

CEMA Position Paper

Application of Delegated Regulation 2015/208, annex XXIV "Functional Safety – Requirements on the safety of electrical systems": installation of fuses does apply neither to trailers (vehicle category R) nor to interchangeable towed equipment (vehicle category S)

20 February 2020

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Regulation 167/2013 covers agricultural vehicles which are defined as follows:

- Category T: wheeled tractors
- Category C: track-laying tractors
- Category R: trailers
- Category S: interchangeable towed equipment

In its Annex I, Regulation 167/2013 defines for each category which topics need to be addressed and in which delegated Regulation the technical requirements will be provided.

Safety of electrical systems is covered in Annex XXIV of Regulation on vehicle functional safety requirements (RVFSR) on the following topics:

- Static electricity
- Protection and location of electrical cables
- Need to provide fuses or overload protection device except for high amperage circuits

These last requirements are mentioned for all categories of agricultural vehicles. **However, CEMA considers that fitting fuses to R and S vehicles is not required.**

Indeed, the electrical circuit consists of:

- at least one electrical source (on the tractor)
- one electrical device or component (load on R/S vehicle)
- electrical wires connecting the source to the load.

The categories R and S vehicles do not have any electrical source when they are not (electrically) connected to a towing vehicle. In that case, there is no electrical circuit, which means that nothing has to be secured against overload by fuses or similar devices. The electrical energy from the electrical source of the tractor is transmitted to the trailer via the socket of the tractor and the plug of the trailer. Only when this connection is established an electrical circuit can be created.

In this case, the fuses are to be found on the tractor. Requiring fuse on R/S vehicle would result in a double fuse protection (Tractor and R/S vehicle), which could also create confusion for the vehicle user in case of a supply interruption: he could misunderstand the failure source.

About CEMA

CEMA aisbl (www.cema-agri.org) is the association representing the European agricultural machinery industry. With 11 national member associations, the CEMA network represents both large multinational companies and numerous European SMEs active in this sector. The industry comprises about 7,000 manufacturers, producing more than 450 different types of machines with an annual turnover of about EUR 40 billion (EU28 - 2016) and 150,000 direct employees. CEMA companies produce a large range of machines that cover

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any activity in the field from seeding to harvesting as well as equipment for livestock management.

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