Class: Formula Xtreme C & D

Series: Australasian Superbike Championship & AFX-SBK

2015 Technical Rules & Regulations

MACHINE ELIGIBILITY & CLASS EXPLANATION

All machines make and models need to be homologated by the owner of these rules, being, Formula Xtreme Pty Ltd to be eligible to compete in the 2015 Australasian Superbike Championship and or AFX-SBK series Formula Xtreme C & D class. Please check with the promoter by email to toneill@aus-superbikes.com.au to find out if your specific make, model and year motorcycle is homologated for the 2015 Formula Xtreme class. Please check if your motorcycle is now eligible as various models that weren't previously homologated now are. Please be aware that the Formula Xtreme C & D class rules in 2015 are the same basic rules as the 2015 Superbike class, however the Promoter reserves the right to alter rules throughout the year specific to the Formula Xtreme class if required. The intent of the class is to provide a separate stand alone class with its own identity for C & D level ability riders that have the same basic rules as the Superbike class. To achieve relevant national level parity in grading the Promoter reserves the right to grade riders and determine their eligibility to compete in the Formula Xtreme class, whether that means grading riders either up or down. Each riders grading case will be looked at on its own merits and the promoter in conjunction with series officials reserves the right to regrade a rider as deemed required.

NOTE: The Formula Xtreme homologation list may be updated at any time.

CLASS NAME & DESCRIPTION: **Formula Xtreme C & D**

NO MINIMUM MODEL NUMBERS:

There is no minimum number of a particular model of bike sold in Australia required for that bike to be eligible to compete in the Superbike class but all bikes must be accepted as being homologated by the promoter.

- For homologated 4-stroke Factory fitted ADR compliance plated Sports orientated motorcycles with two or more cylinders. Check with ARTRP the Promoter for your machines eligibility to enter.
- **Two cylinder head Cam cover bolts and the Cam Chain Tensioner Adjuster bolt must be drilled by the competitor prior to scrutineering.**
- **The Series Chief Scrutineer has the right to lock wire and seal each engine prior to the commencement of the round.**

ENGINE CAPACITY:

- Four Cylinder Machines minimum capacity 745cc, maximum capacity 1000cc
- Three Cylinder Machines minimum capacity 745cc, maximum capacity 1200cc
- Two Cylinder Machines minimum capacity 745cc, Maximum capacity **1400cc**

ENGINE, FUEL INJECTION, GEARBOX, RADIATORS, OIL COOLERS, WIRING LOOMS, ECU, FUEL TANKS, FRAMES, WHEELS, BRAKES:

- OEM per model and year**;** No modifications allowed unless otherwise specifically stipulated in these rules. The above listed parts are not the only parts with restrictions and the whole documents requirements and restrictions must be adhered too.

ENGINE INLET & EXHAUST VALVE & VALVE SEATS & CAM TIMING:

- OEM per model and year valve and valve seats original material must be retained; faces of both surfaces may be lightly cut for maintenance reasons. However all angles of valve seats and valve faces must be retained as per the manufacturers OEM per model and year specifications with no valve seat or valve face angle changes allowed.
- Inlet and exhaust tracks and ports cannot be altered or modified or have material added or removed this includes no after manufactured polishing/buffing etc.
- Valve Guides cannot be modified / Polished, Buffed etc or changed to aftermarket items that have a different specification from the standard OEM model parts.
- Cam Wheels can be modified or changed to aftermarket parts so as to allow for adjustable cam timing.

CLUTCH

- OEM per model and year
- OEM or aftermarket heavy duty springs can be fitted

EXTERNAL GEARING

- External gearing and chain pitch can be changed or replaced with aftermarket items.

AIRBOXES

- OEM per model and year.
- Air filters can be changed to aftermarket items but must be fitted and fully operational
- No internal modifications allowed other then fitment of an operational aftermarket air filter.
- No replacements, alterations or modifications to cold air connections / tubes etc to air box other than connection point to aftermarket Faring if required. Engine & gearbox breather pipes/tubes and the radiator overflow must exhaust into the airbox behind the intakes. The airboxes own breather tubes must be sealed so no fluids can leak out.

ELECTRICAL

- OEM per model and year Starter motors and alternators must be fitted and operational.
- OEM per model and year Australian ADR model ECU must be retained and be fully operational. However the standard OEM per model and year ECU can be reflashed / programmed etc.
- A 1% over rev variation above the factory stated maximum Rev limited per year and model is allowed.
- The ECU cannot be psychically modified internally or externally including repinning. Factory standard OEM per model and year maximum engine Rev limit / cut out must be retained and operational.
- The wiring harness cannot be modified other than to allow a Lanyard Kill switch to be fitted. No other alterations including no repinning of any plugs connected to the ECU / harness from the standard layout for the model and year.
  All electrical components that are to be removed or disconnected must be disconnected at the original factory fitted plug in point.
- OEM per model and year size and capacity Battery must be retained and fully operational including being charged at the correct amperage and voltage as stated in the manufacturers service manual for that model.
- Make, model and composition material of battery is open providing it meets the other listed requirements for the battery.
  Headlights and Tail lights can be fitted. (See 'Other Optional Non Genuine Equipment' Section below for full details.)
- **Thermo Fans must work as per how they came from the factory. Aftermarket switches or plugging in extra wiring to bypass and or allow manual powering of the fans is not allowed under these rules.**

EXHAUST

- Exhaust systems can be changed or altered and do not have to replicate the original profile **and can be made of titanium or carbon fibre.**
- All exhausts used must at all times meet venue noise restrictions or be no more than 95 db **whichever is the lesser.**

FRAME

- OEM per model & year with correct for that bike ADR compliance plate fitted.
- Repairs can be made if required providing they don't alter the machines geometry and measurements from OEM per model and year standard geometry as stated by manufacturer.
- Triple clamps Standard OEM per model and year, no modifications allowed or variations from standard OEM per model and year specifications allowed.
- SUB FRAME - Original profile must be maintained if repaired.
- Separate / additional sub frame sections that bolt to the main Sub Frame section that bolts to the frame can be removed providing the structural integrity of the section the seat unit is bolted to is not downgraded.
- SWINGARM - OEM model & year. No alterations allowed except rear stand mounting lugs & chain guard.
- Any sharp edges left by the removal of components must be shrouded by a rolled edge or beading of minimum 3mm diameter.
- Aftermarket faring, screen and instrument mounting brackets can be fitted providing they connect to the faring and frame in the original positions.

SUSPENSION

- **Rear** - Shock absorber, length, Ride height, make and manufacturer optional.
- **Front** - standard OEM per model tubes. Standard OEM per model sliders. Internals including springs, valving, oil levels and viscosity and external adjusters can be fitted or modified.

BRAKES

- OEM per model & year Callipers
- Front Brake Master Cylinder can be replaced with aftermarket or other OEM part.
- Pads and Lines manufacturer optional.
- If a motorcycle comes fitted with ABS it can be disconnected and removed.
- **Rotors can be changed to aftermarket floating items but must be same size and material.**
- **External aftermarket leaver adjusters can be fitted.**

WHEELS

- OEM standard per base model unless the wheels are standard OEM fitment for that model and year bike.
- Cush drive, Standard OEM per model
- No race kit, Limited Edition or R specification OEM model light weight or after market wheels can be fitted unless they are the standard OEM fitment for that model and year motorcycle.
- Only standard OEM per year and model (none fixed) wheel spacers can be used.

BODYWORK & NUMBER PLATES

- OEM shape and profile per model and year.
- OEM per model and year profile and size cold air inlets must be retained if aftermarket faring used.
- Aftermarket OEM replica per model and year faring and seat may be fitted.
- Rear mud guard and number plate bracket can be removed.
- Seat unit may be modified to be single seat unit inclusive of number plates.
- Aftermarket Screens can be fitted and can be oversize.
- Lower Faring must be sealed and hold a minimum of 3 litres of fluid. It must also have removable plugs for wet races

FRONT & REAR NUMBER BOARD OPTIONS:

- Front Number Boards: The number font that is recommended is either, Arial Rounded Bold, Princeton, Varsity or Super Normal and must be of at least 150 mm in height on the front number Boards.
- Rear Number boards: can be either on each side of the rear seat cowl or one number board on the top centre of the seat cowl and can be a different colour but the numbers must be contrasting for easy visibility. They must also be of at least 150 mm in height.
- If a single rear centred number board is used then the numbers must face the rear of rider when seated.
- The Front Number Board colour for a C and D grade rider must be (flat not gloss) 'Yellow'.
- For C grade riders the numbers must be 'Black'. For D grade riders numbers must be 'Red'.
- Rear number boards can be of any colour providing the numbers are contrasting in colour and stand out and the numbers on the rear boards must strongly contrast against the colour of the rear number board if it is not Yellow.
- Number boards can also be placed on each side of the faring providing they meet minimum size requirements of 150 mm and are easily visible from 20 metres when the motorcycle is upright.
- Other fonts can be used provided a sample is provided to ARTRP for their consideration and written permission is given prior to the event.
- The competitor's motorcycle must be presented to scrutineering with the correct numbers fixed to the bike.
- The promoter reserves the right to allow a capital letter from the alphabet instead of a number. This at this time will be restricted to international riders and or visiting high profile competitors at the promoter's discretion.

PETROL TANK

- Standard OEM per model and year. No metal, alloy or composite can be added or removed.
- **Fuel cap can be changed to aftermarket unit that does not require a key to open.**
- Fuel tanks will be checked for correct OEM manufacturer stated capacity.
- No modifications allowed other than edge crash protector covers. Carbon Fibre protectors are allowed for this application.

FUEL RESTRICTIONS AND SPECIFICATIONS

- As per the various relevant Federal Government Laws, Acts of Parliament, restrictions and or allowances for fuel usage for modern ADR complied 4-stroke motorcycles and these Fuel Restriction & Allowance Rules for the Superbike class.
- Restricted to Unleaded commercially available Petrol station 98 octane fuel pump sold petrol. No additives are allowed to be added.

RADIATOR

- Standard OEM per model and year no modifications.
- No Ethylene Glycol base coolants or other products are allowed to be used in the radiator or cooling system.

TYRES

- For dry track conditions **Homologated** slicks are the only tyres that can only be used.
- If a race or race meeting is declared wet by the Clerk of Course then 'full wet weather' or the **Homologated** tyres can be fitted.
- The ASC Supplementary Regulations (Sup Regs) and Final Instructions that the Formula Xtreme C & D class will compete under for 2015 will cover all aspects of the tyre rules. The Sup Regs and or Final Instructions regarding tyres will, if different, override these rules relating to tyres.

OTHER MODIFICATIONS OR OPTIONAL NON-GENUINE EQUIPMENT THAT CAN BE CHANGED OR FITTED

- Foot pegs, Foot Peg Carriers, Gear levers, Clutch & brake levers, Handlebars, Spark plugs
- Fuel Injection Metering Control Device with an Australian maximum new $1000 RRP Inc GST Must plug into original wiring harness plugs and cannot be used for any other function other than fuel metering.

- Plug in piggy back Auto Tune units with no other functions other than adjusting fuel air mixtures. Must only use a single plug in oxygen sensor. No other sensors can be fitted or utilised for any other function.
- Power / Speed shifter
- Steering damper
- Front Brake Master Cylinder
- Frame savers
- Chain Guards
- Approved Lap timing devices allowed. Australian Maximum new RRP of $750 Inc GST.
- Front and rear aftermarket axle stand points can be fitted.
- Heavy duty crash damage resistant engine case ends
- Lanyard engine cut out kill switch including wiring harness modifications which allow it to operate can be fitted.
- Reverse pattern gear change is allowed
- Headlight with a minimum of 55 watts will be allowed to be fitted. If a headlight is fitted it must be either the original headlight providing it is not glass or a aftermarket headlight which is not glass. The headlight does not have to be the original size and shape. The aftermarket headlight must be fitted to the right hand side of the faring looking at the bike from the rear. If an aftermarket head light is fitted to the R/H/Side then the number plate must be position on the opposite left hand side of the front faring.
- Rear Tail Light must have a minimum of 21 watts and must not be made of glass Please note a rear tail light is not a brake light, Brake lights are not allowed. Please check with the Promoter before fitting headlights and Tail Lights that they comply.
- Head Lights and Tail Lights must be able to be turned off and on by way of a handle bar mounted accessible switch.
- Mesh Radiator shroud / Protectors can be fitted
- Clutch Lever Crash Guards can be fitted. Front Brake Crash Guards are now mandatory in Superbike.
- Petrol tank **Frame / swingarm** crash protectors and crank case protectors can be fitted, even if they are carbon fibre.
- Countershaft Sprocket covers can be modified to allow linkages to be fitted which allow reverse pattern gear shifting. The modified cover must still cover the majority of the countershaft sprocket.

RESTRICTIONS & LIMITATIONS
- No quick action throttles.
- No titanium or carbon fibre, unless standard original OEM part for that model and year or unless used in a replacement exhaust system or part of & or as crash resistant crank case end covers or fuel tank edge or **frame / swingarm** protectors.
- Fuel tank capacity may not exceed the manufacturer's original stated ADR complied Australian fuel carrying capacity.
- No modifications or alterations allowed that will compromise the structural integrity of the motorcycle.
- Any sharp edges must be covered in such a way so as they cannot be able to inflict injury.
- No Brake light allowed.
- No on board telemetry allowed other than approved series timing transmitters, on board camera's and approved auto tune / fuel metering devices.
- Timing Transmitters or any other electronic device that has a GPS function or a 2G, 3G, 4G function or Wireless function to send / transmit information/data is not allowed to be fitted or operational.
- Thermo Fans and how they work cannot be altered; they must only operate and cycle as they came from the factory.

TRACTION CONTROL
- If a motorcycle does not come standard from the manufacturer with traction control then traction control or similar cannot be fitted.

MANDATORY FITMENT
- Heavy Duty crash damage resistant Crank case end casings & or crash damage resistant covers.
- Engine Sump Plug must be drilled and lock wired. Not required if a counter sunk sump plug comes standard.
- Oil filter must be lock wired to frame.
- Brake calliper securing bolts must be drilled and lock wired (Split 'R' pins can be used in conjunction with wiring to secure calliper bolts)
- Oil filters must be locked wired.
- Radiator Caps must be lock wired.
- MotoGP Style Front Brake Lever Crash Guards.

THE FOLLOWING MAY BE REMOVED
- Any pollution gear and or anti-icing gear including catalytic converters and or motors or cables for exhaust valves that are no longer used because of the use of a different exhaust system.
- Any road used gear required for ADR compliance including thermo fans, lights etc. that will not affect the safety, structural or visual integrity of the motorcycle other than what is stated as allowable or not allowable in these rules.

THE FOLLOWING MUST BE REMOVED

- Pillion Pegs, Centre & or side stands
- Horns, Traffic indicators, Rear vision mirrors, Registration plate/label holder, Brake lights.

DEFINITIONS & UPDATES Please Note:

- OEM = Original Equipment of Manufacturer (not year or model specific)
- OEM + per Model = OEM for that model (not year specific.)
- OEM + per Model and Year = OEM for that model and particular year
- Unless otherwise stipulated the above three definitions do not allow any modifications
- If something is not specifically mentioned in these rules then it is not allowed.
- These rules may be updated prior to and or after the ASC and or AFX-SBK series has commenced at the discretion of the Promoter if there is a safety or major concern with the rules that needs addressing.
- Notification of any updates will be listed on the official website www.fxsuperbikes.com.au and the series facebook page as soon as possible after any changes are made.

Regarding the 'DEFINITIONS' Section above be aware of how you can possibly mix and match parts from different models and years to your advantage. If in doubt about any rules or the eligibility of entering a machine in the Superbike class please contact Terry O'Neill, on ph (02) 48 235 711 Fax: (02) 48 235 744 or email: toneill@aus-superbikes.com.au before a potentially costly mistake is made.

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