GRE-AFS Working Paper No. 4-15

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UK proposal for amendments to R48 concerning AFS July 2003

A. Failure tell-tale.

Currently there is an optional tell-tale for dipped beam. There is a flashing telltale for bend lighting failure. It is unclear whether these can be combined in one tell tale which turns on when the dipped beam is switched on and flashes when the bend lighting has failed.

However the new situation for AFS is complicated. Several possible warning lights can be envisaged:

1) dipped beam, neutral state turned on.

2) dipped beam turned on with full AFS functionality.

3) failure in the AFS system

4) traffic change mode activated

It must be clear to the driver (and the PTI inspector) when the AFS system has failed, so he knows to go to the workshop and make repairs.

Should the driver be informed whether the AFS is in neutral state or "normal" state?

Proposal

6.20.8 Tell-tale

6.20.8.1 The provisions of 6.1.8 apply to an AFS which provides a main beam headlamp.

6.20.8.2 A circuit closed tell-tale for the dipped beam is optional. This shall only operate when the neutral state is activated by the driver. [This will be the standard symbol in ISO 2575 for dipped beam]

6.20.8.3 An operating tell-tale shall be provided for the AFS dipped beam. [This shall comprise the symbol "AFS" inside the ISO 2575 symbol for dipped beam].

6.20.8.4. A red non-flashing failure tell tale for AFS shall be provided. It shall illuminate when a failure is detected in the sensors on the vehicle or when a failure signal is received in accordance with 5.9.1 of Regulation XXX. The tell-tale shall remain displayed as long as the failure persists and the ignition switch is in the "on" position.

6.20.8.4.1 The AFS tell-tale shall light up when the electrical system of the vehicle is energised. The AFS system shall verify that none of the specified failures are present before extinguishing the signal.

6.20.8.5 A tell-tale shall be provided to indicate that the driver has set the system into a state according to paragraph 5.10 of RXXX. This is not required if the traffic change mode is obtained purely by an occultation of the lens.

B. Light source modules and LEDs

The UK is reluctant to sanction the use of unapproved light sources including LED and light source modules in AFS but can accept the position of CLEPA, to write the AFS regulation including unapproved light sources "in principle" and then use Reg 48 to prohibit the use of LED and light source modules etc. until the regulations have been reviewed. This review could involve ideas such as limiting non-replaceable light sources to parts of the beam not involved in the Class C neutral state.

Therefore the following text is proposed:

Proposal to Regulation 48

6.20 At the end of the text add "Footnote 1/* applies to AFS systems"

Footnote: "1/ Until uniform technical provisions have been agreed, AFS systems containing light sources other than: 1) filament lamps approved to R37 or 2) gas discharge light sources approved to R99, are not permitted to be fitted to vehicles. "

*Or appropriate number.