2020 CB500 REGULATIONS

ISSUED: 24 February 2020
All machines competing in any 2020 No Limits CB500 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 of 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.

Everything that is not authorised and prescribed in these specifications must remain in standard form, excluding paintwork.

1. Eligible Machines:

Honda CB500 1993-2003 Drum & Disc brake Models (CBF model not eligible),
Suzuki GS500 1989-2004,
Kawasaki ER500 1997-2006

2. Fuel

2.1 Only unleaded fuel, available from a roadside service station to current ACU regulations. E85 biofuel is also acceptable from roadside outlets.

2.2 Octane boosters and/or fuel additives are not permitted.

3. Bodywork and Screen

3.1 The appearance and dimensions must be as homologated.

3.2 Single seat units or seat covers may be fitted to facilitate the use of race numbers but must retain the original silhouette of the bike. Seat units specifically designed for racing are strongly recommended and are available from bodywork suppliers (see cb500racing.co.uk for more details).

3.3 Any fairing is forbidden.

3.4 The seat may be altered or replaced but any replacement seat must retain the original seat profile.

3.5 Engine casing protector covers must be fitted, but must be secured with lock wire or bolts (adhesive alone is not acceptable).

3.6 A front number plate/board must be fitted (Maximum W260mm H230mm) and no aerodynamic advantage should be gained. Front number boards designed specifically for racing are strongly recommended and are available from bodywork suppliers (see cb500racing.co.uk for more details).

3.7 The top of the front number plate/board must be mounted so that the top of the plate/board is no higher than the top of the front master cylinder.

3.8 Radiator cowls/side panels must remain ‘securely’ fitted to the machine.

4. Steering Damper

4.1 A steering damper may be added.

5. Frame/Swingarm

5.1 No alterations to the chassis/frame are allowed unless specified in these regulations.

5.2 Frame braising or strengthening is forbidden.

5.3 Additional frame bracing is forbidden.
5.4 The side stand lug may be removed for safety reasons (ground clearance).

5.5 The standard swingarm must be used and remain unaltered.

5.6 Unused lugs may be removed from the frame & swing arm, but the subframe must otherwise remain complete.

6. Suspension

6.1 Front Forks must remain as homologated by the manufacturer.

6.2 Front Fork springs may be changed for aftermarket items available from Hypapro, Hagon, Ktech etc. No other modifications to the fork internals are permitted other than the spacers and or washers as fitted to any of the 3 original fork types.

6.3 Front Forks may be positioned in the yokes at any height.

6.4 Any quantity or type of fork oil may be used.

6.5 Rear Suspension Units must remain as homologated (Standard Showa) or direct replacement aftermarket item of the correct extended length (Hagon, Yss of Taiwan etc.), adjustable damping is also permitted. Shock type, Emulsion (Nitrogen and Oil) Shock length, 350mm as std CB500 Damper rod shaft, 12mm Piston Diameter, 30mm Adjustment, Threaded body Preload only Spring. Standard shocks that are modified outside of the above parameters are forbidden.

7. Tyres

7.1 There is no nominated control tyre. Any road legal treaded tyre may be used, where a “Wet Race” or “Wet Practice” has been declared the use of Wets is permitted.

7.2 The cutting of extra tread grooves is forbidden.

7.3 Wheel balance weights may be discarded or added.

8. Silencers and Exhaust Systems

8.1 The silencers may be changed.

8.2 The exhaust may exit on either side of the machine, or under the seat unit. The noise output must be within the 105db limit at all times, including post-race controls.

8.3 The bore of the header pipes must not be greater than 38mm & must remain a constant diameter.

9. Spark Plugs

9.1 Any make and type of spark plug may be used.

10. Oils and Fluids

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

11. Safety Wiring

11.1 All drain plugs, external oil filters and bolts that enter any oil cavity must be safety wired.

11.2 Engine protection covers must be safety wired.

12. Starter / Generators

12.1 Must remain entirely as homologated. Starting devices and electrical generators must operate normally, i.e. the mechanical and electrical connections must be maintained. The generator must charge the battery as normal during the race and at post-race control with respect to current and voltage. The engine starting must operate normally at pre- and post-race scrutineering.
13. Airfilters

13.1 The entire air intake system must be as homologated & fully assembled in the correct manor, including air filter element.

13.2 Pattern air filters maybe used provided they are a direct replacement for the original item and offer no technical advantage. No cutting, shaping or other alterations to filters is permitted.

13.3 Performance air filters such as K & N Filters are permitted.

14. Carburators

14.1 Must be the standard units as on the homologated model. A 5% tolerance will be allowed on the main jet size only from those stated.

14.2 Carburator needles must remain as homologated only position may be modified.

15. Oil Pipes

15.1 Oil lines containing positive pressure must be replaced with items of metal reinforced construction with swagged or threaded connectors.

16. Brakes

16.1 The choice of brake pads is free

16.2 Brake calipers must remain standard.

16.3 On the Honda CB500 any combination of original equipment caliper and master cylinder may be used provided they are original Brembo or Nissin parts.

16.4 Brake hoses may be changed.

16.5 Original equipment master cylinders must be used. (Suzuki & Kawasaki models may use a Master Cylinder from any official model in their respective manufacturers range – OE on an official road model)

16.6 Aftermarket master cylinders are not permitted (e.g. Brembo, AP etc.)

16.7 Original disks, solid replacement items & floating type aftermarket discs, to the homologated sizes may be used.

16.8 Brake caliper dust seals may be removed.

17. Throttle

17.1 Throttle control must be self-closing.

17.2 Quick action throttles, both complete systems and modifications to the original assembly are permitted.

18. Breathers

18.1 All motorcycles must have a closed breather system. No direct atmospheric emission is permitted.

19. Number Plates

19.1 Must conform to ACU regulations.

19.2 Number plates must be fitted to the front and both sides of the machine. (See section 3. Bodywork)

19.3 All number plates will have a Yellow background with Black numbers.

20. Kill Switch
20.1 Motorcycles must be equipped with a functional ignition kill switch or button mounted on either the right or left hand side of the handlebars (within reach of the hand while on the hand grips) that is capable of killing the ignition to fully stop a running engine.

21. Footrests / Foot Controls

21.1 Original Honda footrests are allowed with riser plates to aid ground clearance.

21.2 On original footrests the rear pillion brackets must be removed.

21.3 On all makes and models race style rear sets may be fitted.

21.4 Standard or race shift linkages may be utilised.

21.5 Quickshifters of any type are not permitted.

22. Wiring Harness

22.1 Original equipment wiring harnesses may be modified or replaced.

22.2 No data acquisition or non-standard functions may be included in the replacement harness.

22.3 For neatness & safety redundant & excess wiring should be secured in such away it causes no restriction to machine function (i.e. fork/yoke movement and steering).

22.4 If riders wish to run a keyless ignition aftermarket switches may be used in lieu of the ignition barrel.

23. Cooling System

23.1 Must remain as homologated except the thermostat may be removed.

23.2 Only water is to be used in the cooling system (no anti-freeze or other additive is permitted as per ACU handbook).

23.3 The cooling fan may be removed complete with electrical connections.

24. Engine

24.1 This must be as original. Any additional removal of material is forbidden. Any engine modification is forbidden. Except for drilling to enable lock wiring.

24.2 The maximum power output for all eligible models is 52bhp at the back wheel. Any form of tuning to reach this limit by means other than specified is forbidden.

24.3 An oil containment tray to ACU regulations must be securely fitted under the engine. Items designed for racing are strongly recommended and are available from bodywork suppliers (see cb500racing.co.uk for more details).

25. Final Drive

25.1 Sprockets may be changed from standard to aftermarket replacements.

25.2 The pitch of the chain can be changed.

25.3 The front sprocket size on all machines can be changed.

25.4 The rear sprocket size on all machines can be changed.

25.5 ‘O’ ring and non ‘O’ ring chains are permitted.

26. Dynomometer
26.1 Checks on a dynamometer may be carried out at any time during the meeting at the entire discretion of the organisers (Clerk of the Course and Chief Technical Officer).

27. Speedo/Rev Counter

27.1 The original speedo and rev counter assembly can be removed, retained or modified.

27.2 The use of aftermarket rev counters and shift lights is permitted.

27.3 The fitment of a rev counter is compulsory. No rev counter may result in riders being turned away from noise testing and refused permission to take part in practice and/or racing.

28. Handlebars

28.1 Both standard and suitable aftermarket handlebars may be used (e.g. Renthal).

28.2 Bar ends and front brake lever guard must be fitted to the handlebars.

28.3 The handlebar ends must not drop lower than the centre line of the handlebar mounting points.

28.4 Flat handlebars with no lift are permitted.

29. Chain Protector

29.1 A shark fin type chain guard must be fitted as per the ACU regulations to the underside of the swingarm on the drive chain side of the machine so as to cover the point the chain and sprocket mesh.

30. Wheels

30.1 Wheels must remain as standard and with original rim sizes and bearing sizes.

30.2 Either drum or disc brake rear wheels from the original models may be used.

30.3 Provided the original wheel bearing sizes are retained, captive spacers may be utilised to assist wheel changes. Changes requiring alternate bearing sizes are not permitted.

30.4 Spindle (ends only) may be modified to prevent damage, retaining original materials.

31. Items That Must Be removed

Side and centre stands
Rear view mirrors
Traffic indicators
Front Lights
Rear Lights
Light fittings and left-hand switch gear
Horn
Registration plate support
Pillion support bars
Stand handles
Internal gear of the mileage indicator (where applicable)

32. Presentation

32.1 The organisers reserve the right to refuse any machine admission to the start if, on arrival at the technical inspection it is not in a presentable condition.

32.2 Machines should be maintained to a high standard and checked regularly before, during and after meetings by competitors to ensure continued compliance.

33. Aftermarket Components
33.1 Aftermarket parts may be used provided they offer no performance advantage over the original parts, and no technical advantage is gained.

34. **Spirit of the class Rule** Anything that is not mentioned above but is deemed by the organisers to not be within the class ethos will be reported to the Clerk of the Course (COC) and their decision will be final.