, then 20, 16, 13, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1 for all subsequent placings.

The Championship leaderboard will be managed by the Promoter using points awarded as above. All rounds will score towards the Championship leaderboard.

#### 1.6 Prize Fund

#### 1.6.1 Championship Prizes

The prize fund has been refreshed to recognise the top three finishers and the best under 23 year old rookie\*, the awards are as follows:

**Overall 1<sup>st</sup>** - £5,000 cash prize, a Ducati Corse riding suit and entry into the National Superstock 1000 class (providing they ride a Ducati) or the Ducati TriOptions Cup for 2015

Overall 2<sup>nd</sup> – Entry into the 2015 Ducati TriOptions Cup and a Ducati leather suit, gloves and boots Overall 3<sup>rd</sup> – Entry into the 2015 Ducati TriOptions Cup

Overall Highest 848 Championship Points Score - £2,500 cash prize and a Ducati Corse riding suit Overall Dealer Award – Trophy for the leading dealer supported entrant to be presented to the dealer, entrant to declare dealer affinity prior to the start of the season.

#### 1.6.2 Event Prizes

At each event along with race trophies there will also be Pirelli supported tyre prizes awarded to the riders with the highest combined points scores from races at that round.

At each event there will be tyre prize awarded to the riders with the highest combined points scored from races at that round. In the event that riders are tied on points, the rider with the highest placing in either race will take priority, and in the event riders are still tied the rider with the highest place in the first race will take priority.

The tyre prizes will be awarded as follows:

1st overall - 1 x front & 1 x rear tyre

2nd overall - 1 x rear tyre

3rd overall - 1 x front tyre

In addition, there will be 1 x pair of tyres to be awarded at the sole discretion of the Promoter or appointed representative.

Ducati will also recognise the overall round winner with a pair of Sunday hospitality passes for the following round.

# 2 Machine Specification

# ANYTHING THAT IS NOT AUTHORISED AND PRESCRIBED IN THESE REGULATIONS IS STRICTLY FORBIDDEN.

The rules are intended to limit changes to the homologated production motorcycle in the interests of safety, power limitation, and to minimise racing costs.

All items not mentioned in the following articles must remain as originally produced/supplied by Ducati for the machine.

### 2.1 Machine Eligibility

The motorcycles eligible for the series are the Ducati 899, Ducati 848 and the Ducati 848 EVO ("Ducati 848") models with the following type approval numbers:

- e3-2002/24-0475-02
- e3-2002/24-0475-03
- e3-2002/24-0475-04
  848 EVO DARK
- e3-2002/24-0475-04
  848 EVO
- e3-2002/24-0586-03
  899 PANIGALE

The Ducati 848EVO Corse SE is specifically EXCLUDED from the Championship. This model has the following type approval number:

• e3-2002/24-0475-04 848 EVO Corse SE

The appearance from front, rear and the side profile of a series motorcycles must, except when otherwise stated, conform to the shape as originally produced by the manufacturer.

All machines must be registered for road use in the UK, unless with prior written approval from the Promoter, and the appropriate documentation produced on request. All motorcycles must display the manufacturers' vehicle identification number on the frame body (chassis number), with the exception of spare frames.

# 2.2 Displacement Capacity

The displacement capacity must remain as originally produced, for the 899: 898cc and for the 848: 849.4cc. Modifying the bore and stroke is not allowed.

#### 2.3 Power

899 machines must not be making more than 148 bhp and 848 Machines must not be making more than 140 bhp DIN at the rear wheel when measured on a corrected dynamometer.

Furthermore, the Appendix 1 and 2 show the respective power curves of both the Ducati UK 848EVO VIP bike and a standard Ducati UK 899 test machine (herein known as the 'base curve') and it is expected that the power curve of all machines will be broadly following the same path and values as the base curve, with an exception for the 'flattening' of the emissions control at the 7,000 rpm point. Machines showing excessive

power above this base curve will be investigated as will those showing unexpected peak power, maximum revs, or other differing values at points along the base curve.

Machines will be subject to regular and random dynometer checks at any time while at a Championship event.

# 2.4 Minimum Weight

At any time during a Championship event, the weight of the whole machine (including the tank and its contents) must not be less than the minimum weight.

The minimum weight equals 'dry' weight minus 12 kg. The manufacturer declared 'dry' weight is 168kg for the 848 and 169kg for the 899. The Minimum weight of a 848 is 156 kg and 157 kg for a 899 after the 12 kg deductions.

# 2.5 Noise Limit

All machines must comply with MCRCB Technical Regulations. At practice or test sessions organised from time at circuits, outside of the championship, then the relevant circuit operation rules at the particular venue concerning noise limits will apply.

# 2.6 Engine

#### 2.6.1 Fuel Injection System

The injectors must remain standard units as on the homologated motorcycle.

Bell mouths must remain as originally produced by the manufacturer for the homologated machine.

Variable length fuel injection intake track devices that function while the engine is operating are not allowed. The Standard homologated unit must be used.

No modification of fuel pumps or pressure regulator is allowed.

Throttle bodies must be standard units as on the homologated model.

Engine tick-over cannot be adjusted from standard setting.

The butterfly cannot be changed or modified.

# 2.6.2 Cylinder Head

No modifications are allowed. No material may be added or removed from the cylinder head through machining, polishing or any other means.

The cylinder head gasket may be changed.

The valves, valve seats, guides, oil seals, shims, collets, rockers and rocker shaft must be as originally produced by the manufacturer for the homologated machine.

Only normal maintenance interventions as prescribed by the Manufacturer in the model's Service Manual are authorised.

Valve closing rocker springs cannot be removed.

# 2.6.3 Camshaft

No modifications are allowed.

At the technical checks; for non-direct cam drive systems (i.e. with rocker arms), the valve lift is measured.

The timing of the camshaft is free, however no machining of the camshaft sprocket is authorised.

The use of off-set woodruff keys and vernier sprockets is allowed.

### 2.6.4 Cam Sprockets or Gears

No dimensional modifications are allowed.

# 2.6.5 Cylinders

No modifications are allowed.

#### 2.6.6 Pistons

No modifications are allowed, including polishing and lightening.

# 2.6.7 Piston Rings

No modifications are allowed.

#### 2.6.8 Piston Pins and Clips

No modifications are allowed.

# 2.6.9 Connecting Rods

No modifications are allowed, including polishing and lightening.

#### 2.6.10 Crankshaft

No modifications are allowed, including polishing and lightening.

The flywheel must remain as originally produced by the manufacturer on the homologated machine.

# 2.6.11 Crankcase and all other Engine Cases (i.e. ignition case, clutch case, etc.)

No modifications to the crankcases are allowed, including painting, polishing and lightening.

Lateral (side) covers may be altered, modified or replaced. If altered or modified, the cover must have at least the same resistance to impact as the original one. If replaced, the cover must be made in material of same or higher specific weight and the total weight of the cover must not be less than the original one.

#### 2.6.12 Engine Case Secondary Covers

All lateral covers/engine cases containing oil and which could be in contact with the ground during a crash, must be protected by a second cover made from composite materials, type injection moulded nylon 6.6 long fibre 60%, carbon or Kevlar®, aluminium or steel plates and/or bars are also permitted. All these devices must be designed to be resistant against sudden shocks without shattering and must be fixed properly with bolts to the engine covers or affixed to the engine covers with Sikaflex® or SikaFast® automotive bonding adhesive.

No damaged cases will be permitted unless approved by the Race Organiser's Chief Technical Officer.

#### 2.7 Transmission and Gearbox

Modifications to gearbox or selector mechanism are not allowed.

Countershaft sprocket, rear wheel sprocket, chain pitch and size may be changed.

The sprocket cover may be modified or eliminated.

# 2.8 Clutch

The original clutch assembly may be modified or replaced with an aftermarket back-torque limiting unit (slipper clutch) either wet or dry-based. No other modifications are allowed.

The friction and drive discs may be changed, but their number must remain as original.

Clutch springs may be changed.

## 2.9 Oil Pumps and Oil Lines

No pump modifications are allowed.

Oil lines may be modified or replaced. Oil lines containing positive pressure, if replaced, must be of metal reinforced construction with swaged or threaded connectors.

# 2.10 Radiator, Cooling System and Oil Coolers

Protective meshes may be added in front of the oil and/or water radiator(s).

The radiator tubes to and from the engine may be replaced, but the system must be maintained with its original tanks.

Radiator fan and wiring may be disconnected and removed. Thermal switches, water temperature sensor and thermostat may be removed inside the cooling system.

Radiator cap is free.

An additional water radiator may be fitted but the appearance of the front, the rear and the profile of the motorcycle must not be changed. Extra mounting brackets to accommodate the additional radiator are permitted.

The only liquid engine coolants permitted other than lubricating oil shall be water. This is to avoid the use of oil-based substances which can be dangerous if spilt onto the circuit.

#### 2.11 Air Box

The air box must remain as originally produced by the manufacturer on the homologated machine but the air box drains must be sealed.

The air filter element may be modified or replaced.

All motorcycles must have a closed breather system. All the oil breather lines must be connected and discharge in the air box.

The original air ducts running between the front fairing and the air box may be altered or replaced. Carbon fibre composites and other exotic materials are forbidden. Particle grills or wire-meshes originally installed in the openings for the air ducts may be taken away.

#### 2.12 Fuel Supply

Fuel lines from the fuel tank to the delivery pipe assembly (itself excluded) may be replaced but the fuel petcock must remain as originally produced by the manufacturer.

Quick connectors or dry-break quick connectors may be used.

Fuel pressure regulator may not be modified or changed.

Fuel vent lines may be replaced.

Fuel filters may be added.

Electric fuel pumps must be wired through a circuit cut-out which will operate automatically in the event of an accident.

# 2.13 Exhaust System

848 motorcycles only (specifically not 848 EVO models): the complete exhaust system may be changed. For the avoidance of doubt, this includes the two exhaust header pipes, necessary link pipes, and the two silencers/end cans. The exhaust system must remain principally a "2-1-2" configuration, similar in appearance to the Ducati Performance full exhaust system (Ducati Performance Part Number 96457208B).

848 and 848 EVO motorcycles: Silencers/end cans may be modified or changed.

# 899 Panigale motorcycles: Silencers/end cans may be changed but the replacement must be manufactured by Termignoni (Part Number 96480221A)

Catalytic converters must be removed.

If fitted, the noise control exhaust valve may be disconnected but not removed from the exhaust. The controlling servo and cables may be removed.

The number of the final exhaust silencers must remain as originally produced, and located in the same position as on the production model.

For safety reasons, the exposed edges of the exhausts pipes outlet must be rounded to avoid any sharp edges.

No additional internal parts may be added to the exhaust system.

Wrapping of exhaust systems is not allowed except in the area of the rider's foot or an area in contact with the fairing for protection from heat.

#### 2.14 Electrics and Electronics

# 2.14.1 Engine Control Unit (ECU)

The engine control unit (ECU) must be either:

- a) The Ducati Standard Production ECU, as supplied on the homologated motorcycle, without any software changes, including 'flashing' or re-mapping, save for the one exception detailed below, or
- b) The Ducati Performance ECU, as supplied by the manufacturer (Ducati Performance Part Number 96523210A), without any software changes, including 'flashing' or re-mapping. 899 Panigale Ducati Performance Part Number TBA

For the avoidance of doubt, a Ducati Standard Production ECU may be 'flashed' or 're-mapped' with an exact copy of the software on the Ducati Performance ECU.

The addition of a single, external control unit to change the fuel mixture map, such as a *Power Commander* unit, is allowed, the unit must not be able to perform any other function.

Any other means to perform any other electronic management function including traction control, throttle response control, real-time fuelling control (such as with an *Auto Tune* module), and/or the management and switching between multiple ECU software maps and/or fuel mixture maps while the machine is in motion during a Championship event is specifically prohibited.

The use of a software or hardware-based engine retarder/quickshifter is prohibited.

The Series Organiser reserves the right to unhindered access to any machine to verify and to reset or replace the ECU with a corresponding Standard Production or Ducati Performance ECU at any time at a Championship event.

If replaced by the Promoter during a Championship Event, the replacement ECU will be on a like-for-like basis and the replaced ECU will not be returned to the competitor.

The ECU may be relocated, but competitors are advised to ensure there is easy access to the ECU for control checks to take place with the minimum of delay.

Spark plugs may be replaced.

Ignition coils may be relocated.

#### 2.14.2 Generator, Alternator, and Electric Starter

Generator, alternator, and their assembly must remain as originally produced by the manufacturer on the homologated machine. No modifications are allowed.

The electric starter must operate normally and always be able to start the engine during the event.

#### 2.14.3 Additional Equipment

Additional electronic hardware equipment not on the original homologated motorcycle cannot be added (e.g. data acquisition, computers, recording equipment).

The addition of a device for infra red (IR) transmission of a signal between the racing rider and his team, to be used exclusively for lap timing, is allowed.

The addition of a GPS unit for lap timing/scoring purposes is allowed.

Telemetry or any other means to remotely determine machine settings while it is in motion during a Championship event is not allowed.

# 2.14.4 Wiring Loom

Modification or replacement of the wiring loom is not allowed, except that the wiring loom and the key/ignition lock may be relocated and unused wiring loom elements supplying current to direction indicators, horn, lights, etc may be unplugged and/or disconnected and removed.

Cutting of the wiring loom is not allowed.

#### 2.14.5 Battery

The battery may be replaced. If replaced, its nominal capacity must be equal to or higher than the homologated type.

### 2.15 Rolling Chassis, Frame, and Body

# 2.15.1 Frame Body and Rear Sub-frame

The frame body must remain as originally produced by the manufacturer for the homologated machine. The sides of the frame may be covered by a protective part made of a composite material. These protectors must fit the form of the frame.

Holes may be drilled on the frame only to fix approved components (i.e. fairing brackets, steering damper mount).

Nothing may be added by welding or removed by machining from the frame.

Engine mounting brackets or plates must remain as originally produced by the manufacturer for the homologated machine.

Front sub-frame may be changed or modified to that originally produced by the manufacturer for the homologated machine.

Rear sub frame must remain as originally produced by the manufacturer for the homologated machine.

Additional seat brackets may be added to the rear sub-frame, but none may be removed. Bolt-on accessories to the rear sub-frame may be removed. Non-stressed protruding brackets may be removed from the rear sub-frame if they do not affect the safety of the construction or assembly.

The paint scheme of the frame body and sub-frames is not restricted but polishing the frame body or sub frame is not allowed.

#### 2.15.2 Front Forks

The front fork structure (spindle, stanchions, bridges, stem, etc.) must remain as originally produced by the manufacturer for the homologated machine.

Standard original internal parts of the front forks may be modified.

After-market damper kits or valves may be installed in the front forks, including cartridge systems.

The front fork caps may be modified or changed to add spring preload/compression adjusters.

Dust seals may be modified, changed, or removed providing the front fork remains totally oil-sealed.

Any quality and quantity of oil may be used in the front forks.

The height and position of the front fork in relation to the fork crowns is free.

The upper and lower front fork clamps (triple clamp, fork bridges) must remain as originally produced by the manufacturer on the homologated machine.

No aftermarket or prototype electronically-controlled suspension parts may be used.

# 2.15.3 Steering Damper

Steering damper may be added or replaced with an after-market damper.

The steering damper cannot act as a steering lock limiting device.

#### 2.15.4 Rear Fork

Every part of the rear fork (swing arm) must remain as originally produced by the manufacturer for the homologated machine, including rear fork pivot bolt and rear axle adjuster.

Rear wheel stand/paddock stand support brackets may be added to the rear fork by welding or by bolts. Brackets must have rounded edges with a large radius viewed from all sides. Fastening screws must be recessed.

# 2.15.5 Chain Guard

It is compulsory to fit a chain guard made from rigid plastic, metal, or carbon fibre material, fitted and located in such a way to prevent trapping between the lower chain run and the final driven sprocket at the rear wheel.

# 2.15.6 Rear Suspension Unit

The rear suspension unit (shock absorber) may be modified or replaced, but the original attachments to the frame and rear fork must be used.

Rear suspension unit spring may be changed.

No aftermarket or prototype electronically-controlled suspension unit may be used.

# 2.15.7 Rear Ride Height Adjuster

The rear suspension tie rod may be changed for an adjustable type, but the rocker arm must remain as originally produced by the manufacturer for the homologated machine.

#### 2.15.8 Wheels

Wheels must remain as originally produced by the manufacturer for the homologated machine. No replacement lighter wheels may be fitted, including those available in the *Ducati Performance* catalogue.

The speedometer pick-up sensor may be removed and replaced with a spacer.

If the original design included a cushion drive for the rear wheel, it must remain as originally produced for the homologated machine.

No modifications of the wheel axles or any fixing and mounting points for front brake caliper are authorised. Spacers may be modified. Modifications to the wheels to keep spacers in place are permitted.

Wheel diameter and rim width must remain as originally homologated.

Wheel balance weights may be discarded, changed or added to.

Any inner tube (if fitted) or inflation valves may be used.

#### 2.15.9 Brakes

Brake disks can be replaced by aftermarket discs that comply with following rules:

- Brake discs and carrier must retain the same material as the homologated disc and carrier.
- The outer and inner diameter of the brake disc must remain the same as on the homologated disc, the outer diameter being 320mm.
- The thickness of the brake disc may be increased by 20% and it must fit into the homologated brake caliper without any modification.
- The number of floaters must remain the same but the shape and type of floaters is free.
- The fixing of the carrier on the wheel must remain the same as on the homologated disc.

The front callipers can be replaced only with the radially-mounted Brembo Monobloc 4-piston calipers as homologted on the Ducati 848 EVO, specifically Ducati Performance Part Numbers 61040911A (RH caliper) and 61040901A (LH caliper). All other front brake caliper components, including mount, carrier, and hanger, must remain as originally produced by the manufacturer for the homologated machine.

The rear brake caliper, including mount, carrier, and hanger, must remain as originally produced by the manufacturer for the homologated machine.

Front and rear brake master cylinder must remain as originally produced by the manufacturer for the homologated machine.

Front and rear brake fluid reservoir may be changed with an aftermarket product.

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 (lower triple clamp).

Dry-break connectors in the brake lines are permitted.

Front and rear brake pads may be changed. Brake pad locking pins may be modified for quick-change type.

Additional air scoops or ducts are not allowed.

# 2.15.10 Handle Bars and Hand Controls

Handle bars may be replaced.

Handle bars and hand controls may be relocated.

Throttle controls must be self-closing when not held by the hand.

Throttle assembly and associated cables may be modified or replaced.

Clutch and brake lever may be exchanged by an after-market model. An adjuster to the brake lever is allowed.

Handle bar-mounted switches may be changed with the sole purpose of removing standard road-going controls (lights, indicator switches). No additional switched controls are permitted.

Electric starter switch and engine stop switch must be located on the handle bars.

#### 2.15.11 Foot Rest and Foot Controls

Foot rest and foot controls may be relocated but brackets must be mounted to the frame at the original mounting points. Their two original points of fixture (for the footrest, foot-controls and on the shift shaft) must remain as original. Foot controls linkage may be modified. The original mounting points must remain.

Foot rests may be rigidly mounted or a folding type which must incorporate a device to return them to the normal position.

The end of the foot rest must have at least an 8 mm solid spherical radius.

Rigid footrests must have an end (plug) which is permanently fixed, made of aluminium, plastic, Teflon® or an equivalent type material, with a minimum radius 8 mm. The plug surface must be designed to reach the widest possible area.

No additional switched controls are permitted.

#### 2.15.12 Fuel Tank

Fuel tank filler caps may be altered or replaced with a threaded, screw-on type fuel cap.

Fuel tanks must be completely filled with a fire retardant, open-celled mesh material (i.e. Explosafe).

Fuel tank valve petcock must remain as originally produced by the manufacturer for the homologated machine.

The sides of the fuel tank may be covered by a protective part made of a composite material. These protectors must fit the shape of the fuel tank.

Fuel tanks with tank breather pipes must be fitted with non-return valves that discharge into a catch tank with a minimum volume of 250cc made of a suitable material.

# 2.15.13 Fairing and Body work

- a) Fairing and body work may be replaced with exact cosmetic duplicates of the original parts, but must appear to be as originally produced by the manufacturer for the homologated machine, with slight differences due the racing use (different pieces mix, attachment points, fairing bottom, etc). The material may be changed. The use of carbon fibre or carbon composite materials is not allowed. All replacement panels must be painted and of presentable appearance.
- b) Overall size and dimensions must be the same as the original part.
- c) Windscreen may be replaced with another of clear, transparent material, including 'double bubble' windscreens. The height of the windscreen is free, but the width across the aperture in the top fairing into which the windscreen is fixed must remain as per the homologated top fairing.
- d) Motorcycles that were not originally equipped with streamlining are not allowed to add streamlining in any form, with the exception of a lower fairing device, as described in (h). This device cannot exceed above a line drawn horizontally from wheel axle to wheel axle.
- e) The original combination instrument/fairing brackets may be replaced, but the use of titanium and carbon (or similar composite materials) is forbidden.
  - All other fairing brackets may be altered or replaced.
- g) The original air ducts running between the fairing and the air box may be altered or replaced. Carbon fibre composites and other exotic materials are forbidden. Particle grills or "wire-meshes" originally installed in the openings for the air ducts may be taken away.
- h) 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 the openings in the fairing must be positioned at least 50 mm above the bottom of the fairing. For the avoidance of doubt, standard road fairings (and copies of) have openings that are lower than 50mm above the bottom of the fairing and must be sealed up.
- i) Front mudguards may be replaced with a cosmetic duplicate of the original parts and may be spaced upward for increased tyre clearance.

- j) Rear mudguard fixed on the swing arm may be modified or changed but the original profile must be respected.
- k) Motorcycles may be equipped with inner ducts to improve the air stream towards the radiator but the appearance of the front, the rear and the profile of the motorcycle must not be changed.
- I) The Promoter recognises the right of each Competitor to determine the look of their machine, but the overall appearance and a high level of presentation of the machine must be in keeping with the homologated machine and other road and racing machines manufactured by the Promoter. Competitors are to use best efforts to maintain their machines in this condition throughout the whole Championship and the Promoter reserves the right to request Competitors to comply with this sentiment.

#### 2.15.14 Number Plate Colours

The background colours and figures (numbers) for the series are red background with white numbers.

The sizes for all the front numbers are:

Minimum height: 160 mm

• Minimum width: 80 mm

• Minimum stroke: 25 mm

The size for all the side numbers is:

Minimum height: 120 mm

• Minimum width: 60 mm

Minimum stroke: 25 mm

The allocated number (& plate) for the rider must be affixed on the machine as follows:

- once on the front, either in the centre of the fairing or slightly off to one side;
- once on each side of the motorcycle so they can be clearly seen by marshals and the public. For guidance purposes, the side numbers should not be affixed to the rear seat unit since this position is not clearly visible.

These numbers must have the same size as the front numbers.

# 2.15.15 Series and Sponsorship Logos

Each competing motorcycle to prominently display series and sponsor/technical partner logos as supplied and directed by the Promoter, this being:

- A 'Ducati' decal on each side of the fuel tank in keeping with the homologated machine,
- A 'Pirelli' decal on each side of the front fender.
- A [series title sponsor] decal placed centrally on the front of the motorcycle on or above the front number board such as in the lower 'v' of the windscreen.
- A 'Ducati UK' decal to be placed on either side of the machine, the position of which is free although it should be clearly visible at all times.
- A 'Datatag' decal to be placed on either side of the machine, the position of which is free although it should be clearly visible at all times.

Each entrant undertakes to ensure that no competitive marketing materials to those of any series sponsor shall be displayed on machines or riders competing in the Championship at any time.

#### 2.15.16 Seat

The appearance from both front rear and profile must conform to the homologated shape.

Seat, seat base and associated bodywork may be replaced with parts of similar appearance as originally produced by the manufacturer for the homologated machine.

The top portion of the rear bodywork around the seat may be modified to a solo seat.

The seat/rear cowl replacement must allow for proper number display.

The homologated seat locking system (with plates, pins, rubber pads etc.) may be removed.

#### 2.15.17 Fasteners

Standard fasteners may be replaced with fasteners of any material and design but titanium fasteners may not be used. The strength and design must be equal to or exceed the strength of the standard fastener it is replacing.

Fasteners may be drilled for safety wire, but intentional weights saving modifications are not allowed.

Fairing/body work fasteners may be changed to the quick disconnect type.

Aluminium fasteners may only be used in non-structural locations.

#### 2.16 Fuel, Oil, and Coolants

#### 2.16.1 Fuel

The official control fuel of the series will be 'Shell Racing Solutions 99SU', as supplied by the official fuel service provider One Fuel Ltd. At all rounds organised under the jurisdiction of MSVR, all engines must function on Shell Racing Solutions 99SU, being a 99 RON unleaded fuel. All fuel used in free practices, qualifying practices, warm-ups and races at each of these rounds must be the control fuel as supplied by the official fuel service provider.

Unless advised otherwise, at all other rounds all engines must function on a 95 or 97 RON unleaded fuel that can be purchased from any circuit or public forecourt open to the general public.

#### 2.16.2 Fuel Service Provider

The Promoter has appointed Shell Racing Solutions as the official supplier of racing fuels and only the designated fuel may be used in official practices and races.

# 2.16.3 Oil and Lubricants

Al oil and lubricants must comply with the MCRCB Regulations.

# 2.16.4 Other Liquids

All other liquids/consumables must comply with the MCRCB Regulations.

# **2.17 Tyres**

The official tyre supplier to the series will be Pirelli, via the tyre service provider Competition Logistics Ltd.

All tyres used in the free practices, qualifying practices, warm-up and races at each of the eight rounds must be supplied by the official supplier and display a coded marking from the official supplier for that round, save for any untimed Free Practice (as declared in the official schedule) where the tyres can optionally carry a marking from a previous round, or in the case of the first round can carry no marking. The marking will show an identification number for each rider and it may have a different colour depending on whether it is applied to the front or rear tyre. The markings must be applied to the left sidewall of the tyre. Personnel nominated by the Race Director will check that all the motorcycles in the pit lane are fitted with tyres carrying the markings.

The use of motorcycles with unmarked tyres (e.g. without the official markings) will be immediately reported to the Race Director/Clerk of the Course who will take appropriate action.

In exceptional cases, should the marking be damaged or applied in the wrong way, up to 1 extra official marking may be provided at the sole discretion of the Tyre Control Official and applied.

The rider may use a maximum of four dry tyres for each event. For the avoidance of doubt, this means a rider is free to use this allocation either as two pairs of dry tyres, or one front and three rear dry tyres.

Wet tyres may only be used after the race or practice has been declared 'wet' by the Race Director.

Any modification or treatment (cutting, grooving) is forbidden.

The use of tyre warmers is allowed.

After delivery of the tyres, the teams will be responsible for their safekeeping and use.

In case of a red flag, a used tyre found on machines either checked in pit lane or in the parc fermé, may be replaced when it has been damaged. The damage must be confirmed by the Official Supplier.

During practices or warm up new tyres may be supplied to a machine involved in a crash, only if the request has been received when the machine is still in the parc fermé and the Official Supplier certifies that the tyre(s) is(are) damaged and unsafe.

# 2.17.1 Dry Tyres

The dry tyres available for use will be:

Front: 120/70ZR17 DIABLO SUPERCORSA SC2 Rear: 180/55ZR17 DIABLO SUPERCORSA SC2

#### 2.17.2 Wet Tyres

The wet tyres available for use will be: Front: 20/70R17 DIABLO RAIN SCR1 Rear: 180/55R17 DIABLO RAIN SCR2

# 2.17.3 Tyre Service Provider

Series competitors will be required to register their details with the tyre service provider prior to the start of the season:

Competition Logistics Ltd

01332 695258

www.complog.co.uk

#### 2.18 The following items MAY be altered or replaced

Any type of lubrication, brake or suspension fluid may be used.

Gaskets and gasket materials (with the exception of cylinder base gasket).

Instrument bracket(s) and associated cables.

Material for brackets connecting non original parts (fairing, exhaust, instruments, etc) to the frame (or engine) cannot be made from titanium or fibre reinforced composites.

Protective covers for engine, frame, chain, footrests, etc. may be made in other materials like fibre composite material if these parts do not replace original parts mounted on the homologated model.

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.

# 2.19 The Following Items MAY BE Removed

Emission control items in or around the air box, exhaust, and engine (O2 sensors, air injection devices).

Chain guard as long as it is not incorporated in the rear fender.

Bolt on accessories on a rear sub frame.

# 2.20 The Following Items MUST BE Removed

Headlamp, rear lamp and turn signal indicators (when not incorporated in the fairing). Openings must be covered by suitable materials.

Rear-view mirrors.

Horn.

License plate bracket.

Toolkit.

Helmet hooks and luggage carrier hooks

Passenger foot rests.

Safety bars, centre and side stands must be removed (fixed brackets must remain).

# 2.21 The Following Items MUST BE Altered

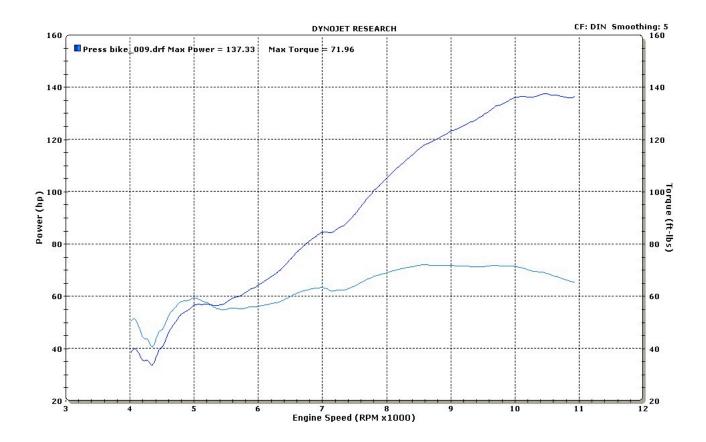
Motorcycles must be equipped with a functional ignition kill switch or button mounted at least on one side of the handlebar (within reach of the hand while on the hand grips) that is capable of stopping a running engine.

All drain plugs must be wired. External oil filter(s) screws and bolts that enter an oil cavity must be safety wired (i.e. on crankcases, oil lines, oil coolers, etc.)

All motorcycles must have a closed breather system. The oil breather line must be connected and discharge in the airbox.

Where breather or overflow pipes are fitted they must discharge via existing outlets. The original closed system must be retained; no direct atmospheric emission is permitted.

# Appendix 1: Ducati 848 Bike Dyno Curve - Reference



Appendix 2: Ducati 899 Bike Dyno Curve – Reference					
To be provided					