

Proposal for amendments to Regulation No. 55 (Mechanical couplings)

The text reproduced below was prepared by the expert from Germany to clarify the present text of Regulation No. 55. It is a revision of document ECE/TRANS/WP.29/GRRF/2011/7. The modifications to the existing text of the Regulation are marked in bold for new and strikethrough for deleted characters.

I. Proposal

Paragraph 2.6.13., amend to read:

"**2.6.13.** Class T Non-standard, non-automatic dedicated drawbar type couplings —**with or without jaw, with or without coupling pin**— which are able to be separated only by the use of tools and are typically used for trailers of car transporters. They shall be approved as a matched pair."

Paragraph 2.9., amend to read:

"2.9. Remote indicators are devices and components which give an indication ~~in the vehicle cab~~ that coupling has been effected and that the locking devices have engaged."

Annex 4, after table 1, insert the following note, to read:

"**Note: In case of drawbars for full trailers with free movement in the vertical plane the maximum permissible axle mass of the steered axle A_v and the number of axles within the front axle group shall be indicated.**"

Annex 5, paragraphs 11. and 11.1., amend to read:

"11. Dedicated drawbar type couplings —**with or without jaw, with or without coupling pin** — Class T

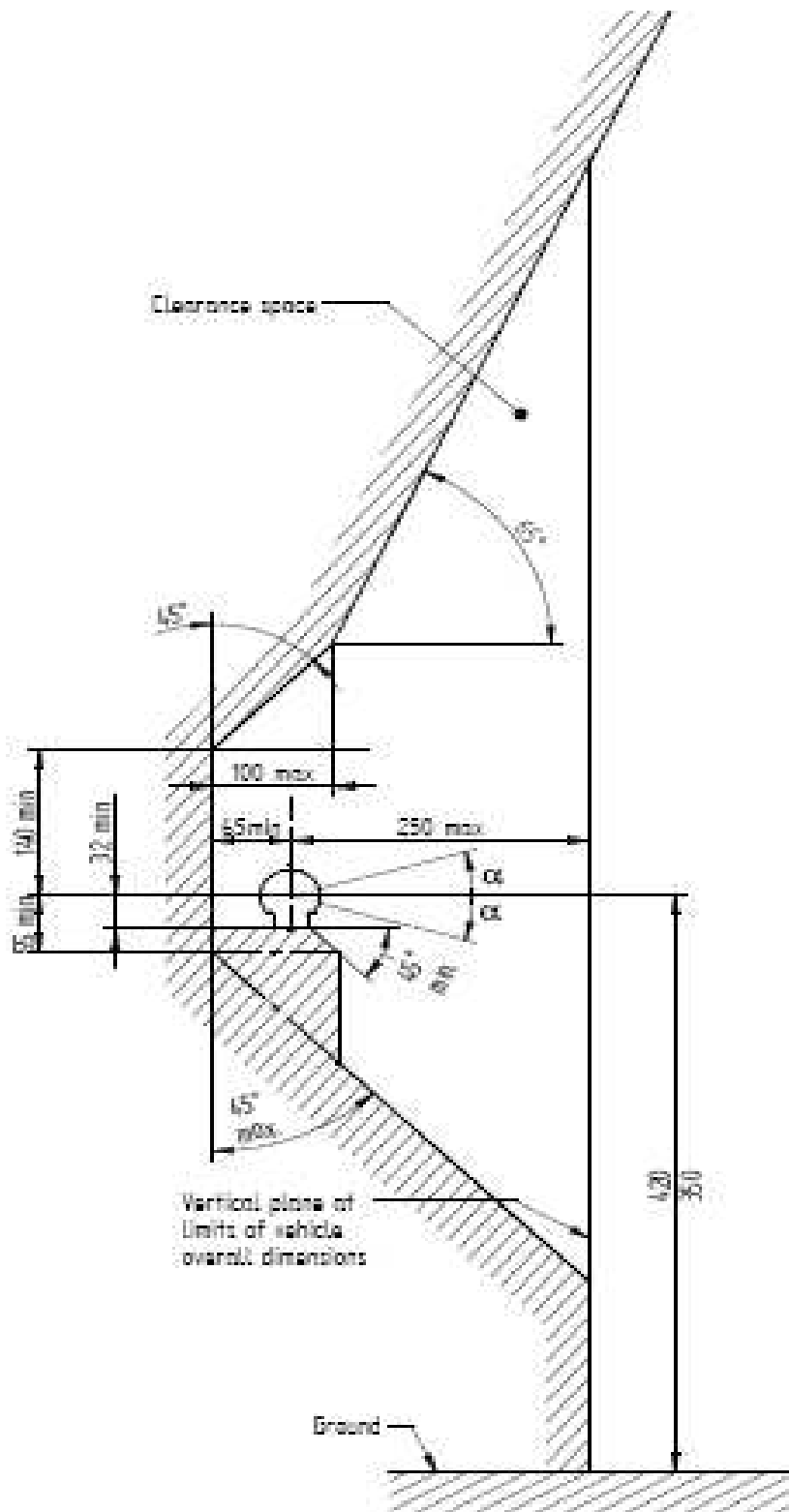
11.1. Class T dedicated drawbar type couplings —**with or without jaw, with or without coupling pin**— are intended for use on specific vehicle combinations, for example, car transporters. These vehicles have special structures and may need particular and unusual location of the coupling."

Annex 6, paragraph 3.3.3.2., the note to table 14, amend to read:

"**Note:** In the case of Class T dedicated drawbar couplings —**with or without jaw, with or without coupling pin**— these values shall be reduced to $\pm 0.5D_c$ and $\pm 0.5V$."

Annex 7, figure 25(a), amend to read:

"

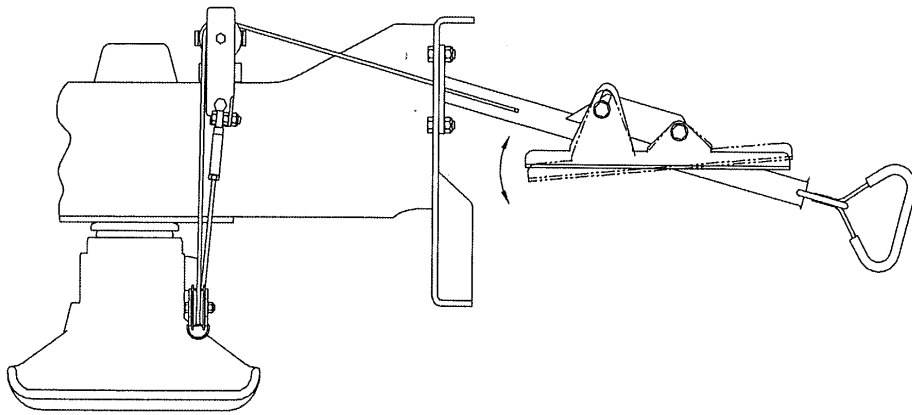


"

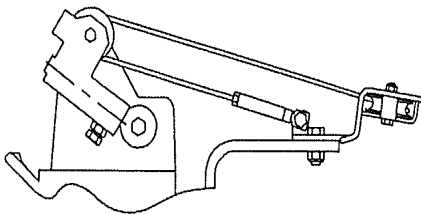
II. Justification

1. The international interpretation of the expression “drawbar type coupling” is a coupling similar to class C50 couplings with a jaw and a coupling bolt. In fact, most of approved class T couplings have neither a coupling jaw nor a coupling bolt. This needs to be clarified.

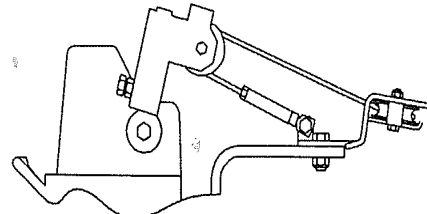
2. A remote indication is used in any case when the closed and safe coupling cannot be controlled directly in a visual way. Actually the regulation requires in point 2.9, that a remote indication must be in the cabin, meanwhile in annex 6, item 12, this restriction is not given. In case of OE manufacturing this remote control can be included within further control instruments. In case of after- market devices this solution is difficult. A remote indication is often used in case of low coupling combinations. Here it is good to have the remote indication near at the rear of the vehicle. So the driver can control the coupling and connect electrical and pneumatic connectors. The possibilities, where to place the remote indication should be free to the manufacturer. See drawing below as example for sidewise controlled coupling



View from above



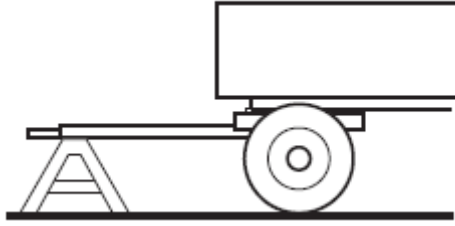
Coupling closed



coupling open

View from the side

3. The A_v -Value and the number of the axles within the front axle group is defined and used to calculate the bending resistance of a drawbar. Missing the A_v -value as an indicator of sufficient resistance has caused damaged drawbars. These drawbars have been designed and calculated for full trailers with single steered axles (9 tons) but mounted on full trailers with a tandem steered axle of 18 tons. Only with D-value indication this problem is not covered. For the resistance test or calculation of the drawbar regarding bending forces the formulas for the test force A_v are different between single and twin axle in the front of the vehicle. Therefore it shall be indicated also the number of frontal axles within the application range.



4. In the figure, the end of the line limiting the clearance zone above the ball ends together with the vertical line used to show the horizontal distance. The purpose of the requirement is to take respect also to any supplement contour or device as lifts, forks, combustors and this on. Also these parts can cause injuries while handling the coupling.
