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RAILINFRASTRUCTURE CORPORATION

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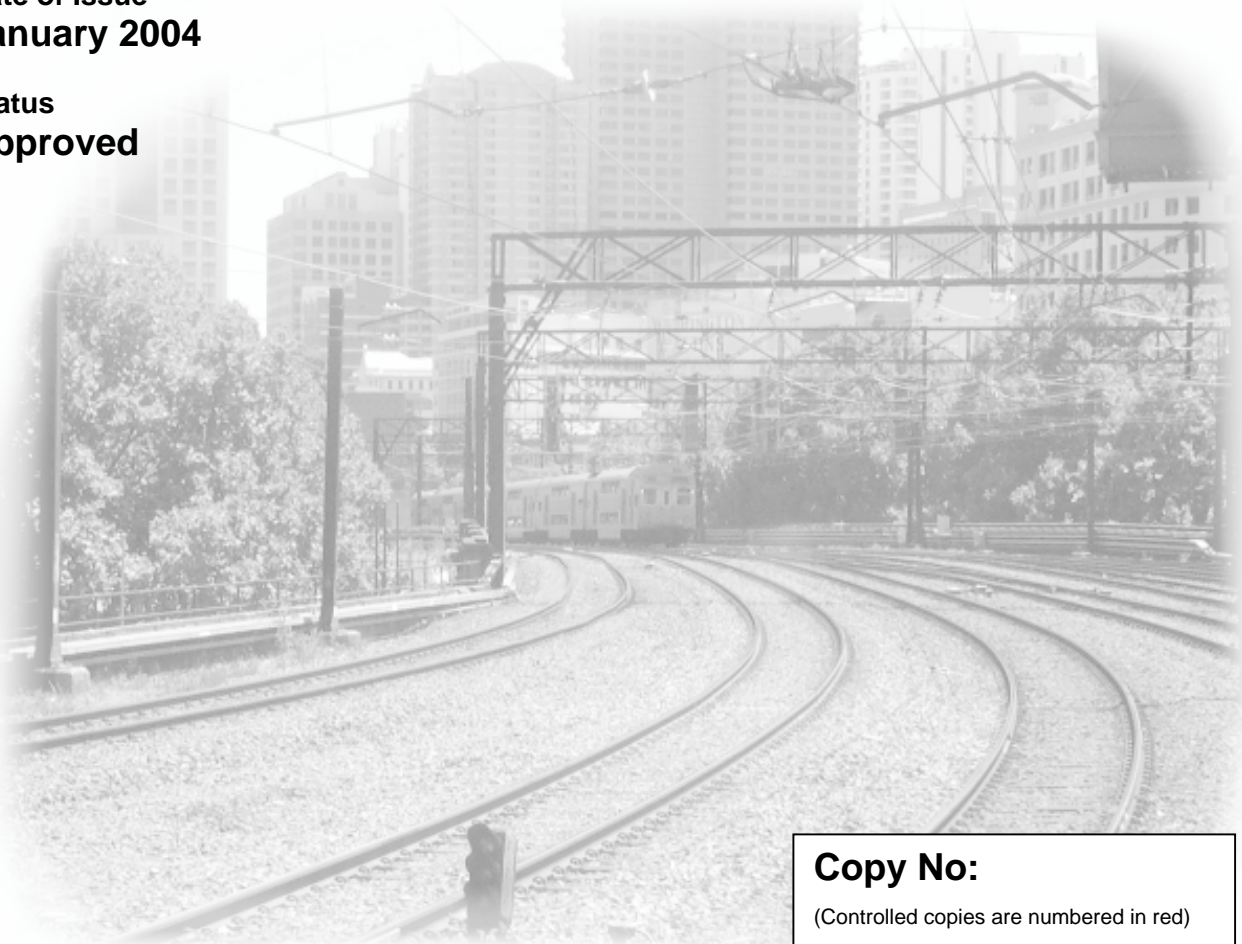
Title
**FIXED EXHAUST CHOKES ON FREIGHT
VEHICLES**

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About This Standard

This standard is based on TRS Standard 1634 Conversion of Wagons to Fixed Exhaust Chokes.

Version History

Version 1.0

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Table of Contents

About This Standard	3
Version History	3
1 Scope	7
2 Equipment required for conversion	7
3 Wagons to be fitted	7
4 Choke Details	7
5 Fitting of choke	8
5.1 Westinghouse Relayed Equipment	8
5.2 Westinghouse Non-Relayed Equipment	8
5.3 Davies & Metcalfe Relayed and Non-Relayed Equipment	9
6 Marking of Wagons (see Figure 1)	9
7 Testing	10
8 Records	10

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1 Scope

To enable freight vehicles to safely descend long steep grades, freight vehicles must be fitted with grade control valves or fixed exhaust chokes.

This standard provides the procedure for the conversion of wagon grade control valves to fixed exhaust chokes.

This standard also provides the correct size of choke for fitting to new vehicles.

2 Equipment required for conversion

- ◆ Appropriately sized choke
- ◆ Triangular stencil and paint

3 Wagons to be fitted

Any vehicles fitted with a grade control valve should be fitted with a fixed exhaust choke.

4 Choke Details

The fixed exhaust chokes are designed with 5 holes in order to reduce the possibility of choke blockage by foreign objects. Even if 4 of the 5 holes are blocked, the choke would still be effective.

The chokes are fitted with a loose “O” ring around the exhaust holes for the purpose of preventing blockage by wasp infestation.

There are 5 choke sizes available as follows:

TYPE OF BRAKE EQUIPMENT	CHOKE DESIGNATION	CHOKE SIZE (diameter in mm)
Westinghouse Relayed	6 W	0.9
Westinghouse Non-relayed 10" brake cylinder	10 W	1.2
Westinghouse Non-relayed 12" brake cylinder	12 W	1.4
Westinghouse Non-relayed 14" brake cylinder	14 W	1.6
Davies & Metcalfe Relayed (not ESR500)	6 DM	0.6
Westinghouse Non-relayed with two 10" brake cylinders	14 W	1.6

NOTES:

1. For Davies & Metcalfe ESR500 equipment use appropriately sized Westinghouse non-relayed choke.

5 Fitting of choke

5.1 Westinghouse Relayed Equipment

Choke must be fitted to the triple valve/relay valve bracket.

- ◆ Remove pipe and fitting from bracket to grade control valve.
- ◆ Remove grade control valve and operating rod.
- ◆ Fit choke into bracket.

5.2 Westinghouse Non-Relayed Equipment

Choke must be fitted directly to the triple valve.

- ◆ Remove pipe and fitting from triple valve to grade control valve.
- ◆ Remove grade control valve and operating rod.
- ◆ Fit choke into triple valve.

5.3 Davies & Metcalfe Relayed and Non-Relayed Equipment

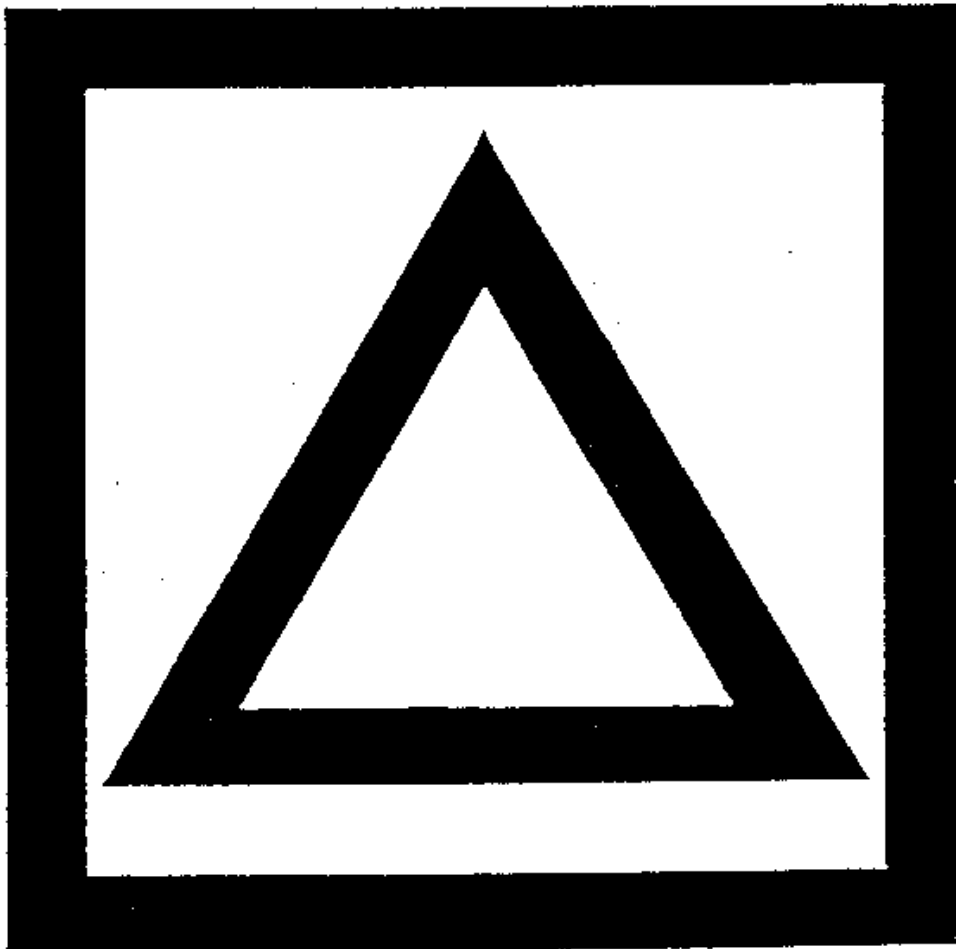
Choke must be fitted directly to the distributor.

- ◆ Remove pipe and fitting from distributor to grade control valve.
- ◆ Remove grade control valve and operating rod.
- ◆ Fit choke into distributor.

6 Marking of Wagons (see Figure 1)

The wagon data plates (one each side) must be altered as follows:

- ◆ Paint over the circle within the square (the circle denotes Grade Control Valve fitted).
- ◆ Stencil a triangle within the square (the triangle denotes Choke fitted).



7 Testing

- ◆ charge the brake pipe
- ◆ apply brakes fully
- ◆ operate release valve

Brakes should fully release in around 90 seconds.

If brakes do not fully release in around 90 seconds.

- ◆ Check choke for correct size.
- ◆ Check choke for blockage
- ◆ Carry out single car air test if timing is incorrect for correct size choke.

8 Records

Record modification to the wagon and advise the Manager Train Operations Group.