

N O T E

This leaflet is part of a set which also includes:

- Leaflet 503: Continental wagons running in Great Britain
- Leaflet 543: Brakes - Regulations relative to the equipment and use of vehicles.

* 1 - All wagons must be fitted with a hand brake which can be operated from the ground (screw brake or hand-lever brake).

* 2 - Screw brakes must comply with the provisions of Leaflet 543, Chapter II, Nos 1 and 4.

3 - Hand-lever brakes must comply with the following conditions:

* 3.1.1 - The levers must not be inclined towards the headstock.

3.1.2 - In cases where they project beyond it, the protruding section must not be likely to cause staff to knock their hands against the headstock during operation.

* 3.2 - The levers must be of similar design and placed so that the handles are to the right of a person facing the centre of the side of the wagon.

* 3.3 - Each lever must be positioned to enable it to be operated easily with one hand. There must be adequate room for the hands in the area of manoeuvre.

* 3.4 - The levers must be fitted so that the brakes can only be released from the side on which they were applied.

* 3.5 - Each lever must be pressed down in order to apply the brakes, and raised in order to release them. The lever must be provided with a retaining device for both the "on" and "off" positions, consisting of a brake lever guard fitted with a toothed rack or a securing pin held by a chain.

* 3.6 - The levers must have a slight tendency to move inwards, with a view to ensuring that they remain in position on the bracket of the brake lever guard.

* 3.7 - In cases where a guard fitted with a securing pin on a chain is used, the length of the chain and the point to which it is fixed must ensure that the pin on the end of the chain cannot hang lower than 152 mm above rail level.

* 3.8 - An adjuster should be provided to allow for wear of the brake block, wheel and moving parts.

* 3.9 - It must also be possible for the lever brake to be applied beyond the normal "on" position within the brake lever guard, to allow for cases where the running and brake gear (wheels, brake blocks, moving parts) have reached their limit of wear, between two consecutive adjustments of the lever brake.

* 3.10 - In the case of wagons fitted with both the continuous compressed air brake and the hand lever brake, it must be possible to operate each brake independently of the other. On wagons equipped with brakes of this type, the hand lever brake must operate on both axles of a two-axle wagon and on the two end axles of a 3-axle wagon, on two shoes per wheel.

* 3.11 - The leverage ratio of the hand lever brake must not be lower than 22.5 for wagons with a loading capacity of less than 21 tonnes and 30 for wagons with a loading capacity of 21 tonnes or over.

The leverage ratio of the hand lever brake must be sufficient to retain the loaded wagon on a gradient of 1 in 40 (25 %).

* 3.12 - The applied force at the lever end must not exceed 500 N.

3.13 - To contain the hand lever travel within the top half of the rack it is recommended that the maximum leverage ratio does not exceed 55:1 and be limited if possible to 45:1.

* 3.14 - On vehicles where a force of 500 N at maximum leverage ratio produces insufficient brake power, provision is to be made on the vehicle for a brake stick to be used. This is not a component part of the wagon. The travel required for the brake stick must be in accordance with the dimensions recommended in Fig. 1 (example of application).

* 3.15 - For design purposes the applied force at the end of the brake stick must not exceed 500 N.

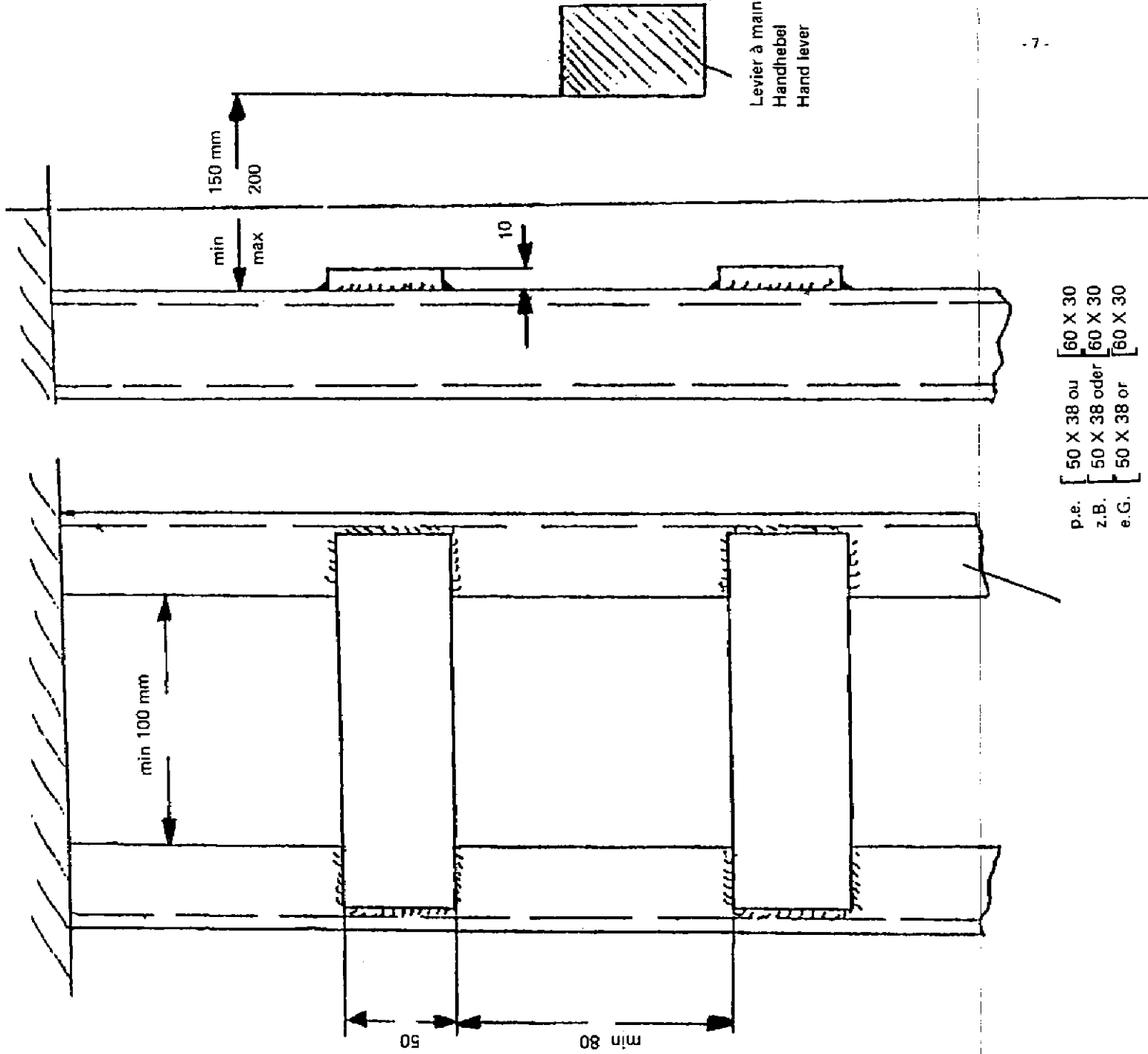
* 3.16 - The parking brake must be fully applied before the lever has travelled half way down the rack.

* 3.17 - The ends of the hand lever must be painted white.

* 3.18 - The hand brake lever arrangement shall be so designed that the lever end cannot under any conditions penetrate vertically through the lower portion of the BR W5 gauge.

1-9-87

BUTEE DU LEVIER SUPPLEMENTAIRE DU FREIN A LEVIER
WIDERLAGER FUR ZUSATZHEBEL DER HANDHEBELBREMSE
TRAVEL FOR HAND LEVER BRAKE STICK



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Figure 1
Figur 1
Figure 1

APPLICATION

Effective from 1 January 1963, except:

- Points 1,2,3 (except § 3.11, 2nd sub-paragraph)..... 1-1-53
- § 3.11, 2nd sub-para 1-1-75
- Point 3.1.1 } 1.9.87
- Point 3.3 (2nd sentence) }
- Points 3.12, 3.14, 3.15, 3.16, 3.17, 3.18 }

Points 3.1.1 and 3.12 to 3.18 do not apply to existing wagons.

All Railways in the Union.

RECORD REFERENCES

- Headings under which the question has been studied:

- Detailed conditions with which continental wagons must comply (loading gauge, hand lever brake and vacuum brake, etc.) in order to be accepted for running in Great Britain.

(5th Committee - R.S. - Lausanne, June 1952. - Board of Management, November 1952).

- Wagons accepted for running in Great Britain: revision of regulations concerning brake equipment (Leaflets Nos. 548 and 549).

(5th Committee - B. -, Portsmouth, May 1962).

- Conditions to be fulfilled by wagons running in Great Britain.

("Traction and Rolling Stock" Committee: Trier, June 1974; Paris, June 1984. - Sub-Committee for Braking, Paris, January 1985).

- Question 5/T/FIC - Revision of leaflets.

(Sub-Committee for Braking, Paris, January 1986, January 1987).