

1. This class allows for New Zealand distributors of Supersport machinery an opportunity to showcase their machines in a competitive environment, with some freedom for machine set up but within the confines of rules to suit New Zealand market conditions.

2. As the name Supersport implies, the machines used are allowed limited modifications.

Senior competitors aged 16 years and over may compete in the Supersport class.

In special cases approval may be granted by the Road Race Commissioner on an individual basis for riders from 15 years of age to ride in this class. The basis for this approval will be a recommendation from a previous or current top level rider or coach who shall commit to act as a mentor to the junior rider whilst riding in this class. All riders with dispensation are to wear a high visibility vest over their leathers for the first 5 events at which they compete. Proof of these events will be from their log book.

3. **Discipline Specifications:**

Supersport motorcycles require an MNZ homologation.

The appearance from both front, rear and the side profile of Supersport motorcycles must (except when otherwise stated) conform to the homologated shape (as originally produced by the manufacturer).

All parts and functions must remain as per OEM specifications unless stated otherwise!

4. **Supersport engine capacity:**

501cc – 640cc 4-stroke 4 cylinders maximum

601cc – 800cc 4-stroke 3 cylinders maximum

601cc – 960cc twins

Approved models that can be raced in the class and necessary balancing rules for those specific machines will be defined in the "Supersport eligible machines, componentry and balancing rules" which is available on the MNZ website.

Balancing rules for the noted models must be adhered to, and these can be changed at any time by the MNZ Road Race Commissioner to ensure parity between manufacturers and models as the class progresses. Only the specific makes and models noted on that list can be used.

5. Machine Specifications (General):

All machines must comply with the relevant general competition rules including Technical Appendix.

**Fuel:** Refer to the Technical Appendix.

6. **Supersport:**

- 6.1 Subject to the required and permitted alterations set out below:

**Supersport machines must:**

- a) Be fitted with V.I.N compliance plates for the particular machine. The only exception to this is if the machine has been supplied direct from the manufacturer and was not intended for use on public roads. However, the onus is on the competitor to ensure the machine is indeed identical to the machine available for sale to the mass public of New Zealand.
- b) Be of a make and model lawfully sold in New Zealand
- c) Be as constructed by the manufacturer

- 6.2 At least 5 production machines of that make and model must have been imported into New Zealand, by the manufacturer or the New Zealand distributor representing the manufacturer.

7. **Tyres:**

- a) Be the same as any commercially available tyres imported or stocked by New Zealand tyre importers (must not be a special brand or type acquired over the internet from overseas or from special sources).
- b) Can be manufactured for road use (IE BE DOT approved) or for competition use.
- c) Be not less than the machine manufacturer's recommended speed and load rating.
- d) Be worn no more than to the minimum tread depth indicators.
- e) Not have an augmented or modified tread pattern.
- f) For NZSBK events control tyre rules are in place

- 7.1 When a race or practice has been declared "wet", the use of a wet tyre is allowed.
8. Engine and gearbox breathing hoses and tubes must exhaust into the air box to the rear of the intakes. The lower air box breather tube must be blocked.

**8.1 The following may be added:**

- a) Ride height adjuster.
- b) Quick shifters and autoblippers.
- c) If the machine is fitted from the manufacturer with an external heat exchanger then this can be replaced with an external oil cooler.

**8.2 The following may be replaced with parts not manufactured by the manufacturer of the machine (all eligible homologated machines):**

- a) Fairing, screen, rear seat so as to provide for the mounting of a rear number plate, rear bodywork, Rider's seat, mudguards, tank covers, air box intake tubes, air intake in bodywork and side covers, but replacements must be the same in shape and appearance as the original, Carbon fibre is prohibited except for small amounts as reinforcement of the mounting points.
- b) Screen Profile to be open.
- c) Mounting brackets or subframes front and rear but the replacements must be mounted on the frame at the original mounting points.
- d) Handlebar mounted levers, master cylinders and controls. The rear brake master cylinder reservoir must hold a minimum of 15ml of brake fluid.
- e) External gearing, and chain, but not chain pitch.

**8.3 The following OEM parts may be modified:**

- a) Gearbox drive dogs may be undercut.

**8.4 Supersport eligible machines, componentry and balancing rules**

Mandatory: Anyone using the following machinery and parity rules are to register with the MNZ Road race commissioner via email at [mnzrrc@mnz.co.nz](mailto:mnzrrc@mnz.co.nz). These parity rules are in development and could be subject to change at short notice. We are also seeking direct engagement with ALL riders / teams or machinery owners to help support the development

Approved Motorcycles:

- a) Honda CBR600 as per MNZ homologation list
- b) Yamaha R6 as per MNZ homologation list
- c) Suzuki GSXR600 as per MNZ homologation list
- d) Kawasaki ZX6R 600 and 636cc as per MNZ homologation list
- e) MV F3 675cc as per MNZ homologation list
- f) Triumph Daytona 675 as per MNZ Homologation List
- g) Ducati Panigale V2 (955cc) as per MNZ Homologation List
- h) MV Agusta 800 as per MNZ Homologation list
- i) Triumph Street triple 765 **(subject to homologation)**
- j) 2022 KTM RC8C **(subject to homologation)**
- k) 2024 KTM RC8C **(subject to homologation)**
- l) Yamaha YZF R9 **(subject to homologation)**

**8.5 4 cylinder machines from 501cc to 600cc, 3 cylinder machines up to 675cc and twins up to 750cc**

The following may be replaced with parts not manufactured by the manufacturer of the machine:

- a) Wiring loom, ECU and fuel injection control units may be replaced with parts not manufactured by the manufacturer of the machine. Only the standard functions of OEM ECU's are permitted to be used ( this excludes quick shifter functions)
- b) Head gasket
- c) Camshaft may be replaced, but the lift must remain standard
- d) Valve springs, collets and retainers

- e) Engine cam wheels, provided they are manufactured in the same material as the original or Engine cam wheels may be slotted to alter valve timing
- f) Air filters and Air funnels (Velocity Stacks)
- g) Exhaust system

***h) Quick shifters and auto blippers for down shifting***

***i) Rear suspension damping units and springs***

- j) Front suspension, springs and damping parts and fork top caps may be modified or replaced, but the external appearance of the forks must not be changed
- k) The Clutch assembly may be replaced with an aftermarket unit specifically made for that model. OE Clutch plates, springs, and slipper springs may be replaced with aftermarket replacements
- l) Brake discs, provided they are made of similar material to the OEM part and are the same diameter, ie; no carbon, titanium or plasma coated items.
- m) Aftermarket radiators, or repairs to the original radiator are permitted provided there is no change to the bodywork. Double pass radiators are not permitted unless specified as original equipment

The following OEM parts may be modified:

- a) Cylinder head and cylinder block mating surfaces may be machined
- b) Cylinder head valve seats may be recut
- c) Crankshaft balancing is permitted by normal trade practices by the addition or removal of minimal amounts of material. Lightening is not permitted
- d) Pistons and con-rods can be balanced as per above.

**8.6 4 cylinder machines from 601cc to 640cc (Kawasaki ZX6-636 cc)**

The following may be replaced with parts not manufactured by the manufacturer of the machine:

- a) Head gasket
- b) Valve springs, collets and retainers
- c) Air filters and Air funnels (Velocity Stacks)
- d) Engine cam wheels, provided they are manufactured in the same material as the original or Engine cam wheels may be slotted to alter valve timing
- e) Exhaust system
- f) Quick shifters and auto blippers for down shifting
- g) Rear suspension damping units and springs
- h) Front suspension, springs and damping parts and fork top caps may be modified or replaced, but the external appearance of the forks must not be changed
- i) The Clutch assembly may be replaced with an aftermarket unit specifically made for that model. OE Clutch plates, springs, and slipper springs may be replaced with aftermarket replacements
- j) Brake discs, provided they are made of similar material to the OEM part and are the same diameter, ie; no carbon, titanium or plasma coated items.
- k) Aftermarket radiators, or repairs to the original radiator are permitted provided there is no change to the bodywork. Double pass radiators are not permitted unless specified as original equipment

The following items must remain as per OEM of the model:

- a) Camshaft to remain as standard (OEM)
- b) Standard (OEM) wiring loom to remain in place

The following items may be used:

- a) Piggy back type fuel injection control units

Modifications allowed:

- a) Reflashing of OEM ECU. RRM limits to remain as standard (no increased RPM or RPM extend is to be used)
- b) Cylinder head valve seats may be recut
- c) Crankshaft balancing is permitted by normal trade practices by the addition or removal of minimal amounts of material. Lightening is not permitted.

- d) Pistons and con-rods can be balanced as per above
- e) Kawasaki 636 pistons can be changed to Kawasaki part **code 13001-0795**

## **8.7 3 cylinder machines 676cc to 800cc**

All items not mentioned in either Appendix F or the following articles must remain as originally produced by the manufacturer, remain fitted and operational for that homologated model

The following may be replaced with parts not manufactured by the manufacturer of the machine:

- a) Exhaust system
- b) Quick shifters and auto blippers for down shifting
- c) Rear suspension damping units and springs
- d) Front suspension, springs and damping parts and fork top caps may be modified or replaced, but the external appearance of the forks must not be changed
- e) The Clutch assembly may be replaced with an aftermarket unit specifically made for that model. OE Clutch plates, springs, and slipper springs may be replaced with aftermarket replacements
- f) Brake discs, provided they are made of similar material to the OEM part and are the same diameter, ie; no carbon, titanium or plasma coated items.
- g) Aftermarket radiators, or repairs to the original radiator are permitted provided there is no change to the bodywork. Double pass radiators are not permitted unless specified as original equipment

Modifications allowed:

- a) Cylinder head and cylinder block mating surfaces may be machined
- b) Cylinder head valve seats may be recut
- c) Crankshaft balancing is permitted by normal trade practices by the addition or removal of minimal amounts of material. Lightening is not permitted
- d) Pistons and con-rods can be balanced as per above

The following items must be used as specified below

- a) Entire Solo engineering World Supersport Next generation control electronic kit :
  - MKE7 Mectronik ECU for Supersport class racing and associated harness
  - ADU5 world Supersport advanced display unit
  - Switch gear left and right
  - Main power switch
- b) "Software version"

### **i. Triumph 765 all models:**

Checksum: 0x8CA68A99

Firmware:	Name	Version
	SSNG_FIM	2.27.44
	SSNG_FIM	2.27.43
	SSNG_FIM	2.27.42

### **ii. MV Agusta F3 800 all models:**

Checksum: 0xDOE95154

Firmware:	Name	Version
	SSNG_FIM	2.27.44
	SSNG_FIM	2.27.43
	SSNG_FIM	2.27.42

- c) Triumph ST 765 & RS models : Daytona 675 (2013) cosmetic replica of complete fairing, belly pan and seat unit.

The following items may be used on the MV800 machines

- a) 7609-0465 Valve keepers
- b) 1167-0015 Upper valve spring retainers
- c) 1167-0016 Lower valve spring retainers

- d) 5611-0023 Intake valve springs
- e) 8000B2550 Exhaust valve springs

### **8.8 Ducati Panigale V2 959cc**

All items not mentioned in either Appendix F or the following articles must remain as originally produced by the manufacturer, remain fitted and operational for that homologated model

The following may be replaced with parts not manufactured by the manufacturer of the machine:

- a) Exhaust system
- b) Quick shifters and auto blippers for down shifting
- c) Rear suspension damping units and springs
- d) Front suspension, springs and damping parts and fork top caps may be modified or replaced, but the external appearance of the forks must not be changed
- e) The Clutch assembly may be replaced with an aftermarket unit specifically made for that model. OE Clutch plates, springs, and slipper springs may be replaced with aftermarket replacements
- f) Brake discs, provided they are made of similar material to the OEM part and are the same diameter, ie; no carbon, titanium or plasma coated items.
- g) Aftermarket radiators, or repairs to the original radiator are permitted provided there is no change to the bodywork. Double pass radiators are not permitted unless specified as original equipment

Modifications allowed:

- a) Cylinder head valve seats may be recut
- b) Crankshaft balancing is permitted by normal trade practices by the addition or removal of minimal amounts of material. Lightening is not permitted.
- c) Pistons and con-rods can be balanced as per above.

The following items must be used as specified below

- a) Entire Solo engineering World Supersport Next generation control electronic kit :
  - i. MKE7 Mectronik ECU for Supersport class racing and associated harness
  - ii. ADU5 world Supersport advanced display unit
  - iii. Switch gear left and right
  - iv. Main power switch

- b) "Software version"

#### **i. Ducati 959 V2 Panigale:**

Checksum: 0x8CF16E17

0x49CE9B5D

Firmware:	Name	Version
	SSNG_FIM	2.27.44
	SSNG_FIM	2.27.43
	SSNG_FIM	2.27.42

- c) Ducati 959 V2: Race kit sump gasket

### **8.9 KTM RC8C**

All items not mentioned in either Appendix F or the following articles must remain as originally produced by the manufacturer, remain fitted and operational for that homologated model

All KTM RC8C engines are required to be MNZ sealed following run in inspection/service

The following may be replaced with parts not manufactured by the manufacturer of the machine:

- a) Fairing and body work to non carbon fibre material
- b) Exhaust system

#### **c) Cam Chain Tensioner.**

Modifications permitted:

- a) Springs and oil level and oil grade in the front forks- no other changes permitted

- b) Springs on the rear shock absorber - no other changes permitted

All internal engine components must be standard, engines must be sealed from new. Any seal needing to be removed for servicing requirements must be done with the technical personnel from MNZ or someone under their direction. Any machines without MNZ engine seals are not eligible for competition.

All ecu maps, functions and limits must be as standard, no modification allowed.

#### **8.10 Yamaha YZF (Not yet homologated)**

All items not mentioned in either Appendix F or the following articles must remain as originally produced by the manufacturer, remain fitted and operational for that homologated model

The following may be replaced with parts not manufactured by the manufacturer of the machine:

- a) Exhaust system
- b) Quick shifters and auto blippers for down shifting
- c) Rear suspension damping units and springs
- d) Front suspension, springs and damping parts and fork top caps may be modified or replaced, but the external appearance of the forks must not be changed
- e) The Clutch assembly may be replaced with an aftermarket unit specifically made for that model. OE Clutch plates, springs, and slipper springs may be replaced with aftermarket replacements
- f) Brake discs, provided they are made of similar material to the OEM part and are the same diameter, ie; no carbon, titanium or plasma coated items.
- g) Aftermarket radiators, or repairs to the original radiator are permitted provided there is no change to the bodywork. Double pass radiators are not permitted unless specified as original equipment

Modifications allowed:

- a) Reflashing of OEM ECU. RRM limits to remain as standard (no increased RPM or RPM extend is to be used)
- b) Cylinder head valve seats may be recut
- c) Crankshaft balancing is permitted by normal trade practices by the addition or removal of minimal amounts of material. Lightening is not permitted
- d) Pistons and con-rods can be balanced as per above.