

**BLACKCHURCH MOTORS FIESTA ZETEC CHAMPIONSHIP 2015
FINAL (18/02/2015)
TECHNICAL REGULATIONS**

1.0. INTRODUCTION:

The following Technical Regulations are set out in accordance with Motorsport Ireland guidelines 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.

2.0. GENERAL DESCRIPTION:

The Mondello Fiesta Zetec Series 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 (not sport) and parts and components for these Fiesta models are permitted.

2.1. The car must retain the original VIN number in the various locations and the manufacturers VIN plate should also be fitted.

2.2. *With some parts in short supply, it is permitted to update an old model car to face-lift model by replacing wings, bonnet lights grille, bumper and associated mounting components.*

3.0. SAFETY REQUIREMENTS:

All cars must comply with these Technical Regulations, in addition to the safety requirements as listed in Appendix "2" in the current MI Yearbook.

3.1. Full front and rear roll cage must be fitted to the car complying with Appendix "2", section 16 of the current MI yearbook.

3.2. Vehicles must be equipped with an externally operated circuit breaker as per Appendix "2" section 20 of the current yearbook. The circuit breaker must be operable when the driver is normally seated irrespective of whether a safety harness is worn or not.

3.3. It is not permitted to have any ignition components, coils, chokes or black boxes located in the cockpit area of the car.

3.4. The car must be fitted with towing points front and rear. It is only permissible to use a strap to connect to the existing towing eye mounting point on the cars to avoid damage in a contact situation. Where a solid bracket is used, the towing eye must not protrude beyond the bodywork of the vehicle.

3.5 *The use of an FIA approved frontal head restraint (FHR) device (eg HANS Device/collar) fitted in accordance with FIA regulations is compulsory for all junior drivers and recommended for all others. The helmet manufacturer must certify the tether anchorages and their mounting.*

4.0. GENERAL TECHNICAL REQUIREMENTS & EXCEPTIONS:

All cars must comply with the requirements in Appendix "2" of the Current MI yearbook. All vehicles must be of sound construction and mechanical condition and be well maintained.

4.1. The word 'standard' as used within these technical regulations is defined as a description of components where: ***"the specified component is from the manufacturer's parts list for the model/engine shown on the entry form or registration form"***.

4.2. Unless it is specifically stated, it is not permitted to use components from the early model on the late model and vice versa where there is any difference in the specification or fitment of these components.

4.3. No modifications are permitted beyond the repair or adjustment processes specified by the manufacturer. Similarly, Checking/Eligibility will be by measurement and/or comparison to spare parts supplied by the manufacturer's official agent. **See Section 16.**

4.4. CHASSIS: Chassis must be as per manufacturer's dimensions and design and comply as per section 2.0. VIN numbers will be checked to ensure the chassis is that of a standard car.

4.5. The wheelbase for the car is: 2446mm

4.6. The front track for the car is: 1429mm

4.7. The rear track for the car is: 1384mm

5.0. BODYWORK & INTERIOR

5.1. Boot and bonnet catches should be removed and bonnet pins and boot pins/springs added. Side and rear windows should be removed and replaced with 4mm clear polycarbonate to MI regulations.

5.2. Front and rear interior door cards are to be removed along with head-cloth, carpets and rear seats. The driver's door must have an interior fire proof door card fitted in accordance with Appendix "2" of the MI Yearbook.

5.3. A plumbed in fire extinguisher as per MI Regulations should be mounted in the passenger foot-well.

5.4. Airbag to be removed. Steering wheel may be changed.

5.5. The steering lock must be disabled and the roller pin removed from the steering barrel to allow any Ford key operate the ignition. This is to facilitate easy change of ECU's.

5.6. Driver's seat should be correctly located and securely anchored to allow no movement in squab or backrest. As the standard slide seat can move it is not permitted. Front passenger seat to be removed.

5.7. Where a car has a sunroof fitted, it must be removed and sheeted in.

5.8. No modification or additions are permitted to the body shell to limit body roll.

5.9. The Front Anti roll bar must be a standard unit of 15mm diameter, of standard construction and must be mounted in the original location with the standard links. No rear Anti Roll bar is permitted.

5.10. It is not permitted to change the silhouette of the car.

5.11. The front ride height is measured as the distance between the ground and the bottom of the sump and must be 120mm or greater.

5.12. The rear ride height is a minimum of 150mm, measured as the distance between the ground and the point where the rear axle is mounted to the chassis of the car.

5.13. All bodywork is to remain standard and standard bumpers should be fitted to the car with the exception of **2.2.** above. Driver's door bar and bonnet internal cross brace structure must remain in place. No lightening of internal panels is permitted.

5.14. The factory dash is to remain fitted to the car. It is permitted to modify or remove the airbag/dash support bar to facilitate roll cage installation.

5.15. No Data Logging systems which require any wired connection to any part of the car, or any wireless connection to any of the car's systems are permitted. Similarly no additional gauges are permitted.

5.16. 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.

5.17. Wheels must remain inside lines of body and not protrude beyond the arches.

5.18. Headlights must remain complete and working. They should have tape applied in a manner which still allows some visibility of the light when illuminated.

5.19. It is permitted to fit extensions and/or non-slip material on the pedals.

5.20. A standard laminated front windscreen must be fitted.

6.0. ENGINE:

6.1. Ford ZETEC 1.25 unit only with a Bore of 71.8mm and a Stroke of 76.5mm.

6.2. *It is permitted to use an old engine in a facelift model and vice versa, once all the relevant ancillary components specific to the engine unit are also used.*

6.3. 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.

6.4. The engine must run the standard valve adjustment mechanism and the standard valve timing as per manufacturer's specification and which will be checked at events.

6.5. *A maximum Compression Ratio of 11:1 is permitted. It is not permitted to modify the Piston or the Engine Block. It is permitted to CC and face the cylinder head to achieve this.*

6.6. No additional form of oil cooling is allowed.

6.7. No modifications are permitted to the cooling system.

6.8. No modifications are permitted to the induction system. The car must retain the standard paper air filter, housings and trunkings.

6.9. The Standard exhaust manifold and Catalytic Converter casing must be used. It is permitted to remove the interior material from the Catalytic Converter to render it inoperable. All other parts of the exhaust are free, but the noise emissions must comply with the MI 105db rule, measured 0.5 metre from the exhaust outlet at an angle of 45 degrees from the exhaust with the engine revving to 4,500 RPM.

6.10. The standard ECU for the car/engine as per manufacturers VIN number must be used and no modifications are permitted to the ECU.

6.11. The fuel injection system must remain standard and no modifications are permitted. The standard fuel lines must be used and no additives are allowed to the pump fuel as per MI regulations.

6.12. The Throttle Body / Inlet Manifold for the respective models must remain as standard and as per the production *engine*. The components are not interchangeable between *engines* and it is not permitted to fit a throttle body from another Zetec engine.

6.13. The top engine cam cover and Rocker Cover mating plate, along with the R/H upper cam cover retaining bolt should be drilled as per Appendix "2" to allow for sealing of the engine.

6.14. Where air conditioning is fitted it is permitted to render this inoperable.

7.0. SUSPENSIONS

7.1. Front Suspension

7.2. Only the standard specified suspension units with a fixed spring platform may be used, as supplied by Ford and assembled in accordance with manufacturer's specifications. These must be fitted to an unmodified front stub axle assembly.

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

7.4. No mechanism is permitted to vary the amount of camber or castor which must remain standard. The maximum tolerance permitted for camber is: 0 degrees to 1 degree & 40 minutes negative.

7.5. 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.

7.6. Suspension arms must remain standard in shape, size and position and must be mounted in the standard locations. No modification or additions are permitted to the suspension pickup points, in line with 7.4 above.

7.7. The control spring: G-Max – GMX30FO32L must be used and unmodified and remain with 5.5 coils in length.

7.8. The top mounting mechanism must be assembled correctly and in accordance with the manufacturer's specification and the standard bump stop must be fitted without any additions or interference.

7.9. Rear Suspension

7.10. 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.

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

7.12. The original unmodified rear beam must be fitted and mounted in the original and unmodified location.

7.13. The original unmodified Fiesta Zetec 1.25 stub axels must be used and fitted in accordance with manufacturer's specification.

7.14. No mechanism is permitted to vary the amount of camber or tow in. The maximum tolerance for rear camber is: 0 degrees to 1 degree & 15 minutes (Negative). The maximum tolerance for rear Tow In setting is: 0 to 3mm toe in.

7.15. The control spring: G-Max – GMX30FO32L must be used. Depending on model, competitors are permitted to cut up to 2 coils off the control spring to lower the rear ride height in accordance with 5.12. It is not permitted to cut any more than two coils off the spring which must measure at least 9 coils in length.

7.16. The top mounting mechanism must be assembled correctly and in accordance with the manufacturer's specification and the standard bump stop must be fitted. It is permitted to cut 20mm off the bump stop in accordance with G Max instructions. No other additions or interference to the bump stop is permitted.

8.0 TRANSMISSIONS

8.1. The only gearbox permitted is the standard 5 speed unit as fitted to the production 1.25 Zetec car with the following ratios;

1st – 3.58

2nd – 1.93

3rd – 1.28

4th – 0.95

5th – 0.76

Reverse – 3.62

8.2. The Differential must be standard with a ratio of: **4.06 / 1** and no form of Limited Slip Differential is permitted.

8.3. A Standard specification clutch Pressure Plate, Disk and Bearing must be fitted with no modifications to the friction material or type permitted.

9.0. ELECTRICS

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

9.2. A rear fog light must be fitted and operational.

9.3. 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's area. Where a battery is located in this area it must be of sealed construction and placed in a battery box.

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

9.5. 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.

10.0. BRAKES

10.1. 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.

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

10.3. Diagonal front-rear split braking must be retained.

10.4. The early cars had a solid front brake disk while the run out model had a vented disk. It is permitted to substitute the solid disk on early cars for the later vented disk and calliper.

10.5. Only unmodified standard brake callipers are permitted.

10.6. Only the unmodified Drum Brake assembly with the exception of 10.1 above can be used.

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

10.8. It is permitted to replace the standard brake hoses with aero-quip / braided replacement pipes.

11.0. WHEELS/STEERING

11.1. No modifications are permitted to the Steering System/Mechanism.

11.2. As per manufacturers VIN number, cars supplied without power steering should have no power steering fitted and cars supplied with power steering must have it fitted and fully operational.

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

12.0. TYRES

12.1. The Mondello Fiesta Zetec Series will run a specification tyre. The only tyre permitted is: Toyo Proxes 888 size - 185/60/14 as supplied by the official tyre supplier Adair Tyres and all cars are required to run Toyo decals.

12.2. *Competitors are permitted 8 tyres, i.e. two sets of 4 for the full championship.*

12.3. On or before the first *championship* race, Competitors must submit at least 4 tyres to the promoters for marking against their entry.

12.4. Tyre markings will be checked after qualifying and racing and where a car has run a tyre with an incorrect marking, or with no marking, this will constitute a technical infringement.

13.0. WEIGHT

13.1. The minimum weight with car and driver is - 940 KG

14.0. FUEL & FUEL DELIVERY.

14.1. The car must run on the standard pump fuel running through standard fuel filters.

14.2. The fuel tank and location must remain as standard

14.3. The fuel supply system must remain as standard. It is not permitted to modify or interfere with any of the fuel supply or return pipes.

14.4. The fuel pressure must remain standard and must not exceed 2.7 Bar when measured at idle with the vacuum pipe connected. The vacuum pipe must be fitted to the fuel pressure regulator and fully operational at all times.

15. NUMBERS AND CHAMPIONSHIP DECALS

15.1. Numbers and Series Decals must be in accordance with section 2 of the Sporting Regulations and Appendix “6” of *the current* MI yearbook.

15.2. The areas on the car as per the illustration in Appendix “3” are retained by the organisers. Competitors will be supplied with the decals for these areas.

16. ELIGIBILITY

The premise of the Mondello Fiesta Zetec Series is to provide close and competitive racing for competitors and a very affordable cost. In order to ensure this, the promoters will “actively” police eligibility on an on-going basis. This will be done by means of checking and/or replacing components on a number of cars at every event. In order to facilitate this, the promoters will have a stock of standard parts, which they will replace on competitors cars as they deem fit. Where a part is removed from a car and subsequently found not to conform with the regulations, the competitor will be penalised in accordance with section 3.2, 3.3 & 3.4 of the Sporting Regulations. The promoters have purchased a significant amount of equipment to assist with eligibility. This includes Tyre Marking Equipment, Fuel Pressure Measurement Equipment, Steering Geometry and Tracking Equipment and Live Data diagnostic tools.

16.1. The promoters will have a stock of equipment and replacement parts at events for use in eligibility checks on the following components;

Induction System

ECU’s

Fuel Pressure

Valve Timing

Ignition Timing – Live Data

Gearbox

Front Suspension Units

Rear Suspension Units

Roll Bar Diameter

Ride Heights

Vehicle Weight

16.2. The Eligibility Liaison Officer will in consultation with the Eligibility Scrutineer and the promoters, request a competitor to change specific components under supervision on their car prior to qualifying and /or between qualifying and race 1 and/or between race 1 and race 2.

16.3. Where the promoters exchange any parts on a car, the promoter reserves the right to keep the removed part, which may then become the spare unit, or to exchange the parts back as they deem fit. This also applies in the case of an engine/ gearbox change.

APPENDIX “1” Contacts

Promoters – Mondello Park Sports Club, Mondello Park, Donore, Naas, Co. Kildare.

Tel: 045 860200

Email: fiesta@mondellopark.ie

Organisers – MPSC, IMRC, MEC, CKMC, CCC, LMC with contact details as per Appendix “10” of the 2015 MI Yearbook.

Class Coordinator – Jenny Senior: 045 860200

Eligibility Liaison: TBC

MI Scrutineers – MI Panel