APPENDIX E – Pro Twin Regulations (Road)

The rules for this class will apply to all National Championship and endurance Championship races. At other meetings these rules will apply unless varied in the Supplementary Regulations, but not contradicting the class rules.

This class of motorcycle requires a production motorcycle available and on sale to the mass public in New Zealand. It is the competitor's responsibility to make sure that the machines engine configuration is the same as the manufacturer's specification. All parts unless mentioned elsewhere *MAY NOT* be interchanged between models, generations, and year of manufacture *(YOM).* Bike components are as per the VIN plate for that bike *(see rule 1b).*

Pro Twin motorcycles require an MNZ homologation. At least 10 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.
Where a New Zealand Importer (distributor) does not exist and the Importer (distributor) is based in Australia and communication re homologation is not forthcoming then with MNZ Road Race Commissioner approval a New Zealand retail outlet could be engaged to provide suitable homologation.

All items not mentioned in the following articles must remain as originally produced by the manufacturers, remain fitted and operational for that model.

The frame number of the machine will be registered by the competitor at each event. This must be the machine that is ridden in all races during the event.
Applications for frame changes must be made to the Technical Steward, in writing, including the old and new frame numbers for approval.

1. MACHINE SPECIFICATIONS:
   a) Two cylinder four strokes up to 690cc standard engines.
   b) Approved models that can be raced in the class and necessary balancing rules for those specific machines will be defined in the "Pro Twin eligible machines, componentry and balancing rules" which is available on the MNZ website.
   c) 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
   d) Be fitted with VIN compliance plates for that model of 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.
   e) Be of a make and model lawfully imported and sold to the mass public in New Zealand.
   f) Be as constructed by the original manufacturer.
   g) Machines with re-bored cylinders must remain within that model's OEM capacity limits *(i.e. second oversize, 0.5mm).*

2. NUMBERS
   a) Number plate colours, size and placement: (*Refer to rule 10.2).*

3. FUEL
   a) refer to rule 10.13.

4. TYRES:
   a) Be commercially available from within New Zealand.
   b) Be not less than the machine manufacturer's recommended speed rating.
   c) Be worn no more than to the minimum tread depth indicators.
   d) Can be manufactured for road use (IE BE DOT approved) or for competition use.
   e) Not have an augmented or modified tread pattern.
   f) For all events other than endurance races only one set of tyres per meeting will be permitted for races where points for MNZ championships are awarded.
   g) Front and rear tyres fitted must conform to the relevant tyre manufacturers' specifications regarding rim width.
   h) Tyre warmers are permitted.
   i) When a race or practice session has been declared 'wet', the use of a wet tyre is allowed.
   j) Any number of wet tyres may be used should the meeting be declared 'wet'.

5. THE FOLLOWING MUST BE REMOVED:
   a) Headlamp.
   b) Tail lamp.
   c) Reflectors.
   d) Horn.
   e) Traffic indicators.
   f) Mirrors.
   g) Centre and side stands.
   h) Registration plate / bracket and label holder.
   i) Any sharp edges left by the removal of these components must be protected by a rolled edge or beading of a minimum 3mm diameter.

6. THE FOLLOWING MAY BE REMOVED:
   a) Passenger handholds and footrest assemblies.
   b) Instruments, brackets, and associated cables.
   c) Air injection pollution control system.
   d) Carburettor anti-icing device.
   e) Rear fender.
   f) Upper Chain Guard.
   g) Left hand (L/H) Switch Block.
   h) Where items that required connection to the wiring looms are no longer used, these connections can be removed or used to power other devices (e.g. rain lights) however the main wiring harness must remain intact.
   i) Radiator Fan. However, the bike must be capable of running at operational temperature prior to the race grid line up, during the race, and during the IN

LAP (race finish). The radiator must be vented back to a secure expansion tank via a pressurised radiator cap. *(See rule 9 j).*

j) The Anti Lock brake system (ABS) can be disconnected and the following may be removed : ABS control unit, ABS wheel rotors and sensors.

7. THE FOLLOWING MUST BE FITTED:

a) A chain guard or shark fin made of suitable material must be fitted in such a way to prevent trapping between the lower chain run and the final drive sprocket at the rear wheel. The leading edge of this guard must be a minimum thickness of 3mm and have a rounded edge to avoid this causing any injury in the event of a fall. Machines where the swing arm shape or positioning prevents fitment are exempt.

b) All exposed lateral engine cases containing water or oil must be guarded from contact with the road surface in the event of a crash. The guard may be a second cover made from suitable materials such as carbon / Kevlar or suitable plastic or with heavy duty end cases or crash bars made from aluminium, steel or nylon. For those machines that do not have a commercially available cover, a frame mounted crash knob or a similar effective protector can be fitted as an alternative. Such devices or fabricated parts must be designed to be resistant against sudden shocks, abrasions and crash damage.

c) 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.

d) All machines must of be fitted with an integral lower fairing dam (Belly Pan) or separate catch tray which must be constructed and fitted to trap and hold engine oil and coolant with a capacity of not less than 3.5 litres, and with no less than 2x25mm holes (1 front 1 rear) which will be fitted with rubber grommets that may be removed in wet conditions.

8. THE FOLLOWING MAY BE FITTED:

a) Ride height adjuster, providing no alterations are required to either frame or swing arm.

b) Lap timing devices, and/or data acquisition recording devices may be used.

c) Accessory fairing, front guard and bodywork may be fitted.

d) Engine case covers and protective crash knobs.

e) Engine cut lanyard attached to the rider that will cut either the ignition and/or the fuel supply to the engine.

f) Swing arm mounted sprocket guard where the device does not act as a tensioning device.

g) Quick shifting devices.

9. THE FOLLOWING MAY BE REPLACED WITH PARTS NOT MANUFACTURED BY THE MANUFACTURER OF THE MACHINE:

a) Brake pads, linings and brake hoses.

b) Fairing, screen, rear seat unit/bodywork (to provide for the mounting of a rear number board), rider's seat, mudguards and tank covers.

c) Handlebars, handlebar mounted levers, and controls. *(The only exception to this is in the instance of rule 10e being utilised).*

d) Footrests and foot controls, but the replacements must be mounted on the frame at the original mounting points.
e) External gearing and chain *but not chain pitch.*
f) Exhaust system.
g) A fuel tuning device (i.e. Power Commander) or ECU flashing device is permitted. Except for the fitting of the associated wires for such a device, the wiring loom must remain standard and intact.
h) Spark plugs and high-tension leads.
i) Rear suspension damping units and springs. The link arms (dog bones) may be changed or modified but the suspension linkage must remain standard. Original attachments to the frame must be used.
j) Front suspension, springs, damping parts and fork top caps may be replaced or modified, but the external appearance of the forks must not be modified or changed. Cartridge replacement must be only with an open type cartridge, no pressurised type cartridges allowed.
k) Radiator expansion tank.
l) Battery, but the replacement must be capable of starting the machine prior to, and post-race.
m) The fitting of crash sliders and external components that utilise aftermarket fasteners. All fasteners must be capable of meeting with manufactures torque settings and tensile strength *No Titanium allowed*.
n) The base and head gaskets may be replaced with aftermarket equivalents; however, OEM thickness MUST be retained.
o) The fitment of an aftermarket sub-frame or modification to the existing OEM sub-frame is allowed providing that the construction is comparable to the original OEM parts (i.e. strength and design). Items such as the battery, wiring, ecu, etc, must be fitted to the aftermarket sub-frame in the same position as the original OEL fitment. The aforementioned items must be secure and not able to be dislodged from the sub-frame in the event of a crash. Where a make of machine has no sub-frame or the sub-frame is permanent (can't be removed), then other than alterations for the fitting of a tail piece, and the mounting of brackets for seat and tail unit, no alterations allowed.
p) Wheel spacers

10. THE FOLLOWING OEM PARTS MAY BE MODIFIED:
a. Gearbox drive dogs may be undercut.
b. Cylinder head valve seats may be recut.
c. Carburettor slide modifications are permitted.
d. Engine throttle stop may be modified.

11. THE FOLLOWING IS PROHIBITED:
a) The fitment of aftermarket traction control units is not permitted.
b) Lifting of the fuel tank is not permitted.
c) Titanium on ANY components (excluding exhaust system).