



2025 DUCATI CHALLENGE REGULATIONS

ISSUED: December 2024

All machines competing in any 2025 No Limits Ducati Cup Races must comply with these regulations. The regulations are additional to the ACU Standing Regulations as laid out in the ACU Handbook. All NLR Championships are for riders who possess a valid ACU or SACU. The regulations are as follows and are correct at the printing but which are subject to any amendments made by the ACU or NLR which will be issued by means of an NLR Bulletin. Engine and frame numbers must not have been tampered with or deleted. New, unstamped components are admissible. Bikes without a frame number are acceptable providing they were originally supplied for racing. Motorcycles must be based upon bikes originally homologated for road use.

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

All machines must comply with all requirements of Road Racing as specified in the ACU Standing Regulations.

Machine Specification

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

1. Machine Eligibility

All Ducati machines from 748-999 are eligible.

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 motorcycles must display the manufacturers' vehicle identification number on the frame body (chassis number), with the exception of spare frames.

2. Displacement Capacity

The displacement capacity must remain as originally produced. Modifying the bore and stroke is not allowed.

3. Minimum Weight

At any time during the event, the weight of the machine (including the tank and its contents) must not be less than the minimum weight of **176kg**.

4. Noise Limit

All machines must comply with ACU regulations of 105dB.

5. Engine

5.1 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.

5.2 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 authorized.

Valve closing rocker springs cannot be removed.

5.3 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.

5.4 Cam Sprockets or Gears

No dimensional modifications are allowed.

5.5 Cylinders

No modifications are allowed.

5.6 Pistons

No modifications are allowed, including polishing and lightening.

5.7 Piston Rings

No modifications are allowed.

5.8 Piston Pins and Clips

No modifications are allowed.

5.9 Connecting Rods

Con-rods may be changed for aftermarket items providing they are not lighter than the standard rod.

5.10 Crankshaft

No modifications are allowed, including polishing and lightening.

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

5.11 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.

5.12 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

No damaged cases will be permitted

6. 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.

7. 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.

The clutch engine case can be changed for the two piece housing.

8. 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.

9. 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.

The radiator may remain as original or be replaced with an aftermarket.

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.

10. 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.

11. 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.

Fuel lines from the fuel tank to the delivery pipe assembly may be replaced and the fuel tank connector can also be replaced from plastic to metal.

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.

12. Exhaust System

Any exhaust system can be used.

13. Electrics and Electronics

13.1 Engine Control Unit (ECU)

The ECU may be replaced and relocated.

Spark plugs may be replaced.

Ignition coils may be relocated.

13.2 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.

13.3 Wiring Loom

Modification or replacement of the wiring loom is permitted allowed.

13.4 Battery

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

14. Rolling Chassis, Frame, and Body

14.1 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 may be changed or modified to that 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.

14.2 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.

14.3 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.

14.4 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.

The Rear Swing arm may have a composite protection guard fitted.

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.

14.5 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.

14.6 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.

14.7 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.

14.8 Wheels

Wheels may remain as originally produced by the manufacturer for the homologated machine or replaced with aftermarket.

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 for the machine they are fitted to.

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

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

14.9 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 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.

Front and rear calipers are open

Front and rear brake master are open

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.

14.10 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.

14.11 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.

The OEM mounting plates which connect to engine and swinging arm for the footrests must be retained, but any rear sets or footrests would be allowed which would also include modifications to the foot control linkage.

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 aluminum, 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.

14.12 Fuel Tank

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

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

Fuel tank valve may be changed from plastic to metal.

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.

14.13 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 to 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) or the Panigale Racing oil containment belly pan must be fitted.
- 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.

14.14 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 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. The side numbers must not be affixed to the rear seat unit since this position is not clearly visible. In case of dispute of the legality of numbers the decision of the MSVR CTO will be final

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

14.15 Seat

Modifications are permitted.

14.16 Fasteners

Modifications are permitted

15. Fuel, Oil, and Coolants

15.1 Fuel

As per the ACU Regulations.

15.2 Oil and Lubricants

All oil and lubricants must comply with the ACU Regulations.

15.3 Other Liquids

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

16. Tyres

Please see 'NLR Tyre Regulations' for full list of all permitted tyres for use in all NLR classes.

Slick tyres are permitted and there is no maximum usage over the event.

Rain or intermediate tyres can be used when a wet race has been declared by race control.

17. 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.

18. 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.

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).

19. 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.

20. RAIN LIGHT

All motorcycles must have a functioning red light mounted at the rear of the machine to be used in rain or low visibility conditions as instructed by the Clerk of the Course as per the ACU regulations.