

## Section B

# MARSHALLING AND COMPOSITION OF FREIGHT TRAINS

## Contents

	Page	Latest Issue
<b>Contents</b>	<b>B1</b>	<b>December 03</b>
<b>B1 Braking Requirements</b>	<b>B2</b>	<b>December 03</b>
<b>B2 Brake Vans</b>	<b>B4</b>	<b>December 03</b>
<b>B3 Marshalling of Freight Trains</b>	<b>B5</b>	<b>December 03</b>
<b>B4 Conveyance of Coaching Stock on Freight Trains</b>	<b>B6</b>	<b>December 03</b>
<b>B5 Examination of Freight Vehicles and Movement of Defective Vehicles</b>	<b>B7</b>	<b>December 03</b>
<b>B6 Escorted Movements</b>	<b>B8</b>	<b>December 03</b>

## **B MARSHALLING AND COMPOSITION OF FREIGHT TRAINS**

### **B1 Braking requirements**

**B1.1** Vehicles which have operative automatic brakes and/or through pipes may be intermixed, subject to:

- the requirements set out in sections B1.2 to B1.5
- the brake force requirements in tables E1 or E2.

**B1.2** Up to but not more than three through piped vehicles may be formed together in a group.

**B1.3** The automatic brake must be operational on the last three vehicles of every freight train, except as permitted in section B1.5 below.

**B1.4** Vehicles with two or more air-brake distributors, one of which is isolated, must be regarded as having defective brakes and treated as through piped vehicles only, except multi element vehicles of CARKNDs, PJA and PJB.

**B1.5** A 'Cartic-4' vehicle (CARKNDs PJA and PJB) has four elements. If one distributor on any element of the 'Cartic-4' vehicles has to be isolated, then it may continue to be regarded as a vehicle with a fully operative automatic brake. However, if more than one distributor has to be isolated then the vehicle must be treated as a through piped vehicle.

**B1.6** A brake van fitted with a through brake pipe may be conveyed at the rear of a train when used by a guard (see also section B2).

- B1.7** On some vehicles white or black stars on the underframe identify the position of the brake release cords.
- B1.8** In exceptional circumstances it may be necessary to move vehicles with no through pipes. Authority must be obtained from Network Rail region(s) over which the vehicles are to be moved.

## **B2 Brake vans**

- B2.1** The brake pipes must be connected and the brake van must be fitted with a pressure gauge and guards brake valve.
- B2.2** Vehicles conveying dangerous goods Class 2.3 toxic gas (loaded or discharged) must have a brake van at the rear of the train in which the guard must ride. See GO/RT3053/C Working Manual for Rail Staff - Pink pages for mixed loads of dangerous goods.
- B2.3** A brake van may be used for propelling, terminal or other local operational reasons.

## **B3 Marshalling of freight trains**

**B3.1** Empty vehicles with a tare weight of 8.15 tonnes or less must be marshalled in the rear of all other vehicles except for any brake van being used by a guard.

**Note:** Where the vehicles are through piped they must have three vehicles with an operational brake in rear (see section B1.3 above).

(Vehicles with a tare weight of 8.15 tonnes or less are specially shown on a TOPS generated Train List by a 'W' in the left-hand margin).

**B3.2** Runner vehicles must be used when loads overhang the ends of vehicles (see section G of this Working Manual). They must have a tare weight not less than 10.5 tonnes.

**B3.3** Open or flat-bed vehicles conveying certain metal products such as rails, angles, girders and pipes, which in exceptional circumstances could puncture an adjacent vehicle, must not be marshalled next to tank vehicles, whether loaded or discharged, conveying gases in dangerous goods Class 2.

**B3.4** Marshalling requirements for freight trains carrying Dangerous Goods are shown in GO/RM3053 Working Manual – Handling and Carriage of Dangerous Goods.

## **B4 Conveyance of coaching stock vehicles on freight trains**

- B4.1** Passenger coaching stock vehicles may only be conveyed on freight trains with the authority of the Network Rail regions(s) over which they are to pass. Non-passenger carrying coaching stock vehicles, and other non-passenger carrying vehicles, may be conveyed as part of a freight train without special authority, subject to any gauge restrictions that may apply and any 'Warning' messages generated on a train document.
- B4.2** Train operators will issue special instructions to indicate where coaching stock vehicles are to be marshalled in a freight train.
- B4.3** Screw couplings must always be used between coaching stock vehicles and freight vehicles. Where two or more buck-eye fitted vehicles are marshalled together, the intermediate buck-eye couplings must be used.
- B4.4** Coaching stock vehicles must not be loose shunted nor must other vehicles be loose shunted against them.

## **B5 Examination of freight vehicles and movement of defective vehicles**

### **B5.1 Examination of freight vehicles**

Each train operator is responsible for determining and applying the necessary pre-departure technical examinations on vehicles, which they haul, in order to ensure that they are fit to operate on Network Rail controlled infrastructure.

### **B5.2 Movement of defective vehicles bearing 'cripple' labels**

Requirements for the movement of defective vehicles on Network Rail controlled infrastructure are given in section D and for international traffic section H.

## **B6 Escorted movements**

**B6.1** Where it is necessary for movements to be escorted the train operator must provide suitable accommodation and ensure that escorts are supervised by a competent person(s), according to the duties the escort may be required to perform.

If a brake van is used for the purpose of conveying an escort, it must be fitted with a pressure gauge and guards brake valve.