

FRONZ / ONTRACK
APPROVED CODE OF PRACTISE
FOR
HERITAGE NETWORK OPERATORS

Mechanical Supplementary Code B3.2.2.01 Westinghouse Brake Air-Reservoirs
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Issue	Prepared (P), Reviewed (R), Amended (A)	Approved by	Effective Date
1	P McCallum (P)	Heritage Technical Committee	27 June 2006

Reference Material

Source	Description	Date
NZ Railways	Mechanical Branch Code No 28, Issue 4	1/3/1973

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Amendment History

Version	Section	Amendment

Westinghouse Brake Air-Reservoirs

1 Introduction

This Supplementary Code relates to:-

B3.1.1.01 - Mechanical Code Of Practice, Section 3.2 - Air Reservoirs

B3.1.4.01 - Task Instruction – Corrosion and crack inspection of vehicle components; Section 2 – Air Reservoirs

It contains:-

- NZ Railways Mechanical Branch Code No 28, - Westinghouse Brake Air-Reservoirs; Issue 4 of 1/3/1973

which contains information relevant to the installation and testing of air reservoirs. Operators are to use those sections that are relevant to their operation.

NEW ZEALAND GOVERNMENT RAILWAYS MECHANICAL BRANCH	WESTINGHOUSE BRAKE AIR-RESERVOIRS	CODE No. 28
		Issue No 4 Date Issued 1/3/73

(1) AUTHORITY FOR INSTALLING AIR BRAKE RESERVOIRS:

Only air reservoirs sanctioned by and built to specifications or drawings approved by the Chief Mechanical Engineer may be installed on the air brake system of locomotives and rolling stock.

(2) PRECAUTIONS TO BE TAKEN WHEN INSTALLING AIR RESERVOIRS:

The following precautions are to be taken before air brake reservoirs are placed in service:-

- (a) Reservoirs are to be thoroughly examined (visually), cleaned and painted.
- (b) Where the fitting of drain plugs is authorised on air reservoirs, they are to be placed at the lowest point of the reservoir so that any accumulation of water or other matter may be discharged completely.
- (c) Air reservoirs are to be subjected to hydraulic test in accordance with Clause 3.
- (d) Reservoirs are to be securely clipped and bolted or welded in position to withstand all vibration and shocks.
- (e) When air reservoirs are coupled to the pipe system, pipe lengths are to be gauged and fitted accurately. The straining of air pipes into position is prohibited.

(3) TESTING OF AIR RESERVOIRS:

Prior to being initially installed all air brake reservoirs must be subjected to a hydraulic test to a pressure 50 per cent in excess of the approved working pressure, such pressure to be maintained for a period of one minute.

All fabricated air reservoirs in excess of three cubic feet capacity on locomotives, railcars, multiple unit coaches, rail and road cranes, cars, vans and wagons must be removed and subjected to a hydraulic test pressure of $33\frac{1}{3}$ per cent in excess of the approved working pressure at the following intervals:-

- (a) Locomotives, railcars, multiple unit coaches and rail cranes at A and B class overhauls. When such stock is shopped for A and B overhauls at intervals of less than 4 years, then hydraulic testing should be arranged at the first overhaul completed after a four yearly interval.
- (b) Cars, vans and wagons during workshop overhaul.
- (c) Road cranes at 5 yearly intervals.

Such pressure tests are to be maintained for a period of one minute.

(4) DRAINING OF AIR BRAKE RESERVOIRS:

The air brake reservoirs on locomotives and railcars and water raising air reservoirs on main trunk cars are to be drained of any accumulation of water during preparation for service. Those on multiple unit coaches are to be drained during service checks. Those on shunting locomotives, shunting tractors and electric locomotives are to be drained weekly.

Car and wagon stock are to have drain plugs removed as set out in the Consolidated Air Brake Instruction.

(5) WELDING OF AIR BRAKE RESERVOIRS:

The repair of air brake reservoirs by welding may be carried out only by fully qualified and experienced welders,

(6) FAILURE OF AIRBRAKE RESERVOIRS:

Should a serious failure occur to an air brake reservoir when in service, the Chief Mechanical Engineer is to be fully advised immediately. Under no circumstances are repairs to be effected to the damaged reservoir without written authority from the Chief Mechanical Engineer.