Safety Instructions for Electrical Vehicles

Attention Mortal Danger:

Poor electrical contacts (e.g. caused by corrosion, vibration or mechanical damage) can lead to signal levels in the regular range of the throttle.

This may lead to unwanted acceleration of the vehicle and eventually to an accident.

Therefore we highly recommend

- Before riding, check all connections of throttle and controller on good electrical contact and tight fit.
- Damaged, loose or corrosive contacts as well as damaged cables must be exchanged immediately.
- Take care of good electrical contacts of screwed connections. Clean and polish all intermediate connection surfaces and tighten loose screwing connections by the use of the correct torque.
- Fix the vehicle on a stand with lifted wheels and check the complete system for proper functionality.

- Install an wrist coupled emergency plug in series to the ignition key
- Install an emergency switch in series to the ignition key

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Safety Instructions for Potentiometer Throttle

The Potentiometer throttle should not be used without the following additional safety measures:

- Install an wrist coupled emergency plug or switch in series to the ignition key

Defects in electronic devices cannot be completely avoided. Under certain conditions such a defect may cause an output signal of potentiometer which is equivalent to “throttle active” signals.
This may lead to unwanted acceleration of the vehicle and eventually to accidents.

Therefore we recommend

- Before riding, check all connections of throttle and controller for good electrical contact and tight fit.
- Damaged, loose or corrosive contacts as well as damaged cables must be exchanged immediately.
- Fix the vehicle on a stand with lifted wheels and check the complete system for proper functionality.

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Safety Instructions for Hall Sensor Throttle

The Hall sensor throttle should not be used without the following additional safety measures:

- Install an wrist coupled emergency plug or switch in series to the ignition key

Defects in electronic devices cannot be completely avoided. Under certain conditions such a defect may cause an output signal of Hall sensor which is equivalent to “throttle active” signals.
This may lead to unwanted acceleration of the vehicle and eventually to accidents.

Such a failure is highly probable for Hall sensor throttles with damaged or broken housing

Therefore we recommend

- Before riding, check **Hall sensor housing** and replace immediately if damaged or broken.
- Before riding, check all connections of throttle and controller for good electrical contact and tight fit.
- Damaged, loose or corrosive contacts as well as damaged cables must be exchanged immediately.
- Fix the vehicle on a stand with lifted wheels and check the complete system for proper functionality.

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Safety Instructions for Mapping Switch

Attention Mortal Danger:

When using a potentiometer throttle in combination with a mapping switch with resistor values below 10 kOhms **permanent full throttle signal** will occur in the case of interrupted cables to the throttle, e.g. by accident.

Safety Instructions:

Without a DMMA-module the resistor value of a mapping switch **must be at least 10 kOhms.**

A mapping switch with a resistor value **between 6.8 kOhms and 10 kOhms** requires a **DMMA-module of the type DMMAP**.

The ALLTRAX controllers sense a missing throttle if the resistance value is 10 kOhms or higher. Therefore a mapping resistor of 6,8 kOhms only will cause a regular full throttle signal.

DMMA-modules of the type DMMAP sense a missing throttle at 6.8 kOhms and higher.

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