

# 2010 MOTORSPORT IRELAND FIAT MARK 1 PUNTO CHAMPIONSHIP TECHNICAL REGULATIONS

## 15. INTRODUCTION.

This is a class for standard production saloons based on the Fiat Mark 1 Punto. All cars must use only standard production components except where permitted in these regulations. In these regulations the word 'standard' is deemed to be as originally produced or supplied by Fiat. The definition is further extended to include replacement or pattern parts produced by other than Fiat for aftermarket sales provided that:

**15.1.** The part is a straight replacement for the original part, requiring no modification to fit.

**15.2.** All dimensions of the part and the materials used in its construction are the same as the original part.

**15.3.** The entrant is able to demonstrate that points (15.1.) and (15.2.) have been observed, if requested by MI Eligibility Scrutineer. (By making reference to the aftermarket manufacturers catalogue, for example).

**15.4.** MI Yearbook and SPEC sheet take precedence over the workshop manual.

**15.5.** If there are any doubts over your car's legality, please contact MI Eligibility Scrutineer for written clarification or permission.

## 16. ELIGIBLE CARS.

Any 3 or 5 door Punto Mark 1

## 17. BODYSHELL.

Must be standard steel shell with all doors and hatch-back operating. Structural additions for safety and reliability purposes are permitted provided they do not alter the outside appearance of the car. Head lamps may be replaced by blanking to original shape. Bucket seats must be used to MI Spec. Front bumper must be as standard with no cooling slots cut into it. Optional chin scoop can be fitted. Headlight covers must be uncut.

## 18. WEIGHT.

The minimum weight in full race trim inclusive of driver and racewear and including petrol is 900kgs. To achieve minimum weight some or all of the following may be removed; side and rear windows may be replaced with e.g. Macrolon provided they take the original shape of original windows. Front windscreen must stay as standard glass. Carpets, headcloth, all sound proofing and seats, rear washwipe and wiper assembly can be removed. Dashboard must be standard, but original gauges may be replaced with rev counters and gauges. The internals of door may be removed. If door panels are removed they must be replaced with lighter

material provided its minimum thickness is not less than 1mm. The heater must remain in car and must be fully operational.

## 19. AERODYNAMICS.

All standard aerodynamic devices such as rear spoiler must remain in original location where fitted by the manufacturer and must not be added to or altered. Front wiper arm and blade must be retained in original position and operational.

## 20. SUSPENSION.

LEDA shocks only are permitted. Spring platforms on rear beam may be changed to adjustable platform to take 2 1/4" - 2 3/4" springs provided they are in original position.

**20.1. Springs.** Springs are free.

### 20.2. Camber.

4 max front and rear.

All mounting points must remain in original position, one hole in shock may be enlarged to obtain camber. Only top rubber shock mount may be replaced with a Uniball arrangement, provided it is in the original position. All bushes must be standard Punto, no modification allowed.

TRACK FRONT 138 cm

REAR 137cm

Wheels must remain inside wheelarch. The front beam may be re-enforced and strengthened. The rear beam may only be seamwelded.

### 20.3. Anti-Roll Bar Front and Rear.

Front roll bar diameter may be no larger than 21 mm. Rear roll bar diameter may be no larger than 17.5mm.

## 21. STEERING.

Steering assembly must be as originally fitted to the vehicle. Steering wheel can be changed. Minimum number of turns on wheel 4.4 from lock to lock.

## 22. BRAKES.

Brake lines and friction materials only can be uprated. Brake discs may be standard solid discs or ventilated discs. No cross drilled discs or grooved discs are allowed. Max outside diameter 260mm. Compensator valve on rear can be inside car. Front brake Pads - Ferodo brake pads (part no. FCP 370S or FCP 10565) or any other manufacturer's front brake pad with equivalent specifications to the Ferodo brake pads mentioned above can be used.

## 23. WHEELS AND TYRES.

### 23.1. Wheels.

**Wheel size: 5.5 inch J or 6 inch J**

**There is to be no mixture of wheel sizes i.e. four of the same wheel size must be used.**

### 23.2. Tyres.

**12 X Dunlop 175 555 14 slicks are permitted for the season. Mixing of slicks and wet tyres is not permitted.**

## **24. ENGINE GENERAL.**

**24.1.** Modifications are strictly prohibited other than those contained in these regulations.

**24.2.** Reconditioning is permitted but must be within the constraints of the Fiat workshop manual for the engine. MI Spec sheet and MI Yearbook taking precedence over workshop manual.

**24.3.** Sump may be baffled, oil cooler is allowed to be fitted to engine.

## **25. CYLINDER BLOCK.**

It is permitted to over bore cylinder block to max 81.1mm bore. Max cc of any block is 1395cc. The only way allowed to alter volume of piston in cylinder is by machining square across top of piston. No fettling of piston pockets allowed.

**25.1.** Machining of piston crown (B) must be square (90) with cylinder bore.

**25.2.** Minimum weight for rod and piston assembly is 1120g.

## **26. CYLINDER HEAD.**

**26.1.** The cylinder head ports must be as manufactured. Strictly no grinding or polishing is allowed. This prohibits the use of wire brushes or other abrasive tools.

**26.2.** The valve guides must be as manufactured, no modification of any kind is permitted. Minimum length: 47mm.

### **26.3. Valve inserts.**

It is permitted to recondition the valve inserts as laid down in the Fiat workshop manual provided the reconditioning ensures a valve seat width of not less than 1mm with valve inserts having a maximum of width of 33mm for inlet at it's narrowest point. A valve seat width of not less than 1mm with a valve insert maximum width of 27mm at it's narrowest point is required for exhaust. Maximum overall diameter inlet valve seats: 37.5mm.

Maximum overall diameter exhaust valve seats: 31mm.

### **26.4. Valves.**

Only standard valves, valve springs and assembly permitted. Washer spacers must be of standard specification. No additional spacers, springs or washers may be added. Valve spring retaining position must be as standard.

Washer spec under valve springs: Combined thickness of both large washer thickness and small washer thickness is 3.5mm.

Refacing valve seats on cylinder head.

NOTE - The valve seats are refaced on the cylinder head every time the valve guides are refaced or replaced.

## **27. CAMSHAFT.**

Refer to MI SPEC. sheet.

**27.1.** Cam wheel may be of a Vernier Pulley design, but must be non variable when in motion. Retaining dowels, holes on camshaft and cam wheel must be to standard specification.

## **28. MANIFOLDS.**

Refer to MI SPEC. sheet.

**28.1.** Exhaust pipe is free but must exit rear of driver either side or rear of the car. It must run with at least one silencer.

**28.2.** The heating system to the inlet manifold may be blocked off at the cylinder head and the external feed may also be blocked off and disconnected.

**28.3.** Exhaust manifold may be insulated with wrapping.

**28.4.** The exhaust manifold may be either:

**28.4.1.** Tubular competition (as per MI spec sheet) or

**28.4.2.** Standard Fiat cast

## **29. CRANKSHAFT/CONROD ASSEMBLY.**

Only standard components permitted. It is permitted to balance the crankshaft assembly in accordance with the Fiat workshop manual but within the limits and tolerance of MI spec sheet.

## **30. CLUTCH.**

A standard pressure plate must be used, either a FIAT original or equivalent provided they comply with MI specification sheets. It is permitted, however, to change clutch disc only to a paddle type.

## **31. PISTONS.**

Standard original Fiat part pistons or equivalent may be used provided they comply with MI spec sheets. Contour or shape of piston may not be enhanced in any way. Maximum allowable compression ratio 10.0:1, also see Cylinder Block.

**31.1.** Piston rings must be similar in design, shape and specification to standard Fiat unit.

## **32. CARBURETTORS.**

**32.1.** Type allowed, Weber 40 DCNF with primary venturi 32mm, secondary venturi 32mm.

**32.2.** No machining or drilling allowed. All removable jets may be changed. Choke mechanism may be removed or rendered inoperative.

**32.3.** A K&N/Piper type filter may be used with complete operating air filter. Alternative air box systems will not be permitted.

### **32.4. Inlet manifold.**

Refer to drawing in MI spec sheet.

## **33. GEARBOX.**

Must be standard 5 speed gearbox unit from Tipo.

### **33.1. Crown Wheel.**

Two final drive ratios allowed: 3.9 or 3.7.

### **33.2. Gear Ratios.**

The following are the gear ratios allowed

1st 3.9  
2nd 2.2  
3rd 1.4  
4th 1.0  
5th 0.8

### **33.3. Differential.**

A limited slip differential of any form is not permitted.

### **33.4. Gear Change Mechanism.**

It is permitted to up-rate the reliability of the gear change mechanism by replacing the standard ball & nylon socket joints with rose joints.

### **34. SAFETY.** (see appendix 2)

**34.1.** A MI approved full safety harness *per appendix 2.*

**34.2.** A fire extinguisher system to MI regulations plumbed in.

**34.3.** A master cut out switch operable from outside and inside of the car which will isolate the battery and kill the engine.

**34.4.** A full roll cage of an approved type and intrusion bar on each side may be uprated. Strut braces are allowed.

**34.5.** A laminated windscreen *is mandatory.*

**34.6.** Steering locks must be removed or made inoperative.

**34.7.** A bucket seat is compulsory.

**34.8.** Protective clothing and helmet as per current MI regulations.

**34.9.** Battery may be fitted inside car passenger footwell provided the battery is in a battery box or is a drycell battery and must be well secured to floor. The battery tray and support may be removed from the engine compartment.

**34.10.** Rear lights, stop lights and (21 watt) rain (fog) lights must remain functioning.

**34.11.** One stabiliser bar may be fitted from the top of the engine to the bulkhead or strut brace.

**34.12.** Wiring to be arranged in such a way that alternator is fully operational at all times when engine is running.

**34.13.** Data logging systems are acceptable. The ECU should be mounted in such away as to be easily accessible for examination.

### **35. THERMOSTAT.**

The thermostat housing on the cooling system may be removed and replaced with a direct feed alternative in the original position. The lower position on the radiator may be connected directly to the water pump.

### **36. CAPACITY CHECKS.**

Two camshaft cover or rockers cover, two sump and gearbox centre bolt must be cross drilled to enable wire sealing. Failure to comply will result in a car being automatically declared ineligible.

### **37. BONNET SCOOPS.**

The placing of a scoop as defined in a drawing from the Technical **Advisory Group** is permissible. The scoop must not be modified. The maximum size of hole in the bonnet is 30cm width by 16cm depth (with 5cm tolerance). Maximum width of intake is 125mm by 30mm (with 5mm tolerance).

### **38. MI ELIGIBILITY SCRUTINEER APPOINTED.**

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