



# Class: Formula Xtreme C&D

## 2017 Technical Rules & Regulations

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### **MACHINE ELIGIBILITY & CLASS EXPLANATION**

For a machine to be eligible to compete in the Formula Xtreme C&D class at the 2017 Australasian Superbike Championship Series (ASC) it must be homologated by the Series Race Director. Please check with the promoter by email to [toneill@aus-superbikes.com.au](mailto:toneill@aus-superbikes.com.au) to find out if your specific make, model and year motorcycle is homologated for the 2017 Formula Xtreme C&D class and will mirror image the 2017 FX-Superbike list. The Formula Xtreme C&D class is open to C & D grade riders only.

**NOTE:** The Formula Xtreme C&D homologation list and these rules may be updated at any time during the season by the promoter.

### **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 Formula Xtreme C&D 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 the Promoter for your machines eligibility to enter.

#### **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 to.

#### **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 cut.
- 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 to allow for adjustable cam timing.
- Cylinder head and cylinder block mating surfaces may be machined.

#### **CLUTCH**

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

#### **GEARBOX**

OEM per model and year gear ratio's, no internal gearing alterations allowed.  
Gear dogs can be undercut.

#### **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 than 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.
- Factory Kit ECU and wiring harness can be fitted. There is no engine upper RPM limit.
- If a motorcycle does not come with traction control standard then (one) wheel speed sensor and pickup disc can be fitted as a part of the kit wiring harness to complete a traction system.
- The OEM ECU can be reflashed / programmed etc.
- The OEM ECU can be physically modified internally or externally including repinning.
- A Lanyard Kill switch can be fitted.
- OEM per model minimum AMP 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.)
- OEM per model and year Thermo Fans must be fitted and operational.

## **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 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 Forks. 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 diameter and material.
- External aftermarket lever 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.
- Carbon Fibre and or composite wheels are not permitted even if OEM per model.
- **Fixed wheel spacers are allowed.**

## **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 AND NUMBER OPTIONS & REQUIREMENTS:**

- **The colour of number boards is optional, however the race numbers must be of a single contrasting colour that is acceptable to the series chief scrutineer. Please check with the promoter prior to attending the race meeting.**
- 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.
- Rear number boards can be of any colour providing the numbers are contrasting in colour and stand out.
- 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 the Promoter for their consideration and written permission for any other font etc must be obtained 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.
- Unleaded must be commercially available Petrol station 98 octane fuel pump sold petrol. No additives are allowed to be added.
- **E85 is allowed but no additives can be added.**

#### **RADIATOR**

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

#### **TYRES**

- For dry track conditions control 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 control tyres can be fitted.
- The ASC Supplementary Regulations (Sup Regs) and Final Instructions that the Formula Xtreme C&D class will compete under for 2017 will cover all aspects of the tyre rules. The Sup Regs and or Final Instructions regarding control 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 Devices including piggy back auto tune units can be fitted.
- Factory Kit ECU and wiring harness can be fitted. There is now no upper engine RPM limit
- If a (one) wheel speed sensor and or a pickup disc needs to be fitted as a part of the kit wiring harness to complete a traction system it will be allowed.
- Power / Speed shifter
- Steering damper
- Front Brake Master Cylinder
- Frame savers
- Chain Guards
- Approved Lap timing devices with GPS function are 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
- 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 and 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.

- Fuel cap can be changed to aftermarket unit that does not require a key to open.

### **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 and 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.
- 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.

### **TRACTION CONTROL**

- If a motorcycle does not come standard from the manufacturer with traction control then traction control or similar can 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.
- Chain guard must be fitted in front of rear sprocket underneath the swingarm.

### **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, 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 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 websites [www.fxsuperbikes.com.au](http://www.fxsuperbikes.com.au) and [www.formula-xtreme.com.au](http://www.formula-xtreme.com.au) 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) 4981 2315 Fax: (02) 4981 0131 or email: [toneill@aus-superbikes.com.au](mailto:toneill@aus-superbikes.com.au) before a potentially costly mistake is made.

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