

NEW ZEALAND GOVERNMENT RAILWAYS	<b>WESTINGHOUSE BRAKE AND STEAM-HEATING HOSES</b>	<b>CODE No. 55</b>
<b>MECHANICAL BRANCH</b>	Cancelled 24/563, 19/12/73	Page No. 1 of 2 Issue No 3      Date Issued 1/7/37

**(1) SPECIFICATIONS.**

All Westinghouse-brake hoses used on locomotives and rolling-stock are to conform to N.Z.R. Specification No. [417/1950]

All steam-heating hoses used on locomotives and rolling-stock are to conform to N.Z.R. Specification No. [404]

**(2) APPLICATION. -**

(a) **W.H.B. Hoses.-** Straight 1 in. coupling cocks and 22 in. [30" for Class D<sup>M</sup> & D coaches] by 1<sup>1</sup>/<sub>8</sub> in. coupling hoses with straight nipples to B.P. [Z/X 40190/2?] are to be fitted to all new rolling-stock upon which W.H.B. equipment is installed, as well as upon vehicles fitted with W.H.B. pipe-lines only, and are to replace 18 in. by 1<sup>1</sup>/<sub>8</sub> in. coupling hoses and 1 in. bent coupling cocks as the latter require renewal.

30 in. by 1<sup>1</sup>/<sub>8</sub> in. coupling hoses are to be used for all train-pipe connections between engines and tenders. Upon locomotives that have the main reservoirs fitted to the tenders, 30 in. by 1<sup>5</sup>/<sub>8</sub> in. coupling hoses are to be used between engines and tenders for connecting the W.H.B. pump-delivery pipes to the pipes leading to the main reservoirs.

All new W.H.B. coupling hoses are to be fitted with external galvanized wire protectors to B.P. ~~W-15042?~~ [Z/X 40191/2]. [Not E<sup>D</sup>, D or D<sup>M</sup>]

(b) **Steam-heating Hoses.-** Steam-heating coupling hoses (22 in by 1<sup>3</sup>/<sub>4</sub> in.) and 1<sup>1</sup>/<sub>2</sub> in. steam valves are to be fitted to all rolling stock equipped with steam-heating apparatus as well as to vehicles fitted with steam-pipe lines only. Locomotives equipped with steam-heating control apparatus are to be fitted with 22 in by 1<sup>3</sup>/<sub>4</sub> in. steam-heating coupling hoses and 1<sup>1</sup>/<sub>2</sub> in. steam valves on the trailing end only, except in cases where the locomotives thus equipped are running regularly on branches not provided with locomotive turntables, when coupling hoses and steam-valves are to be fitted to both leading and trailing ends.

22 in. by 1<sup>3</sup>/<sub>4</sub> in. steam-heating coupling hoses are to be used for all steam-heating connections between engines and tenders.

**(3) TESTING.**

(a) **W.H.B. Hoses.-** All W.H.B. coupling hoses, nipples, and rubber-packing rings (B.P. ~~W30188?~~ [Z/X 40099/7?]) on rolling-stock are to be cleaned and tested when vehicles are shopped for W.H.B. overhaul. (Loco. Code No. 26.)

W.H.B. coupling hoses on locomotives are to be cleaned and tested when locomotives are shopped for class "A" or "B" repairs.

The method of testing is to subject the hoses to an air-pressure of 90 lb. per square inch while totally submerged in a tank of clear water, and hoses exhibiting signs of porosity while undergoing the test are to be removed from service immediately. Leakages detected in the vicinity of the hose clamps, coupling heads, or nipples, which are not attributed to defective hoses, are to be rectified and the hoses returned to service. The rubber-packing rings in the coupling heads are to be carefully inspected, and should be renewed if the water test proves them to be defective.

New W.H.B. hoses are to be subjected to the water test before being placed in service. And the Controlling Officer should be advised of any cases where new hoses fail to pass the test.

(b) **Steam-heating Hoses.-** The instructions contained in clause 3 (a) relating to the periods and methods of testing W.H.B. hoses are also applicable to steam-heating hoses.

Leakages in the body of the hoses detected during the water test condemn them for further service, but small leakages at the nipples, coupling heads or packing rings are to be rectified. Gravity valves are to be ground in and locking devices on the coupling heads over-hauled and tested with a master coupling.

New steam-heating hoses are to be subjected to the water test before being placed in service, and the Controlling Officer should be advised of any instances where new hoses fail to pass the test.

**(4) BRANDING.**

When initially placed in service all W.H.B. and steam-heating coupling hoses are to have the corresponding month and year numbers deleted from the small table vulcanized on the hose covering.

**(5) STORING.**

Steam-heating coupling hoses are not to be removed from vehicles and forwarded to Car and Wagon Depots for storing during the summer months. If, however, hoses are removed during the summer months from vehicles upon which the steam-pipe lines are not in use, and are forwarded to Car and Wagon Depots for testing purposes, these hoses need not be replaced until such time as the steam-heating equipment on the respective vehicles is required.

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**(6) CHANGING W.H.B. HOSES ON EXPRESS SERVICES.**

W.H.B. hoses must not remain in service on vehicles used on express services for more than three years. After having been in service for three years, these hoses must be removed, and new hoses used for replacement purposes. When removed from the vehicles, the old hoses are to be subjected to the test outlined in clause 3 (a) of this code, and if free from defects are to be utilized to replace defective hoses on wagons.