

Proposal for draft amendments to Regulation No. 116
(Protection of motor vehicles against unauthorized use)

Note: The text reproduced below was prepared by the experts from the International Organisation of Motor Vehicle Manufacturers (OICA) in order to amend Regulation No. 116 to permit the use of electric parking brakes as anti-theft systems.

A. PROPOSAL

Paragraph 3.1., amend to read:

"3.1. The application for approval of a vehicle or component type with regard to this Regulation shall be submitted by the manufacturer. **However in the case of an immobilizer acting on the vehicles braking system (PART IV of this Regulation), application for approval shall only be submitted by the vehicle manufacturer.**"

Paragraph 5.1.2., amend to read:

"5.1.2 "Device to prevent unauthorized use" means a system designed to prevent unauthorized normal activation of the engine or other source of main engine power of the vehicle in combination with at least one system which:

- (a) locks the steering, or
- (b) locks the transmission **or the wheels**, or
- (c) locks the gearshift control, or
- (d) **blocks the wheels.**"

Paragraph 5.2.14., amend to read:

"5.2.14. Devices to prevent unauthorized use preventing release of the brakes of the vehicle shall **only** be permitted **when the brakes are held in a locked position by a purely mechanical device.**"

Paragraph 5.3.2., amend to read:

"5.3.2. Devices to prevent unauthorized use acting on the transmission **or the wheels**"

Paragraph 5.3.2.1., amend to read:

"5.3.2.1. A device to prevent unauthorized use acting on the transmission **or the wheels** shall prevent the ~~rotation of the vehicle's driving wheels~~ **vehicle from being driven away under its own power.**"

Paragraph 5.3.2.3., amend to read:

"5.3.2.3. It shall not be possible for the transmission **or the wheels** to be blocked inadvertently when the key is in the lock of the device to prevent unauthorized use, even if the device preventing starting of the engine has come into action or been set to act. **This does not apply wherever the requirements of paragraph 5.3.2. of**

this Regulation are met by devices used for another purpose in addition and lock under the conditions above is necessary for this additional function (e.g. electrical parking brake)."

Paragraph 5.3.2.5., amend to read:

"5.3.2.5. If the device ... in which the transmission is **or the wheels are** locked...."

Paragraph 8.2.10., amend to read:

"8.2.10. It shall not be possible for an immobilizer to prevent the release of the **service** brakes of the vehicle, **except in the case of an immobilizer which prevents the release of pneumatically released spring brakes 9/ and functions in such a way that in normal operation, or in failure conditions, the technical requirements of Regulation No. 13 in force at the time of application for type approval under this Regulation are satisfied.**

Compliance with this paragraph does not exempt an immobilizer which prevents the release of pneumatically released spring brakes from the technical requirements set out in this Regulation."

Paragraph 8.2.11., amend to read:

"8.2.11 It shall not be possible for an immobilizer to operate in such a manner as to apply the **service** brakes of the vehicle."

B. JUSTIFICATION

Electrical Systems show increased rates in the construction of a vehicle. Former purely mechanical systems will be assembled or replaced by electrical systems, e.g. the electrical steering systems which will be type approvable. The electrical parking brake becomes common more and more for new vehicles. This system is safe and reliable. The use of vehicle brakes is prohibited till now by paragraph 5.2.14. of ECE Regulation No. 116. Prohibition was justified as vehicle brakes are normally actuated via compressible fluids and a brake once actuated could after some time be released due to leakage. With the introduction of electromechanical brakes and electric parking brakes objections against usage of vehicle brakes as means to prevent unauthorized use of vehicles are no longer justified. Therefore the paragraphs prohibiting that should be amended. The aim of the proposal is to establish alternative systems regarding protection against unauthorized use.

For an immobilizer paragraphs 8.2.10. and 8.2.11. forbid to make use of the vehicles brakes. The amendment limits the prohibition of brakes to only "service brakes". The exemption for spring brakes therefore is no longer needed and can be deleted since spring brakes are only used as parking brakes and in some cases for secondary braking. The aim of the proposal is to establish alternative systems regarding vehicle immobilizers.

Application for approval for an immobilizer acting on the parking brake shall be limited to the vehicle manufacturer only to assure safe interaction of immobilizer and braking system. Paragraph 3.1. therefore has to be amended accordingly.
