MOTORSPORT AUSTRALIA MANUAL

ELECTRIC VEHICLE APPENDIX EV TECHNICAL REGULATIONS SERIES PRODUCTION EV



General Information

This document is the technical regulations for a *Series Production EV* participating in a *Competition* and is to be read in conjunction with the FIA requirements for an Electrically Powered Vehicle in Appendix J, Articles 251 and 253 to the *Code* at www.fia.com.

1. SERIES PRODUCTION EV - GENERAL REQUIREMENTS

1.1 Standard EV configuration

A Series Production EV is permitted to compete in a Competition as detailed in the Electric Vehicle Appendix – Standing Regulations subject to:

- (a) the EV system/s being unmodified from that as produced by the original manufacturer for that Automobile: and
- (b) compliance with each regulation for the classification/category under which it is entered, except that:
 - (i) where such regulation refers to an internal combustion engine (*ICE*), certain items (e.g. exhaust system, fuel system) are not applicable to an *EV*. However, it is noted that alternative *EV* requirements may be added.
 - (ii) where such regulation permits a modification or a change to a component that if undertaken to a *Series Production EV* would require an *EV* system to be modified (e.g. a brake system for an *EV* with regenerative braking incorporated to its *EV* system) then that modification or change to a component is prohibited.

1.2 Modified EV configuration

A Series Production EV which has a modification to any EV system/s (e.g. a battery cell, a battery management system, a power unit, an inverter/converter, regenerative brake etc.) of the original manufacturer vehicle will be classified as a Competition EV.

2. SERIES PRODUCTION EV – SPECIFIC REQUIREMENTS

2.1 Technical Appendix Exemptions

Except for a Hybrid EV, the following Manual; Technical Appendix regulations are not applicable to an EV:

- (a) Schedule A: Article (f), (i);
- (b) Schedule B: Article (g), (j), (n);
- (c) Schedule C: Article (e), (i), (j) with specific respect to "and stops the engine";
- (d) Schedule G: in its entirety; and
- (e) Schedule N: in its entirety.

2.2 Log Book

- (a) Each EV must be issued with a Motorsport Australia Log Book prior to participating in a Competition.
- (b) Any Series Production EV log book application must include a Statement of Vehicle Compliance Electric Vehicle (EV) to confirm that the original manufacturer EV systems are unmodified.
- (c) Any other log book application requirement must be met.

Explanatory Note: The purpose of a log book is to provide an *Organiser* a record of the ownership and *Competition* history of that *Automobile* and is necessary to ensure that any compliance matters can be recorded.

2.3 EV Emergency Response Guide (ERG)

Each *Competitor* entering an *EV* must provide the *Organiser* with the current original manufacturer's Emergency Response Guide (ERG), and any other emergency response information, relevant to the *Automobile*. This may be in an electronic format.

2.4 Status Indicator/s

Each EV must be fitted with the following Status Indicators:

Safety Indicator: The high voltage (HV) electrical circuit is isolated or live; and

Ready to Move Indicator: The EV will move when the accelerator pedal is depressed.

(a) Safety Indicator

Each Series Production EV will have a Safety Indicator, unique to its make/model. This will usually be displayed on the dashboard which will also indicate that the EV will move when the accelerator pedal is depressed.

The Safety Indicator must not be modified.

(b) Ready to Move Indicator

The Ready to Move Indicator is a visual identifier that the *Automobile* will move when the accelerator is depressed.

A Series Production EV may be fitted with Daytime Running Lights (DRL) or similar as a Ready to Move Indicator. When the DRL are illuminated the EV is in a Ready to Move state.

Any DRL must not be modified.

A Series Production EV that is not fitted with DRL or other clear system to externally identify a Ready to Move Indicator must be fitted with forward facing lamps that produce a white light consistent with that as required by a conventional headlight or DRL.

2.5 EV Markings on Automobiles

Each Series Production EV must display the following markings, in addition to any other compulsory signage requirements:

Sign / Component ID	For	Location
4	High Voltage (HV) Identifies the HV components.	Must be on each of the HV components fitted, in a size that is easily distinguishable to the surrounding.
EV	Electric Vehicle (EV) Provides an external identification that the vehicle is an EV.	Must be fitted in the vicinity of the vehicle competition number. Each side of the triangle must be 150mm. For Rally/Road additional triangles of 80mm sides at the front and rear in the vicinity of the registration number plate.
	HV Cables Clear identification of each HV cable	Each HV cable is to be clearly coloured Orange.