

## Manual Amendment

*These amendments have been authorised to the text of MotorSport Manual Edition 35. It is recommended that in addition to retaining a copy of this amendment that all parties modify the actual text in their Manual according to the following:*

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### Appendix Two, Schedule A – Driver and Vehicle Safety

#### Amendments to Schedule A in Manual 35:

1. Amend Part One Article 4.4 as stated in the schedule below.
2. Amend Part One Article 4.6 as stated in the schedule below.
3. Amend Part One Article 4.12 as stated in the schedule below.
4. Amend Part One Article 5.5 as stated in the schedule below.
5. Amend Part One Article 5.6 as stated in the schedule below.
6. Amend Part Two Article 3 as stated in the schedule below.

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1. Item One:

4.4 Safety Harnesses:

(...)

- (5) **Anchorage:** The series production (existing) anchorage points may be used or new anchorage points created as follows. Straps shall not anchor directly to the seat, its frame / runners, or share fasteners with any other components:

(...)

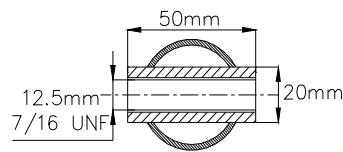
- (d) For each new anchorage point created on the Safety Cage, the following methods of attachment are permitted:

- (i) By looping the straps around a transverse (Safety Harness) bar homologated with the Safety Cage. It is advised to use a guide to prevent sideways movement. Additionally the straps may lean on an appropriately positioned transverse bar to enable the installation angles to be achieved, or
- (ii) By eyebolts (7/16"-20 UNF) in combination with inserts welded in a transverse (Safety Harness) bar homologated with the Safety Cage (*refer diagram 4.4(5) below*), or
- (iii) By eyebolts (7/16"-20 UNF) affixed to a flange consisting of a minimum 4mm thick steel plate, wrapped a minimum of 30% around the bar it is attached to, **and**

- (e) A 'stand alone' harness bar (for vehicles not fitted with a safety rollbar or safety cage) for the attachment of safety harness shoulder straps, is authorised under the following conditions:

- (i) The bar shall be transversely mounted between the rear wheel arches on a horizontal plane and in a position that provides adequate strength and ensures the (strap) angles comply with diagram 4.4(4).

- (ii) The material specification of the bar shall comply with Schedule A, Part Two Article 5.2.
- (iii) The bar may be directly welded to reinforcement plates or bolted to reinforcement plates in combination with footing plates.
- (iv) Reinforcement plates of minimum three(3)mm thick steel plates and 120cm<sup>2</sup> (per plate) shall be fully welded in full contact with the surface of the bodyshell.
- (v) If the bar is to be dismantable, footing plates shall be welded to the ends of the bar which in turn shall be bolted to the reinforcement plates welded to the bodyshell using at least four(4) M8 x ISO 8.8 lock nuts and bolts at each end (refer Schedule A Part Two Diagram 5.5(c).
- (vi) The harness straps may be looped around the bar or inserts fitted as per diagram 4.5(5).
- (vii) The bar shall have an inspection hole of three(3)mm accessible to verify the tube thickness and the bar shall be validated by a licenced Scrutineer in the vehicles' logbook.
- (viii) For use on public roads, the bar must be detailed on a LVV / MotorSport Authority Card (refer Appendix Two, Schedule A Part One Article 8.3)



**Diagram 4.4(5) - Eyebolt Insert**

**Reason:**

*To introduce a harness attachment bar independent to a rollbar or safety cage.*

**2. Item Two:**

**4.6 Safety Structures (Roll Protection):**

(...)

- (2) **Requirements:** A Safety Rollbar or a Safety Cage shall be fitted as per the following chart:

Safety Structure Requirements Chart			
EVENT TYPE	VEHICLE TYPE	SAFETY CAGE	SAFETY ROLLBAR
(...)			
<b>CLUBSPORT BASIC</b> (refer Note 5)	All closed Vehicles	Optional	Optional
	Open Vehicles (non road registered)	Optional	Mandatory
	Open Vehicles (road registered with current WOF and Licence)	Optional	A minimum of a non-homologated safety rollbar or a securely fitted hardtop are authorised

**Notes:**

1. Road registered vehicles fitted with a Safety Cage shall require a MotorSport/LVV Authority Card to obtain a WOF. (Refer Part One Article 8 of this Schedule).
2. Unless specified otherwise within Appendix Five Schedule C, ClubSport Advanced Status Events.
3. A homologated Safety Cage is mandatory when carrying a passenger.
4. Event Supplementary Regulations may impose higher requirements than the minimum detailed above.
5. For competition under Appendix Five, Schedule C Part Two Article 4.1 – Motorkhanas, a safety structure is not mandatory.

(...)

**Reason:**

To correct error

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**3. Item Three:****4.12 Fuel Tanks, Fillers, Lines and Pumps:**

(...)

- (3) **Fuel Tank Types:** The following types of fuel tank are authorised:

(...)

- (c) Fabricated fuel tanks provided the following requirements are met:

- (i) The tank is professionally constructed, and
- (ii) The tank is internally baffled and/or contains foam (ideally to MIL-B-83054B specification), and
- (iii) As from 1 January 2016 all fabricated tanks shall have a certificate of compliance and identification sticker attached to the tank, issued by the manufacturer or a testing authority detailing; the tank series/individual serial number, the material specification (minimum 1.6mm for aluminium or 1.0mm for stainless steel), the welding process and evidence that the tank has been subjected to a hydrostatic leak test at 50kPa gauge. Further information may be found on the MotorSport NZ website.
- (iv) For existing tanks fabricated prior to 1 January 2016, that are in compliance with (i) and (ii) above, identification, inspection and a logbook notation shall be required by a licenced Scrutineer / Technical Officer, or the requirements of (iii) above shall apply.

**Reason:**

To implement the new standard for fuel tanks.

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**4. Item Four:****5.5 Batteries:** Are defined as follows:

- (a) **'Sealed Battery'** means a type that can be mounted and operate in any orientation without leakage, spillage or detriment to the battery, or
- (b) **'Non-Sealed Battery'** means a type designed to be mounted and operate in one orientation only, where if it was mounted in any other orientation leakage, spillage or detriment to the battery could result.

- (1) For all batteries the live terminal shall be completely insulated, and

- (2) For Series Production vehicles the following applies:

- (a) Where the original position and battery size/type is retained the original attachment method remains acceptable under this Schedule, or

- (b) Where the original mounting position and/or battery size/type is changed the requirements of Article 5.5(3) apply, or
  - (c) Where the original battery is located within the cockpit area and the interior is modified such that the battery is exposed Article 5.5(3) shall apply.
- (3) For vehicles other than Series Production vehicles and for those detailed in Article 5.5(2)(c) above, the battery shall:
- (a) Be mounted on a flat base, and
  - (b) Be securely retained by metal bracket / straps (insulated from the live terminal) that provide a positive location in all planes, attached with a minimum of four(4) M6 ISO 8.8 standard fixations or equivalent in combination with counter plates, or
  - (c) Alternatively, may be securely retained using a retention method that can be proven to withstand a force up to 25G.
- (4) Specifically, where a 'non-sealed' battery is installed in the cockpit:
- (a) It shall be secured as per Part One Article 5.5(3) above, and
  - (b) It shall be contained in a leak/fume proof container, independently attached and vented to the exterior of the cockpit.
- (5) **Recommendation:** Where the battery is installed in the cockpit, the use of a 'sealed' [type] battery is highly recommended.

**Reason:**

*Revision of battery regulations.*

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**5. Item Five:**

**5.6 Lighting Systems:**

(...)

**(2) Rear Lights / Rain Lights:** shall be fitted as follows:

- (a) For all circuit events all vehicles shall be fitted with either their fully operational Series Production rear lights in good working order, or red rear light/s that are;
  - (i) At least 15watts (each lamp), or equivalent LED, that maintain constant illumination (unless detailed otherwise in a current Sanctioned Series Technical Schedule), and
  - (ii) Clearly visible from the rear, and
  - (iii) Robust enough to operate throughout any event entered, and
  - (iv) Mounted within 100mm of the vehicles centre-line (except where more than one(1) lamp is fitted), and
  - (v) Able to be switched on by the Driver in their seated position.

**Reason:**

*To correct an anomaly*

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6. Item Six:

3. Fuel Specification Chart:

<b>Engine Fuel Specification Chart</b>				
Reference Appendix Two Schedule A, Part One Article 3.9(2)(a)				
Property	Test Method	Unleaded Petrol	Leaded Petrol	Diesel
(...)				
Phosphorus (mg/L)		1 mg/L Maximum		
<b>Engine Fuel Specification Chart</b>				
Reference Appendix Two Schedule A, Part One Article 3.9(2)(b)				
Property	Test Method	Ethanolic Blends		
Base Gasoline		Minimum 15%V Maximum 90%V		
Ethanol Content	ASTM D5501	Maximum 85%		
Methanol Content	ASTM D5501	0.5%V Maximum		
Water Content	ASTM E203	1.0%V Max.		

**Reason:**

To add new specification for Ethanolic blend fuels.

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This amendment is issued for MotorSport New Zealand Inc by the Administration.



B. Budd  
General Manager

