

## **2017 NORTHERN IRELAND FIESTA ZETEC CHAMPIONSHIP**

### **Technical Regulations.**

#### **5.1 INTRODUCTION:**

The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that you can do it, you should work on the principle that you cannot.

#### **5.2 GENERAL DESCRIPTION:**

The Fiesta Zetec Championship is for competitors participating in Fiesta Zetec cars. Eligible cars are, 3/5 door hatch-back, built between 1996 and 2001, with a 1.25 Zetec engine, 75BHP Mark 4 model.(including face lift model) Only standard original chassis and parts and components for these Fiesta models allowed i.e. you can't fit parts from another model of Ford ( see 5.4 below)

#### **5.3 SAFETY REQUIREMENTS:**

All cars must comply with the Technical Regulations listed in the current MSA Yearbook Section J.5 and K and with the minimum safety requirements listed in Section Q. Extinguishers must comply with MSA regulation K3.1.2a (plumbed in). Seat belts must be to FIA standards in accordance with K.2.1.2 (3" 4 point), K.2.1.3 (5 point) or K.2.1.4 (6 point)

5.3.1: Full front and rear roll cage must be fitted to the car complying with MSA regulation K1 with side impact bars and spreader plates welded to the floor.

5.3.2: Vehicles must be equipped with an externally operated circuit breaker having positive ON OFF positions clearly marked(K8).

5.3.3: The internal ignition cut-off must be operable when the driver is normally seated irrespective of whether a safety harness is worn or not.

5.3.4: Apart from the ECU (see 5.7.9) It is not permitted to have any ignition components, coils, chokes or black boxes located in the cockpit area in racing cars.

5.3.5: The fuel system must be equipped with an effective method of stopping fuel supply and be operable by the driver when normally seated. This can be incorporated into 5.3.3. above or be located adjacent to internal ignition cut-off switch.

#### **5.4 GENERAL TECHNICAL REQUIREMENTS & EXCEPTIONS:**

All cars must comply with the requirements of Sections J5, K and Q19 of the current MSA Yearbook. All vehicles must be of sound construction and mechanical condition and be well maintained.

5.4.1: The word 'Standard' is as defined in Section B of the current MSA Yearbook. The word 'standard' used within these technical regulations as a description of components is to be interpreted as:- 'the specified component from the manufacturers parts list for the model/engine shown on the entry form or registration form. It is not permitted to use components from the early model on the late model and vice versa where there is any difference to the specification or fitment of these components. This includes engines. . No modifications are permitted beyond the repair or adjustment processes specified by the manufacturer. Checking will be by comparison to spare parts supplied by the manufacturer's official agent or by any other means'.

Parts/engines etc may be interchangeable between early and late model cars.

#### **5.5 CHASSIS**

Chassis must be as per manufacturers' dimensions and design, including the wheel base dimensions and track

## **5.6 BODYWORK**

- 5.6.1: Boot and bonnet catches should be removed and bonnet pins and boot pins/springs added. Side and rear windows to be removed and replaced with 4mm clear polycarbonate to MSA regulations.
- 5.6.2: Front and rear door cards are to be removed along with head-cloth, carpets and rear seats.
- 5.6.3: A plumbed in fire extinguisher should be mounted in the passenger foot-well.
- 5.6.4: Airbag to be removed. Steering wheel may be changed. The steering lock is to be disabled. The steering lock housing must be fitted to the column by headed bolts (no shear bolts permitted) to allow ease of replacement for eligibility purposes.
- 5.6.5: Driver's seat should be correctly located and securely anchored to allow no movement in squab or backrest. As the standard seat can move it is not permitted.. Front passenger seat to be removed.
- 5.6.5: Sunroof, if fitted to be removed and sheeted in.
- 5.6.6: No modification or additions permitted to body shell to limit body roll.
- 5.6.7: The front anti roll bar must be a standard unit and must be mounted in the original location with the standard links. No rear anti roll bar is permitted.
- 5.6.8: It is not permitted to change the silhouette of the car.
- 5.6.9: The ground clearance is measured as the distance between the ground and the bottom of the sump and must be 12cm or greater.
- 5.6.10: All bodywork to remain standard. Driver's door bar and bonnet internal cross brace structure must remain in place. No lightening of internal panels is permitted.
- 5.6.11: Factory dash to remain fitted.
- 5.6.12: It is not permitted to cut holes in the bodywork for lightening purposes or to increase airflow to the engine, suspension or braking system. No air ducts other than standard are permitted.
- 5.6.13: Wheels should remain inside lines of body and not protrude beyond the arches.
- 5.6.14: Headlights must remain complete and working.
- 5.6.15: It is permitted to fit extensions and/or non-slip material to the pedals.
- 5.6.16: A standard laminated windscreen must be fitted.

## **5.7.ENGINE:**

- 5.7.1: Ford ZETEC unit only with a bore of 71.8mm and a stroke of 76.5mm.
- 5.7.2 The engine must be mounted in the standard position, using the standard production engine mounting brackets and standard engine rubber mounts which must be bolted to the standard production fitting points on the chassis/subframe.
- 5.7.3: The engine must run standard hydraulic tappets.
- 5.7.4: The standard compression ratio of 10.0:1 must apply.
- 5.7.5: No additional form of oil cooling is allowed.
- 5.7.6: No modifications are permitted to the cooling system.
- 5.7.7: No modifications are permitted to the induction system. The car must retain the standard paper air filter, housings and trunkings.
- 5.7.8: The standard exhaust manifold and catalytic converter must be used. See MSA regulation (J)5.16.7. All other parts of the exhaust are free, but the noise emissions must comply with current MSA requirements.
- 5.7.9: The standard ECU must be used and no modifications are permitted. This must be located in the glove box area. The organisers reserve the right to replace a competitors' ECU with a standard one from their stock at any time.

5.7.10: The fuel injection system must be standard no modifications permitted. No additives allowed to pump fuel as per MSA regulations.

5.7.11: Valve/camshaft timing to remain unaltered and comply with manufacturers original specifications.

5.7.12: The throttle body/inlet manifold for the respective car (i.e. early model/late model) must remain as standard as per model and the parts are not interchangeable between the two.

5.7.13: The top engine cam cover and rocker cover mounting plate, along with the r/h upper cam cover retaining bolt should be drilled as per Appendix 2 to allow for the sealing of the engine.

## **5.8 SUSPENSIONS:**

5.8.1: The wheelbase and track of the vehicle must remain as per manufacturers standard specifications.

5.8.2: Front suspension: Only the standard specified suspension units with a fixed spring platform may be used, as supplied by Ford and assembled in accordance with manufacturers specifications, and these must be fitted to an unmodified front stub able assembly.

5.8.3: Front suspension: It is not permitted to tamper with the suspension unit or to change the oil within it.

5.8.4: Front suspension: No mechanism is permitted to vary the amount of camber or castor.

5.8.5: Front suspension: All suspension bushes must be of standard construction and fitment. No nylon or polybush replacements are permitted. It is not permitted to fit a strut brace top or bottom.

5.8.6: Front suspension: Suspension arms must remain standard in shape, size and position and must be mounted in the standard locations. No modifications or additions are permitted to the suspension pickup points in line with 5.8.4 above.

5.8.7: Front suspension: It is permitted to fit lower springs to the car and these are a spec unit; G-Max – GMX30FO32L which lower the car by 60mm.

5.8.8: Front suspension: The standard bump stop must be fitted, without any additions or interference.

5.8.9: Rear suspension: Only the standard specified suspension units may be used and these must be assembled in accordance with the manufacturer's specification and be mounted in the standard locations to the existing and unmodified mounting points.

5.8.10: Rear suspension: It is not permitted to tamper with the suspension unit or to change the oil within it.

5.8.11: Rear suspension: The original unmodified rear beam must be fitted and mounted in the original and unmodified location.

5.8.12: Rear suspension: No mechanism is permitted to vary the amount of camber or castor.

5.8.13: Rear suspension: It is permitted to fit lower springs to the car and these are a spec unit: G-Max – GMX30FO32L which lower the car by 60mm. Competitors are permitted to cut up to 2 coils off the control spring – but no more than 2 coils – with the control spring as specified in section.

5.8.14: Rear suspension: the standard bump stop must be fitted, without any additions or interference.

## **5.9 TRANSMISSIONS**

5.9.1: The gearbox must be the standard 5 speed unit as fitted to the production 1.25l car with the following ratios:

1<sup>st</sup> 3.58

2<sup>nd</sup> 1.93

3<sup>rd</sup> 1.28

4<sup>th</sup> 0.95

5<sup>th</sup> 0.76

Reverse 3.62

5.9.2: The differential must be standard with a ratio of : 4.06:1 and no form of limited slip differential is permitted.

5.9.3: A standard specification clutch pressure plate, disc and bearing must be fitted with no modifications permitted to friction material or type.

## **5.10 ELECTRICS**

5.10.1: Headlights and brake-lights must remain as standard and be operational.

5.10.2: A rear fog light must be fitted and operational.

5.10.3: It is permitted to replace the standard battery with a competition type and to move the battery inside the vehicle and locate it in the passenger area. Where a battery is located in this area it must be of sealed construction.

5.10.4: the standard alternator must be fitted, connected and providing a charge when the engine is running.

5.10.5: It is not permitted to fit any additional switches in or around the dash panel or to connect into the vehicle wiring loom or any of the engine/exhaust sensors.

## **5.11 BRAKES**

5.11.1: The standard brake pads and shoes can be replaced with identical units which have a competition friction material fitted. However no carbon/ceramic materials or similar are permitted.

5.11.2: It is permitted to replace the standard brake fluid with a higher temperature fluid.

5.11.3: Diagonal front-rear split braking must be retained.

5.11.4: the early cars had a solid front brake disc, while the run-out model had a vented disc. It is permitted to substitute the solid disc on early cars with the later vented disc and calliper. ABS callipers are not permitted.

5.11.5: Only unmodified standard brake callipers as per Fiesta non-ABS are permitted.

5.11.6: Only the unmodified drum brake assembly can be used, although friction materials therein can be changed (See 5.11.1)

5.11.7: Under no circumstances is ABS permitted and if fitted to a vehicle it must be disabled.

5.11.8: It is permitted to replace the standard brake hoses with Aeroquip/braided replacement pipes.

## **5.12 WHEELS/STEERING**

5.12.1: No modifications are permitted to the steering system/mechanism.

5.12.2: The standard 14inch alloy wheels as fitted to the production car must be used.

## **5.13 TYRES**

5.13.1: Toyo Proxes R888 (control tyre).

5.13.2: Competitors are permitted eight tyres per season.

#### **5.14 WEIGHTS**

5.14.1: Minimum car and driver - 940 KG

#### **5.15 FUEL & FUEL DELIVERY**

5.15.1: The car must be run on standard pump fuel. No fuel additives are permitted.

5.15.2: The fuel tank and location must remain as standard.

5.15.3: the fuel supply system (pump & pressure regulator) must remain as standard.

#### **5.16 SILENCING -**

5.16.1: Specification – Sound regulations as per MSA requirements.

#### **5.17 NUMBERS AND CHAMPIONSHIP DECALS**

5.17.1: Numbers: As per MSA Yearbook

### **APPENDIX**

#### **6.00 ORGANISERS**

6.00.1: Race organising clubs and contacts;

500 MRCI office, Kirkistown Race Circuit, Rubane Rd., Cloughy, Kircubbin, Co. Down  
'phone 028427-71325 fax- 028427-71894

Web: [www.kirkistown.com](http://www.kirkistown.com)

e-mail: [info@kirkistown.com](mailto:info@kirkistown.com)

Comp.Sec; Richard Young