



**YAMAHA PAST MASTERS RACING CLUB
Technical regulations 2014**

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*Items **highlighted as this** are new in 2014

Section 1: Eligible Yamaha Models

- 1.1 Road-going 250 and 350 parallel twin two-strokes, model type;
 - 1.1.1 LC Model is RD250LC 4L1 & RD350LC 4L0
 - 1.1.2 TZR Model is 2MA and 1KT parallel twin
 - 1.1.3 TDR Model is 3CK and 2YK
 - 1.1.4 YPVS model is RD350LC2, RD350N, RD350N2, RD350F, RD350F2, RD350R
- 1.2 Only models of the same spec as the officially imported model.
- 1.3 Reverse cylinder or V-twin model TZRs are not acceptable.
- 1.4 Models with larger rim sizes or brake diameters than the official models are also illegal.

Section 2: Parts that must remain standard and not be modified regardless of model

- 2.1 Frame and subframe, with the exception of minor modifications permitted in the list in sections 3.12 and 3.13
- 2.2 Swingarm must be from the relevant model and standard, other than the compulsory fitting of a lower run chain guard. (LC exceptions: rules 5.1.3-5.1.4, TZR exception: rule 5.4.1)
- 2.3 Cush drive and sprocket carrier
- 2.4 Primary drive gears
- 2.5 Gearbox must be from the officially imported model of the relevant motorcycle
- 2.6 Ignition control units must be from an officially imported model of the relevant motorcycle. No remapping or FIII kit boxes are permitted. (LC/YPVS exemption: rule 5.1.13)
- 2.7 No system may be fitted that will affect a dyno's ability to take a correct power reading
- 2.8 No redundant electrical systems are permitted
- 2.9 Powervalve systems, if applicable to model, must be from the relevant motorcycle and must be fitted and fully operational

Section 3: Parts allowed to be modified regardless of model

Fuelling:

- 3.1 Internal petrol tank filters and taps may be modified or removed but otherwise fuel tanks must remain as standard for the model
- 3.2 Fuel tank cap can be modified or replaced, subject to ACU regs

Electrical:

- 3.3 Static ignition timing may be altered
- 3.4 Electrical components may be repositioned, and waterproofing measures taken
- 3.5 Rotor lightening is allowed

Engine:

- 3.6 Barrels and head can be modified
- 3.7 Crankcases may only be modified to match cylinder porting and the only permitted crank modification is the use of a full-circle crank
- 3.8 Sprocket cover may be modified or removed
- 3.9 Airbox may be modified or removed
- 3.10 Radiators, cooling system and thermostat may be substituted or modified
- 3.11 Rebores to a maximum of 2.75mm (no big bores)
- 3.12 Aftermarket billet clutch and non-OE pressure plate, extra plates and replacement springs are permitted
- 3.13 Exhausts can be modified or replaced with alternatives. Any exhaust must conform to the ACU noise limit of 105db

Chassis:

- 3.14 Minor frame and subframe mods are allowed for cosmetic reasons, bodywork fitment and steering damper mods, but not to change geometry, lightening or bracing
- 3.15 Ancillary frame brackets can be removed, typically unused mounting lugs, additional lugs may be added to assist the fitment of bodywork
- 3.16 Chassis and wheel bearings may be upgraded to superior specification, but must be to standard diameter
- 3.17 Fork internals and caps may be modified.

- 3.18 Shock may be regassed, the spring replaced with a different spring rate or complete replacement of the unit with a class approved Hagon Rear Suspension Unit is permitted (for LC exception, see separate rules below) – Please contact pvfishwick@yahoo.com for details
- 3.19 Rear suspension tie-bars may be modified or replaced to modify the ride height
- 3.20 A steering damper is allowed
- 3.21 Handlebars can be modified, replaced and remounted with due consideration paid to clearance of fairings and bodywork
- 3.22 Race bodywork can be fitted, but must not alter original silhouette at front of bike. Seat unit may be replaced with any suitable unit
- 3.23 Mudguards
- 3.24 Double bubble and tinted screens are allowed
- 3.25 Wheel spindles, subject to use of original material and thickness. They must be at least standard length and may be lengthened to allow use of R-hook
- 3.26 Rear brake fluid reservoir. The 'HRC' tube modification is allowed
- 3.27 Any mass production fixed ratio master cylinder for front and rear braking system may be used. This does not mean race production Brembo, AP Lockheed or bespoke units.

Section 4: Parts allowed to be removed regardless of model

- 4.1 Equipment for road use like mirrors, horn, indicators, pillion pegs and ancillary brackets originally to support road-going parts
- 4.2 Top chainguard (a bottom run 'sharks fin' toe guard must be added as per ACU regulations)
- 4.3 Mudguards
- 4.4 Speedo, cable and speedo drive. The speedo drive can be substituted for a suitable spacer
- 4.5 Charging system, including regulator-rectifier and battery
- 4.6 Oil tank and pump
- 4.7 Airbox
- 4.8 Kickstart mechanism
- 4.9 Gearbox sprocket cover
- 4.10 Thermostat
- 4.11 Rear brake fluid reservoir

Section 5: Model-specific regulations

Section 5.1: RD250/350 LC non-powervalve 4L0 and 4L1

- 5.1.1 250LC is allowed twin discs and callipers from the 350LC
- 5.1.2 YPVS forks, wheels and brakes can be fitted
- 5.1.3 Swingarm bracing and period aftermarket swingarms are allowed
- 5.1.4 Any class-legal YPVS bodywork/frame/swingarm part can be fitted, with the exception of full fairings)
- 5.1.5 TZR forks, wheels and brake may be fitted, along with the rear wheel, as long as the braking system conforms to TZR regulations. 'Blue spot' caliper may be fitted to LCs ONLY if they are fitted with TZR equipment along these lines. See TZR rules for full definition of this caliper.
- 5.1.6 Any shock can be used
- 5.1.7 The 'Pro-Am' Fairing and belly pan are permitted
- 5.1.8 Non-standard or modified carburettors are allowed
- 5.1.9 YPVS conrods can be used
- 5.1.10 Any ignition is allowed for engines conforming to the class HP limit
- 5.1.11 The highest permitted HP on BMCRC's DynaPro dyno is 59bhp - see section 8 for dyno regulations

Section 5.2: RD350YPVS LC2, F1/N1, F2/N2, RD350R - 31K, 1UA

- 5.2.1 Any OEM Yamaha twin opposing piston calliper, with an 83mm bolt pitch, that will fit without additional mounting brackets is allowed
- 5.2.2 Allowance of four piston brake callipers with 83mm bolt spacing from the following models, to fit 350YPVS 31K or F2 forks, without any adapter plates. Callipers must be from the following eligible models only. Master cylinder must remain 5/8" i.e. 16mm: FZR400 3TJ, TZR250 3MA, TZR250 3XV, R1-Z 250, Triumph TT600 and 595 series
- 5.2.3 Ignition systems can be a combination of eligible models or an aftermarket non programmable YPVS replacement
- 5.2.4 Non-standard or modified carburettors are allowed
- 5.2.5 The highest permitted HP on BMCRC's DynaPro dyno is 59bhp - see section 8 for dyno regulations

5.2.6 TZR forks, wheels and brake may be fitted, along with the rear wheel, as long as the braking system conforms to TZR regulations. The YPVS rear swing arm must remain. 'Blue spot' caliper may be fitted to YPVS ONLY if they are fitted with TZR equipment along these lines. See TZR rules for full definition of this caliper.

Section 5.3: RD350LC/YPVS Hybrid

Rules as RD250/350LC (section 4.2) with the following exception

5.3.1 Ignition must be as per YPVS rules and the Powervalue system must be operational

Section 5.4: TZR250 1KT, 2MA

- 5.4.1 Model 2XW-1 swinging arm, shock and linkages are permitted as these were officially fitted to later model 2MAs imported to the UK.
- 5.4.2 Rear wheel can be replaced with a suitable 3.5in Yamaha wheel that will accept the standard spindle, cush drive and sprocket carrier
- 5.4.3 We allow use of any OEM Yamaha monobloc construction front calliper with 100mm bolt pitch that attaches directly to the fork leg without the need for an adaptor plate
- 5.4.4 Carb needles and jets may be replaced. Carb bodies must be standard
- 5.4.5 Standard 2.15in diameter front wheel must be used
- 5.4.6 The highest permitted HP on BMCRC's DynaPro dyno is 53bhp - see section 8 for dyno regulations
- 5.4.7 TZR/TDR wheel change eligibility – valid from 2013 onwards

Below is a list of wheels that make up eligible options for front wheel variant for all models. This list may change in the future as we find additional wheels that are suitable
Note the conditions are:

- The original specification wheel spindle must be used
- No adjustments to the forks or caliper can be undertaken to allow fitment
- Standard wheel must be able to fit straight back into to setup using standard size spacers, spindle and eligible caliper setup
- The wheel must be off a Production Yamaha motorcycle

Wheel	ID Number	Size
TZR125R	Brembo	2.75 x 17
TZR250 (2XT)	F-44	2.75 x 17

R1-Z 250 (3XC)	F-44	2.75 x 17
FZR250 (3LN model)	F-44	2.75 x 17
FZX250	F-44	2.75 x 17
TZR125RR**	F-49	3.00 x 17
TZR250 (3ma & 3xv) **	F-49	3.00 x 17
FZR600 (3HE)		3.00 x 17
SZR660 **	Y-2 F-49	3.00 x 17

** A modification to remove 4mm from the wheel is required

Section 5.5: TDR250 3CK, 2YK

Rules as TZR250 (section 4.4) with the following exceptions

- 5.5.1 Footrest position may be altered by modifying or removing frame lugs, allowing fitment of aftermarket rearsets
- 5.5.2 CDI and PV boxes from eligible TZR models are allowed
- 5.5.3 The highest permitted HP limit is 56bhp - see section 8 for dyno regulations

Section 6: Fuel

- 6.1 Pump fuel only. Max 99RON, premixed with two-stroke oil if necessary. No octane boosters or other additives allowed

Section 7: Tyres

- 7.1 Tyres: Any moulded treaded tyre. Wets are allowed. No slicks

Section 8: Technical inspection

- 8.1 Any machine not capable of post race Dyno testing will be deemed to have failed the Dyno test.
- 8.2 Machines will be run on the Dyno until in the opinion of the Dyno operator the maximum output is achieved. If, in the opinion of the Dyno operator or race official, an unsafe condition exists while performing the Dyno test, the test will be stopped and the Clerk of the Course in conjunction with the Chief Technical Official will make the final decision on the Dyno test results.
- 8.3 If repairs are permitted by the Clerk of the Course or the Chief Technical Official, the

machine is not to leave Dyno area. All repairs to be undertaken in Dyno area under supervision of the Chief Technical Official.

- 8.4 Machines will be selected at random by race officials to run on the Dyno as soon as possible following the end of the race. Failure to report to the Dyno when requested may result in disqualification.
- 8.5 Bikes which have been deemed to have failed the technical inspection/Dyno run will be excluded from the race results. The exclusion may be for the entire meeting at the discretion of the Clerk of the Course.
- 8.6 To aid technical inspection all riders who do not have standard wiring loom connections will require to supply an adaptor that allows the fitment of a standard Power valve controller or CDI unit. This is to allow the Clerk of the Course or the Chief Technical Official to check that the machine is fitted with standard Yamaha control units. Failure to meet these requirements will constitute a failed inspection/Dyno run.
- 8.7 The Dyno operator, scrutineer or person appointed by the race or series organisers to ensure eligibility, may request removal of bodywork before, during or after Dyno testing and may request removal of other components for inspection.

Section 9: Updates/queries

- 9.1 Any changes made to the regulations will be decided under the control of the club coordinators and in some cases BMCRC Tech officials
- 9.2 For any information concerning updates to or questions about the regulations, contact:
Len Whalin – whalin72@hotmail.com