

2010 MDA Ford KA

Vehicle Regulations

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The Following M.S.A. Vehicle & Technical Regulations apply:-

Section **J 1.1 – J 5.20.13**

Section **K 1.1.1 – K 1.1.6, K 1.6.6, K 1.8 – K 14**

Section **N 6.1 – N 6.14.3**

**PLEASE READ THESE REGULATIONS THOROUGHLY.
IF IT DOES NOT STATE YOU CAN, YOU CANNOT. IF IN DOUBT ASK.**

General Technical Requirements and Exceptions

Ford KA Junior Minicross is open to any Ford KA 1.3 litre Endura-E engined, power steering model cars complying with current MSA yearbook regulations as specified above.

All references to **the kit** will mean; The Ford KA Rallycross Car Kit as supplied by Chris Birkbeck Rallysport and will be indicated and identified by that organisations specific Part Numbers as shown in the attached appendix 1.0.

All modifications will be supplied by the approved supplier as a kit. With the exception of any modification specifically authorised in these regulations the kit must be used as supplied.

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 specify you can do it, then you cannot.

No approved modification may give rise to an unapproved one.

It is prohibited to remove or add any material not specifically approved by these regulations.

1. Safety Requirements

- 1.1 A full roll cage as supplied by the approved supplier is mandatory Part Number 9097092. Roll cage padding is free. FIA approved padding is recommended. Other requirements as defined in N6.10 – N6.12.6 of the 2010 MSA Yearbook are mandatory.
- 1.2 The specification of the Fire extinguisher as supplied with the kit, Part Number *SP004430*, may be exceeded. The extinguisher fixing bracket must be secured to the vehicle by a minimum of two 6 mm bolts refer to Section K 3.4.1 of the 2010 MSA Yearbook.
- 1.3 Front windscreen to be either laminated glass or 4 mm minimum thickness polycarbonate Part Number *SP00427*. A functioning windscreen wiper and washer system is required. Tinted windscreens must not be used. All cars are to be fitted with 4 mm minimum clear polycarbonate side windows.
- 1.4 A six point FIA homologated harness in accordance with the 2010 MSA Yearbook Section K 2.1. is mandatory. A set of seat belts can be supplied as part of the Kit as an optional extra, Part Number is *SP 00429*.
- 1.5 An FIA approved competition seat with a built-in headrest must be fitted in accordance with Section K 2.2 – KK 2.2.3 of the 2010 MSA Yearbook. The seat mounting frame is supplied as part of the Kit Part Number *SP 00424*. A seat can be supplied as part of the Kit as an optional extra Part Number *MD 0040*.
- 1.6 An ignition cut-off switch having positive on / off positions clearly marked, must be fitted in a position to be operable by the driver when normally seated. It must also isolate the fuel pump. A spark proof master cut-off switch must be fitted externally wither at the rear of the car, or below windscreen and be readily accessible whatever the attitude of the vehicle following an accident. The switch must be clearly marked with a red spark on a white edged blue triangle and On / Off positions clearly marked. Refer to Section K 8.1 – K 8.5 of the 2010 MSA Yearbook. An FIA approved switch can be supplied as part of the Kit as an optional extra Part Number *SP00428*.
- 1.7 Both front and rear bulkheads **MUST** be effectively fire proofed, so as to seal off the drivers compartment from fire within the engine compartment and boot. Refer to Section J 5.2.2. of the 2010 MSA Yearbook.

- 1.8 Vehicles must be equipped with a positive method of throttle closing in the event of a linkage failure, by means of an external spring to the throttle spindle. A secondary throttle return spring is strongly recommended.
- 1.9 A crash helmet to MSA Requirements with appropriate approval stickers attached should be worn at all times during training, practice and racing. Refer to K 10.3.1 of the 2010 MSA Yearbook. All drivers must wear an approved visor or goggles unless the car is fitted with a complete polycarbonate windscreen. We strongly recommend that the drivers wear a neck brace.
- 1.10 Clothing whilst driving must cover the arms and be fastened at the neck. Clean fire resistant overalls in accordance with Section K 9.1 – K 9.3 of the 2010 MSA Yearbook are required. Competitors are strongly advised to wear flame resistant gloves, balaclavas and underwear. Plastic shoes (such as trainers) should be avoided.

2. Chassis and Bodywork

- 2.1 The body shell must remain as produced by the manufacturer.
- 2.2 All parts supplied in the kit must be used. Part Numbers *SP00426*, *SP00423* and *9097138*. See attached appendix 1.0.
- 2.3 All interior trim with the exception of the dashboard and its mountings must be removed.
- 2.4 The driver's side door anti intrusion bar must be retained.
- 2.5 Windscreen washers are free but must be in working order.
- 2.6 Throttle, Brake and Clutch pedal pads are free.
- 2.7 Competition numbers will be black, minimum height of 230 mm with a width of 38 mm placed on the sponsors' background supplied by the MDA. It is also necessary for the competition number to be repeated on the nearside front of the roof.
- 2.8 The drivers name is to appear using 75 mm high white self adhesive letters in both rear side windows.
- 2.9 Provision should be made for fitting of sponsors decals as defined in Championship Regulations. Decals will be supplied by the MDA. Cars not complying to this regulation will not be awarded Championship Points.
- 2.10 Mud flaps are to fitted behind all four wheels, extending to a minimum of 38 mm either side of the tyre tread and to a maximum of 76 mm above the ground. Part number *9097027* is supplied as part of the kit.

3. Engine and Transmission

- 3.1 The engine is the sealed unit as supplied by the approved supplier. The seals must remain intact at all times. It is the entrants' responsibility to ensure that the undamaged seals are in place at all times. Any internal work on the sealed unit must be carried out by the approved supplier. Competitors may change engine oil and filter. Competitors may remove the rocker cover to adjust the tappets only. The MDA will supply a numbered restrictor plate which must be fitted in the inlet manifold. Any modification to the restrictor plate is illegal.
- 3.2 The only exhaust manifold system allowed is the one supplied with the kit. Part Numbers *9097454* and *9090030*
- 3.3 The only air filter allowed is the one supplied with the kit Part number *SP00425*.
- 3.4 A lightweight flywheel as supplied in the kit is allowed.
- 3.5 Engine mountings may be uprated but only by the approved kit.
- 3.6 Transmission: the only modifications are as supplied in the kit. Additionally up-rated drive shafts from the approved supplier may be used.

4. Suspension and Steering

- 4.1 The only modifications allowed are as supplied in the kit Part number 9096899 and Part Number 9096990
- 4.2 The Steering Wheel and it's source is free.
- 4.3 The optional rear wide track spacers from the approved supplier may be used. Part Number 9090056

5. Electrical Equipment

- 5.1 The only modifications allowed are supplied in the kit
- 5.2 A 'poor visibility' light should be fitted according to Section K 5.1 – K 5.2 of the 2010 MSA Yearbook. The light should be switchable from the driver's seated position.
- 5.3 The original lighting wiring loom must be retained. It may be removed from it's original location providing it is neatly and securely attached to the bodyshell. An auxiliary loom can be supplied as part of the kit as an optional extra Part Number SPXOO01.

6. Brakes

- 6.1 Front brake pads must be supplied by the approved supplier and marked. Part Number 9096896. Alternatively up-rated vented discs can be supplied as part of the Kit as an optional extra Part Number CB 502828.
- 6.2 Rear brake shoes / linings must be readily identifiable as standard Ford parts.

7. Wheels

- 7.1 Only championship specification wheels may be used.

8. Tyres

- 8.1 TBA to be determined by championship regulations. Car is currently set up on Yokohama A048 R

9. Weights

- 9.1 At any time during the event the minimum weight of the car must be 800kgs including the driver. Any ballast required to achieve the minimum weight must be fitted in accordance with Section J 5.15.1, 5.15.2 and J 5.15.4 of the 2010 MSA Yearbook.

10. Fuel Tank / Fuel Petrol as defined within the terminology of the 2010 MSA Yearbook is mandatory.

- 10.1 **Fuel Tank** No modifications other than as supplied in the kit are allowed. Part Number 9097011

11. Silencing

- 11.1 The exhaust system as supplied in the kit must be used in its entirety. At all times the exhaust system must comply with Sections J appendix 1 – chart 5.8 – Section F of the 2010 MSA Yearbook.

12. Eligibility Checks.

- 12.1 Random eligibility checks may be made at any meeting and engine / gearbox assemblies checked or sealed for subsequent checking. The Minicross Drivers Association will reimburse Scrutineers travelling expenses when a sealed engine / gearbox assembly is subsequently checked and found legal. All other expenses to be borne by the Entrant / Competitor. Refer to 2010 MSA Yearbook for guidance. Random fuel checks will be made.
- 12.2 Sealing of engine / gearbox assemblies shall be by means of MSA official tamperproof paint.

- 12.3** Drivers may, if they wish, elect at their own expense to have the above items sealed by and Eligibility Scrutineer during assembly. A sealing certificate would then be issued for the vehicle. Providing the original seals are in place, and the original certificate is produced at any subsequent eligibility inspection, the need for further stripping will be removed.
- 12.4** MSA vehicle log books are required in accordance with Section J 2.1 – J 2.1.5 of the 2010 MSA Yearbook. Non production of the Vehicle Log Book will be deemed a breach of vehicle eligibility.
- 12.5** The panel adjacent to the left hand front subframe top mounting **MUST** be drilled on the angled flange with a 2mm diameter hole. An MSA numbered seal will be fitted, and the number recorded in the vehicle log book.

IMPORTANT SAFETY CHANGES

Please pay particular attention to the sections on Fire Extinguishers, Seats and their Fixings, Harnesses and Helmets. The regulations covering these may have changed from last year in the MSA Competitors Yearbook.