

# UIC CODE

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*Translation*

# O R

## **Motive power units - Inscriptions, marks and signs**

*Engins moteurs - Inscriptions, marques et signes*

*Triebfahrzeuge - Anschriften, Merk- und Kennzeichen*



UNION INTERNATIONALE DES CHEMINS DE FER  
INTERNATIONALER EISENBAHNVERBAND  
INTERNATIONAL UNION OF RAILWAYS

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*The person responsible for this leaflet is named in the UIC Code*

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## Summary

This leaflet contains all inscriptions, marks and signs that motive power units should bear when operating in international traffic.

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## o 1 - Scope

These rules shall apply to locomotives, railcars and multiple-unit trains operating in international service.

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## o 2 - Introductory comments

Additional inscriptions or signs on motive power units shall only be allowed if there is no possibility of their giving rise to misunderstandings or confusion. The minimum dimensions of the inscriptions or signs are marked in the text enclosed within the sign: ")....(".

The type-faces to be used for the wording of the marks and inscriptions shall be identical to UNIVERS 65 BOLD and UNIVERS 65 BOLD CONDENSED or very similar.

## 3 - External inscriptions

(see Appendix A - page 16)

### 3.1 - General provisions

Two cases must be considered:

1. For trains formed from individual vehicles, i.e. trains or trainsets which are not permanently in fixed formation or coupled together, the following provisions apply to all vehicles in the train.
2. For trains formed from permanently coupled vehicles (TGV-type high speed trains, railcars), i.e. stock which remains in fixed formation almost all the time (and which can only be split in maintenance depots), the inscriptions set out in the provisions below, that otherwise apply to the whole train, may be applied to the end vehicles only.

In certain specific cases where the indication is compulsory for all the vehicles in the train, the text is preceded by the symbol (°).

If the text below (or that of *UIC Leaflet 545 and 580* or *Appendix V to the RIC*) contain no specific provisions as to the colour of the inscriptions, the choice of colour shall be left to the user. It is however essential to ensure that the inscription is clearly visible by choosing a colour which contrasts sufficiently with that of the external paintwork of the vehicle.

The following inscriptions are specified:

### ○ 3.2 - Symbol of the owning railway in accordance with Appendix I to the RIC

Character size: free choice.

### ○ 3.3 - Vehicle number

Character size: )80( mm.

(°) The identification mark, with the vehicle number, in accordance with the provisions of *UIC Leaflet 438-1, Section 4*.

High-speed trainsets may have their own numbering system.

### ○ 3.4 - Indication of train category or series

As for point 3.3.

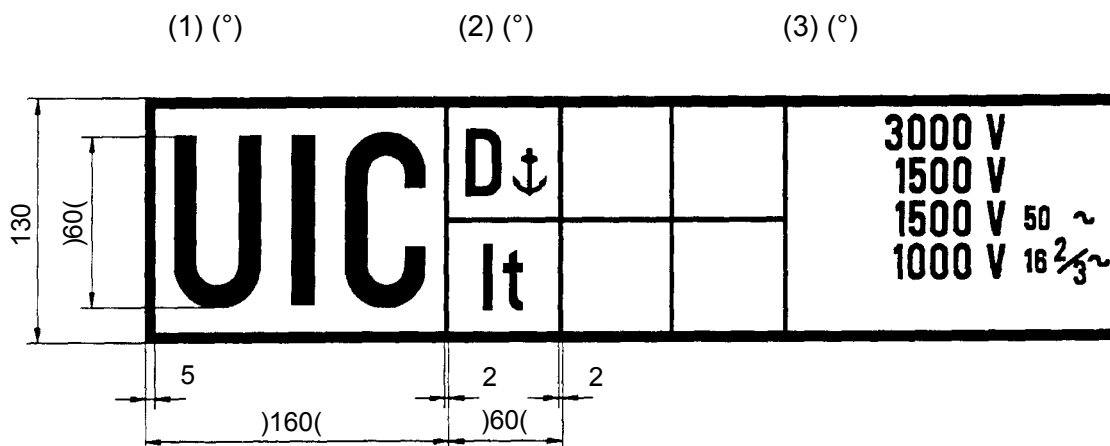
### ○ 3.5 - Train mass in running order, with the powered unit's tanks filled to 2/3 capacity (water, oil, fuel, etc.)

Character size: )45( mm.

**3.6** - The UIC sign with a plate which must contain the symbols stipulated in *Appendix V/2 to the RIC* for those railways party to the agreement governing the running of motive power units.

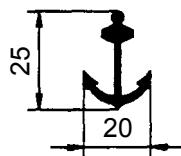
This indicates that the vehicle meets all obligatory provisions and complies with the special agreement governing its reciprocal use in international service between the owning railway and the railways whose symbol appears in the frame.

1.



(°) Boxes (1) and (2) are obligatory; box (3) may be filled in only as specified in bilateral agreements.

2. The anchor sign shown next to the symbol of the railway in the UIC frame indicates that the vehicle meets the conditions set by that railway for conveyance on the train ferries which it operates.



3. The box to the right of the frame must contain, solely on the basis of bilateral agreement, the inscriptions relating to the type of current, the voltage and the maximum permissible current strength in the train line of the motive power unit.

○ **3.7** - The railway which has confirmed that a vehicle belonging to a non-railway company complies with the UIC regulations.

**3.8** - The signs and inscriptions denoting vehicles fitted with equipment for broadcasting announcements in the train:

1. *UIC Leaflet 440, Appendix A, figure 1:*

sign for vehicles with public address system

- with a socket to plug into a mobile transmitter unit for broadcasting announcements and music and
- with a transmitter unit



2. *UIC Leaflet 440, Appendix A, figure 2:*

sign for vehicles with public address system

- with a socket to plug into a mobile transmitter unit for broadcasting announcements and music but
- without a transmitter unit.

3. *UIC Leaflet 440, Appendix A, figure 3:*

sign for vehicles with public address system

- without a socket to plug into a mobile transmitter unit for broadcasting announcements and music but
- with a transmitter unit

4. *UIC Leaflet 440, Appendix A, figure 4:*

sign for vehicles with public address system

- without a socket to plug into a mobile transmitter unit for broadcasting announcements and music and
- without a transmitter unit.

- **3.9** - Date of last overhaul, as per *RIV, Plate 19*, with details of the regular maintenance operations guaranteeing operating safety and functioning.

By providing this inscription, the owning railway indicates that the vehicle has undergone the regulation maintenance operations which are a prerequisite for its safety of operation and functioning.

Furthermore, the presence of this marking may be revised by agreements between the railways concerned.

- **3.10** -

- The signs and inscriptions shown in *Figure 1 of Appendix V/9 of the RIC*, indicating the length over buffers or the length between couplers for vehicles fitted with the automatic coupler.
- The distance between pivots and the wheelbase (distance between end axles): as shown in *Figure 2 of Appendix V/9 of the RIC*.

- **3.11** - The inscriptions relating to the brake in accordance with *UIC Leaflet 545* (see [Bibliography - page 30](#)), to be applied according to the procedure outlined in point [3.1 - page 4](#).

The minimum height of the capital letters shall be 35 mm.

**3.12** - Home depot.

Character size: )40( mm.

**3.13** - Designation of driving cabs by means of the figure 1 or 2 placed on the doors of the cabs in question or beneath their side windows.

Height of figures: )80( mm

- **3.14** - Vehicles on which the "anchor" sign appears in the UIC panel must also bear the designation of support points for operation on train ferries as shown below.



- **3.15** - (°) An indication shall be given on all vehicles of the different lifting points, according to the type of lifting involved, using the following signs:

1. 4-point lifting with or without running gear: *Figure 2 of Plate 25 of the RIV,*
2. lifting or rereiling with or without running gear, at one end only or close to the end: *Figure 3 of Plate 25 of the RIV,*
3. lifting in the workshop without running gear: *Figure 1 of Plate 25 of the RIV.*

- **3.16** - (°) On all the junction boxes or dummy sockets on the train line and also for vehicles with steps situated more than 2 000 mm above rail level or with a ladder the top of which exceeds this height, the warning sign consisting of a lightning flash as show in *Appendix V/7 of the RIC* shall be affixed.

The base of the triangle must be at least 150 mm in length.

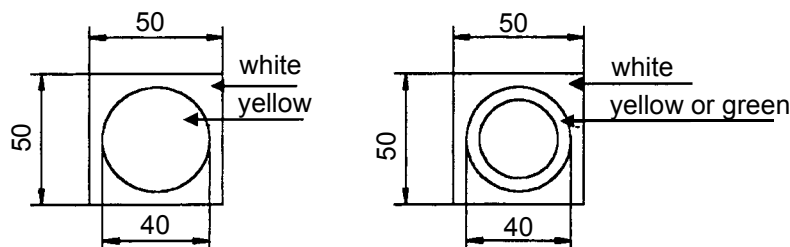
This sign must also be placed on doors protecting electrical installations, contact with which might be fatal.

In this case, the base of the triangle must be at least 100 mm in length.

- **3.17** - (°) The distinctive marking for the filling and emptying equipment of sanitary installations shall make use of the signs below.

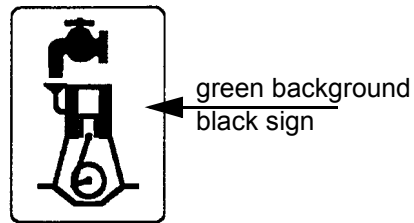
A green ring indicates that in winter the water is liable to freeze despite the heating of the vehicle.

A yellow ring indicates that, even at low outside temperatures, the water will not freeze if the vehicle heating is switched on.

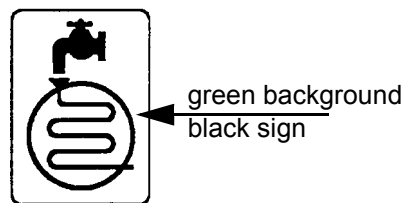


The sign consisting of a solid yellow disc on a white background indicates that there is no danger of freezing in the toilet installation of a vehicle whose inside ambient temperature has been raised to 20 °C, even after the heating has been switched off for 12 hours, provided that the outside temperature does not fall below - 10 °C.

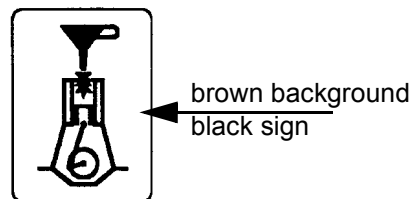
**3.17.1** - Symbol denoting the filling connection for cooling water for the engine.



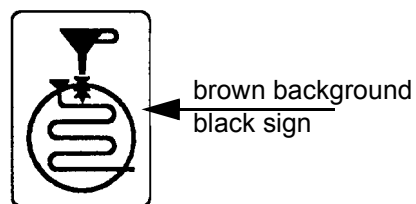
**3.17.2** - Symbol denoting the filling connection for water for the boiler.



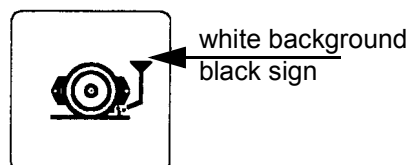
**3.17.3** - Symbol denoting the filling connection for fuel for the engine.



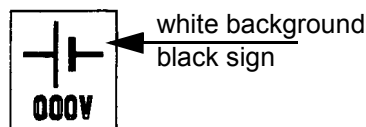
**3.17.4** - Symbol denoting the filling connection for fuel for the boiler.



**3.17.5** - Symbol denoting the filling connection for the sand box.



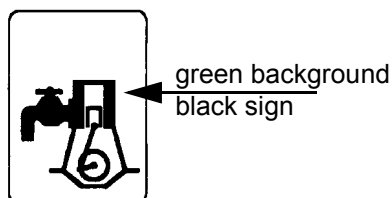
**3.17.6** - (°) Symbol denoting the battery sign.



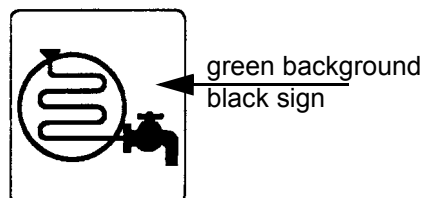
**3.17.7** - Symbol denoting feeding by electrical installation with indication of the service voltage, the type of current and the frequency.



**3.17.8** - Symbol denoting the drain cock for the cooling water.



**3.17.9** - Symbol denoting the drain cock for the water supplying the boiler.



**3.17.10** - The year of construction of the vehicle, in the entrance step area or on the solebar.

**3.17.11** - To mark the emergency brake re-locking gear when it is contained in a box on the vehicle exterior, the signs given in *UIC Leaflet 545, Appendix D* shall be used.

**3.17.12** - Pressure-tight vehicles must be marked with a "(p)" code as shown in *Appendix V/17 of the RIC*, in a box next to that indicating the public address installation.

**3.17.13** - For vehicles with retention toilets, the sign shown in *UIC Leaflet 563, Appendix 18* must be used to denote the emptying nozzles.

## 4 - Inscriptions inside the driving cabs

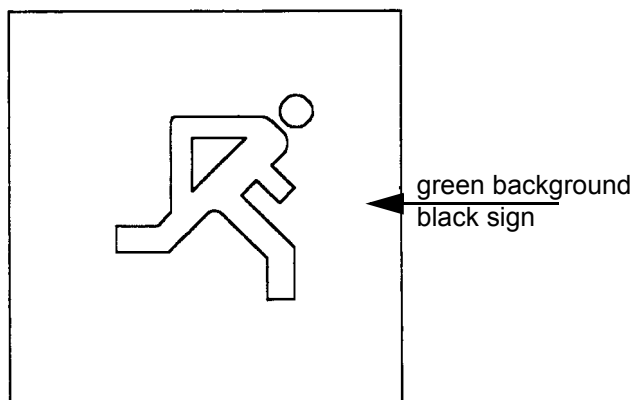
- 4.1 - The maximum speed of motive power units with motor equipment in use:



- 4.2 - Vehicle number.
- 4.3 - Indication of type and class.
- 4.4 - Designation of the driving cab by means of the figure 1 or 2.

Minimum character size: 35 mm.

- 4.5 - Braked weight percentage of the motive power unit for each braking system.
- 4.6 - Lightning flash as per point 3.16 - page 7 for potential hazards.
- 4.7 - The "Evacuation" sign placed on the doors through which the cab may be evacuated in the event of danger.



## 5 - Marking of vehicle equipment

### 5.1 - General guidelines

It is recommended that all important equipment on vehicles be marked with signs corresponding to the fitting or operating diagrams (compressed air, engine oil, cooling water, etc.).

Similarly, it is recommended that the devices for starting and stopping the vehicles be marked with an additional sign designed to attract attention.

Generally speaking, in view of the increasing international use being made of rolling stock, the use of pictograms is highly recommended, both:

- for the equipment itself and,
- for marking the controls for this equipment in the driving cab and on the driver's desk.

**5.1.1** - It is recommended that the following colours be used for the marking of pipes (in accordance with ISO standards):

cooling water:	green
oil:	brown
compressed air:	light blue
main air supply pipe:	yellow
main brake pipe:	black
additional air pipe of motive power unit:	blue-black
steam pipe:	silvery grey
diesel fuel:	intermittent brown

### 5.1.2 - Provisions concerning the position of equipment

It is recommended that the position of the protection equipment be denoted by means of a visible device such as a pilot light or warning light, identified by the symbol and/or the position number of the item of equipment or of what it protects.

- **5.1.3** - Use of the lightning flash in accordance with point **3.16 - page 7**, where there is danger.

### 5.1.4 - Marking of controls

**5.1.4.1** - The function and the various positions of the switches, stop cocks, levers, locks, etc. which are essential for placing the vehicle in running order and for the driving of motive power units, may be given a functional marking to be defined by agreements between the railways concerned.

**5.1.4.2 - Hand brake**

The hand brake control must be marked with an arrow indicating the direction of braking.

If the control is not visible, its position must be marked by the sign shown in *UIC Leaflet 545, Appendix J*.

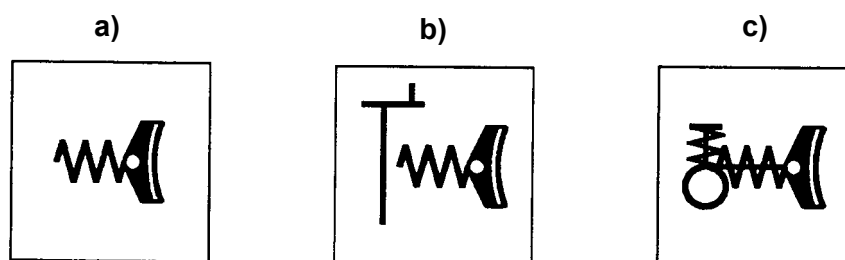
In the case of motive power units with two driving cabs, this sign shall be placed on the door of the driving cab in which the handbrake is found.

**5.1.4.3 - Accumulator spring brake**

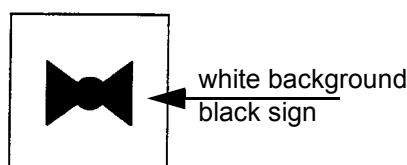
The control for the accumulator spring brake shall be marked with the symbol (a) shown below.

Symbol (b) below denotes the position of the handle for releasing the accumulator spring brake without compressed air.

Symbol (c) corresponding to the unlocking ring of certain brake immobilisation equipment may also be used.



**5.1.5 - The marking of non-visible stop cocks is effected by means of the following sign:**



**5.1.6 - The positions of the selector for the air brake system shall be marked in accordance with *UIC Leaflet 545* (see [Bibliography - page 30](#)).**

The symbols E, H or Mg denote the position of the controls in which, respectively, the electric brake, the hydrodynamic brake or the electromagnetic brake of the motive power unit are ready to function.

**5.1.7 - The positions of the diesel engines controls are marked by the symbol "START" or by "1" for starting and by the symbol "STOP" or "0" for stopping. When the figures 1 or 0 are used, the controls themselves must be marked more specifically, for example by means of the "diesel engine" pictogram as shown in [Appendix B - page 17](#).**

## **O 5.1.8 - Visual and identification indicators**

Visual indicators are used to provide information on the status of essential components, as well as on the circuits of the motive power unit. They are required when the driver needs to take account of the information they provide in order to drive the motive power unit and when it is not possible directly to ascertain the status of these components during running.

Indicator lamps shall be denoted in accordance with the instructions given in point **5.1.4.1 - page 11**.

The usual general symbols are given in Appendix **B - page 17**. Other symbols may be created on the basis of bilateral agreements.

While the train is running, no indicator lights should be permanently lit up on the driver's panel, except to indicate a fault.

This provision is not obligatory for the light indicators of the on-board signalling system or automatic train protection and warning systems if indeed such objectives form an integral part of the driver's desk.

The gravity of the fault is determined by the colours specified in points **5.1.8.1** and **5.1.8.2** below.

**5.1.8.1** - If the driver is required to take action urgently, because of serious risk to persons or to an essential component of the motive power unit (or the multiple-unit train) the information warning must be transmitted by means of a red light signal.

**5.1.8.2** - The request to the driver to take certain action shall be transmitted by means of a yellow light signal.

**5.1.8.3** - Information concerning switching status or the service situation shall in principle be transmitted by means of a white light signal.

**5.1.8.4** - Blue shall be used solely for the light signal indicating the proper working order of the safety device controlling the repetition of signals when the train is stopped automatically by suitable installations positioned along the line.

**5.1.8.5** - Green light signals should be avoided in the driver's cab or should be positioned in such a way that neither the signals themselves nor their reflections in any of the glass in the cab are visible to the driver while the train is running.

They must not be permitted if there is any possibility of their reflections in the front window leading to confusion and being interpreted as a trackside signal.

Furthermore, when driving at night, the lighting of equipment may be provided by means of green light-emitting diodes.

**5.1.9** - Measuring equipment shall be marked taking into account the provisions of point **5.1.4.1**. Where necessary, their dials should also indicate the unit of measurement and the permissible limit for the value measured.

## **5.2 - Guidelines for conventional stock**

Appendix **B** shows the most common signs and indications used for conventional rolling stock.

They are not used exclusively for such stock.



## Designation of inventory items and spare parts

Doors, covers and drawers giving access to signalling equipment, miscellaneous accessories and spare parts shall be adequately marked. For spare parts, the symbols shown in Appendix B may be used to this end for the components to which they refer.

The symbols shown in Appendix C should be used for signalling equipment and those in Appendices D and E for other inventory items. However, an inscription in the necessary national languages is also permissible.

General symbols	Appendix B - page 17
Signs for signalling equipment	Appendix C - page 19
Signs for various mechanical accessories	Appendix D - page 20
Signs for various electrical accessories	Appendix E - page 21

### 5.3 - Guidelines for high-speed stock

Appendices F to L below are particularly recommended (see also High Speed TSIs).

Pictograms mentioning the technology of the test and signalling devices are given only by way of indication, the list not being exhaustive.

Pictograms on the driver's desk	Appendix F - page 22
Pictograms for switch boxes	Appendix G - page 24
Pictograms for controls not located on driver's desk	Appendix H - page 25
Pictograms for fault indicator panel	Appendix I - page 26
Pictograms for control box in the cab	Appendix J - page 27
Pictograms for controls in the engine room	Appendix K - page 28
External inscriptions	Appendix L - page 29

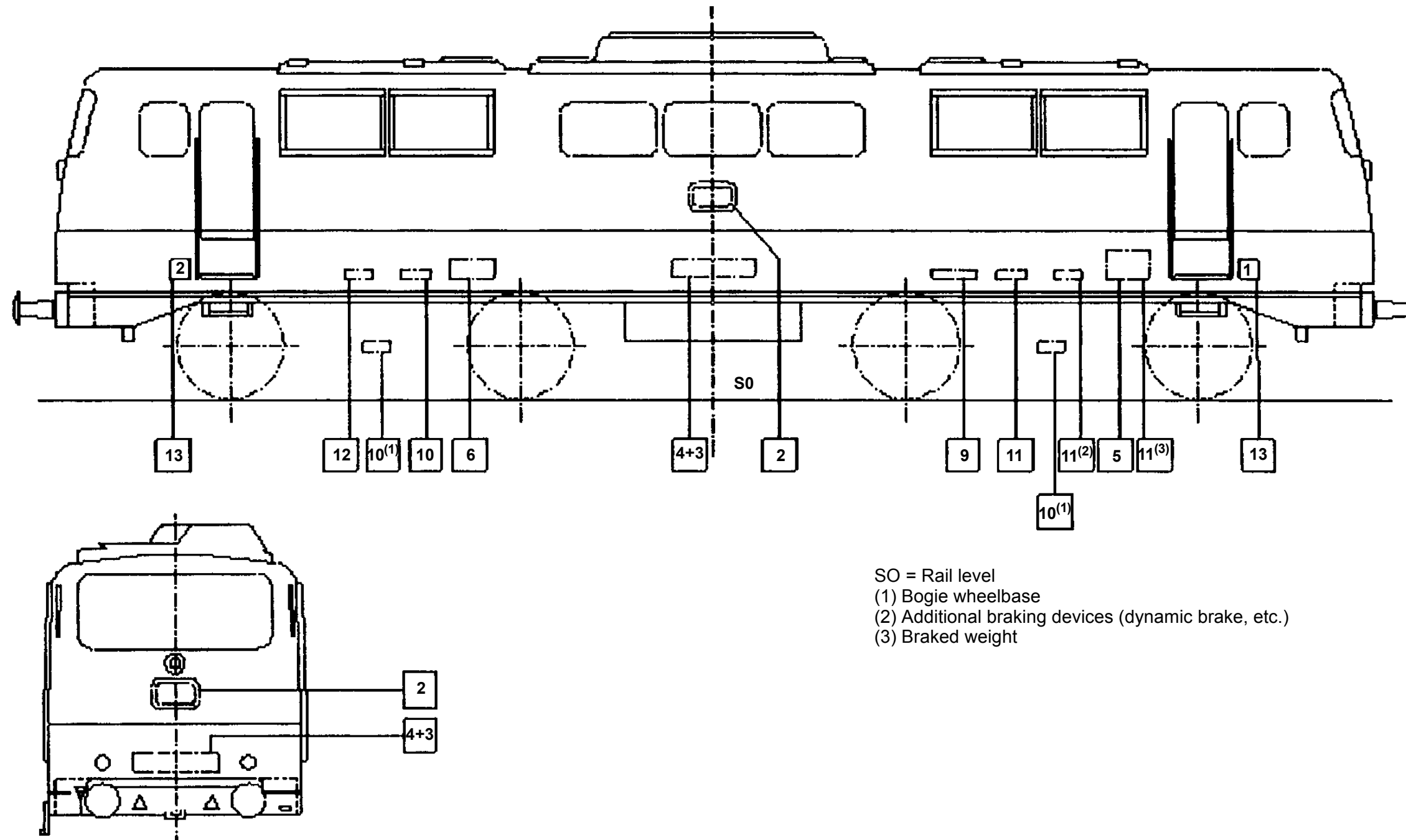
These Appendices are also recommended for other rolling stock.

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## 6 - Inscriptions on vehicles intended for passenger transport

All the signs and inscriptions stipulated in *UIC Leaflet 580* (see [Bibliography - page 30](#)) and in the RIC for coaches used in international service shall also apply to multiple-unit trains in international traffic.

## Appendix A - External inscriptions



SO = Rail level  
 (1) Bogie wheelbase  
 (2) Additional braking devices (dynamic brake, etc.)  
 (3) Braked weight

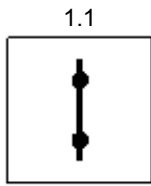
The figures in the  correspond to the sub-sections of point 3 - page 4 (e.g.:  2 corresponds to point 3.2 - page 4).

The position of the markings in this Appendix is mandatory for those described in points 3.5 - page 4 to 3.14 - page 7.

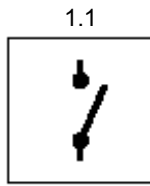
The inscriptions shown for one longitudinal side of the vehicle must also appear on the other. For motive power units that are not symmetrical about a transverse vertical plane through the vehicle centre, the inscriptions should be made symmetrically about a vertical plane running lengthways through the vehicle centre.

Inscriptions for railcars and multiple unit trains should be set through bilateral agreement.

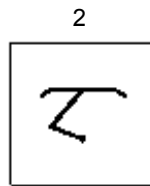
## Appendix B - General symbols



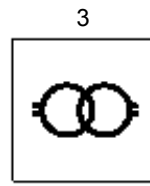
Main switch on or main circuit-breaker on



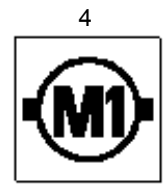
Main switch off or main circuit-breaker off



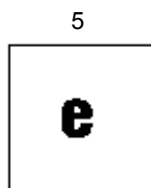
Pantograph



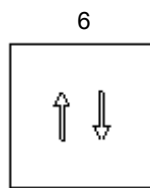
Main transformer



Electric traction motor



Train line switched out



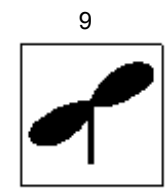
Indication of switch to reverse running



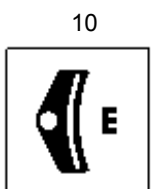
Contactor



Oil pump



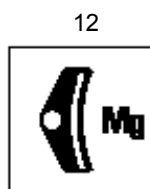
Fan



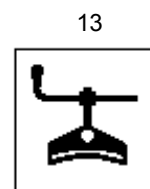
Electric brake of the motive power unit



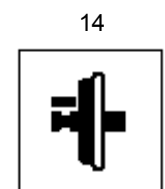
Hydraulic transmission brake of the motive power unit



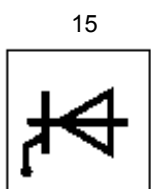
Electromagnetic brake



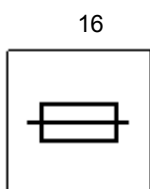
Hand brake



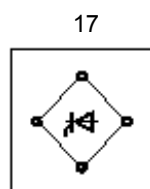
Axle box



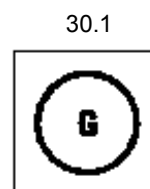
Thyristor



Safety fuse



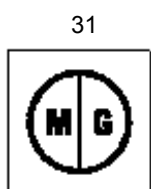
Thyristor bridge



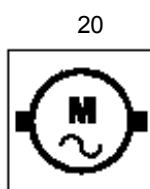
Generator



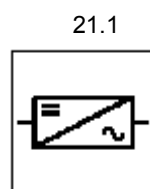
Alternator



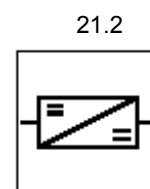
Motor generator set



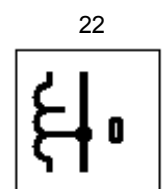
Induction motor



d.c.-a.c. converter (static)



d.c.-d.c. converter (static)



Switching device Neutral position

23

Series-connected motor

24

Parallel-connected motor

25

Open left-hand doors if placed to the left

26.1

Open right-hand doors if placed to the right

26.2

Close doors

27

Lighting

28

Compressor switch

29

Air suspension

30

Headlights  
Main beam

31.1

Headlights  
Low beam (dipped)

31.2

Headlights  
Lamp

32

Rear of train

33

Heating of driving cab  
Level I

34

Heating of driving cab  
Level II

35

(organe)

Heating component

36

Diesel traction motor

37

Diesel motor for train heating

38

High-pitched horn

39

Low-pitched horn

40

Sand box

41

Main battery switch  
open

42

Motor mechanism

43

Auxiliary motor  
mechanism

## Appendix C - Signs for signalling equipment

1



Sign for signalling discs

2



Sign for signalling flag

3



Sign for signalling lamp (safety lamp)

4



Sign for torch

5



Sign for detonators

## Appendix D - Signs for various mechanical accessories

1



Sign for hammers

2



Sign for tools

3



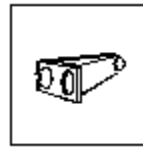
Sign for oil-can

4



Sign for spare coupling hoses

5



Sign for emergency coupling

6



Sign for speed recording tapes

7



Sign for bandages and dressings

## Appendix E - Signs for various electrical accessories

1



Sign for spare bulb

2



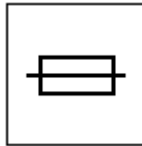
Sign for inspection lamp

3



Sign for coupling for multiple unit control

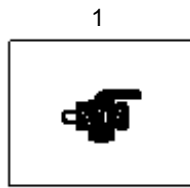
4



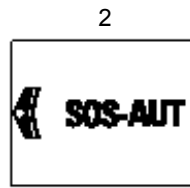
Sign for spare fuse



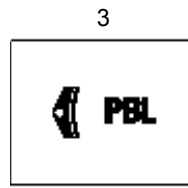
## Appendix F - Pictograms on the driver's desk



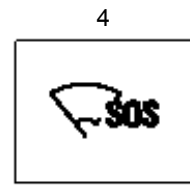
Emergency brake



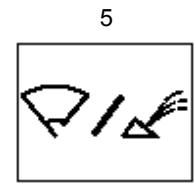
Emergency control for the automatic brake



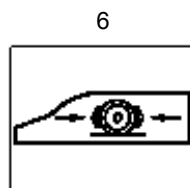
Control for automatic brake



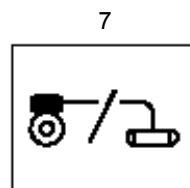
Emergency windscreen-wiper control



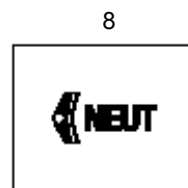
Control for windscreen wiper/washer



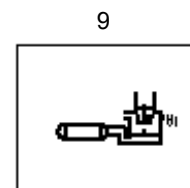
Holding brake for brake test



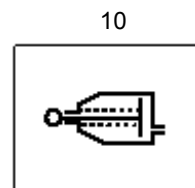
Pressure gauge for main air supply pipe/ main air reservoir



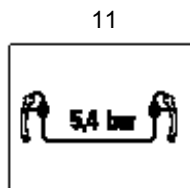
Neutral brake function



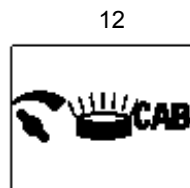
Pressure gauge for main brake pipe / equalising reservoir



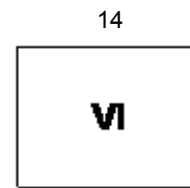
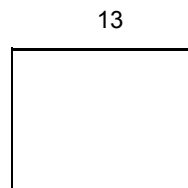
Brake cylinder



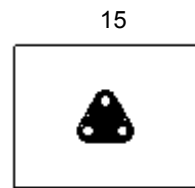
Brake overcharge



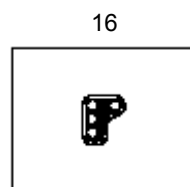
Brightness regulation Cab signal



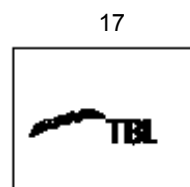
Specified speed



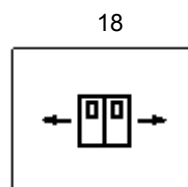
TBL<sup>1</sup>, small movement



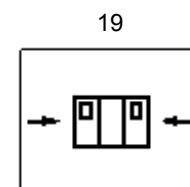
TBL, large movement



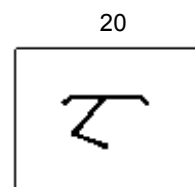
TBL function



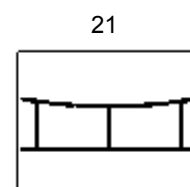
Push-button for opening doors



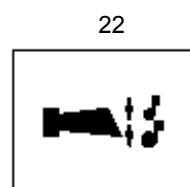
Push-button for closing doors



Current collection selector (pantograph)



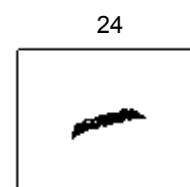
Voltage selector



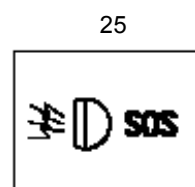
Two-tone horn



Regulation of brightness of equipment



Acknowledgement



Light warning

<sup>1</sup>TBL = Transmission: balise/locomotive

26



Headlight selector  
Full-beam / dipped

27



Timetable lighting

28



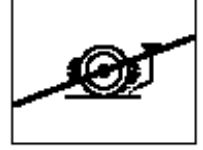
Driver's safety  
device (DSD)

29



Pneumatic wheel-  
slip protection

30



Cancellation of  
automatic sanding

31



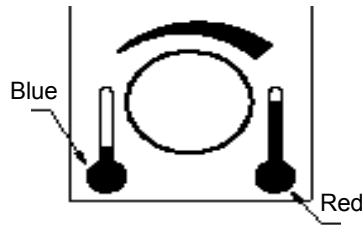
Manual sanding

32



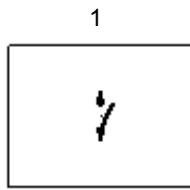
TBL test

34

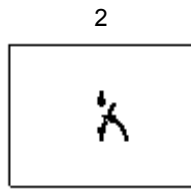


Regulation of cab  
temperature

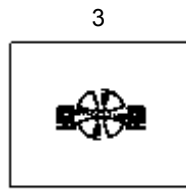
## Appendix G - Pictograms for switch boxes



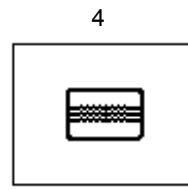
Circuit-breaker lock



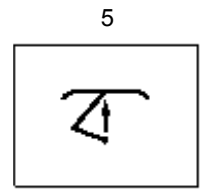
Circuit-breaker closure



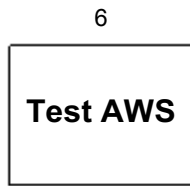
Air recirculation



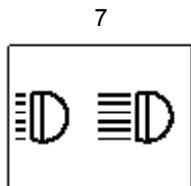
Heated window



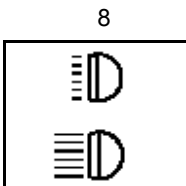
Maintain in service



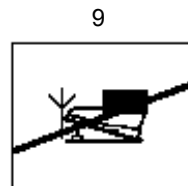
AWS (automatic warning system test)



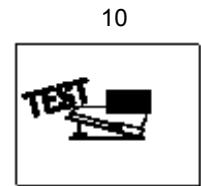
Lamps / headlights



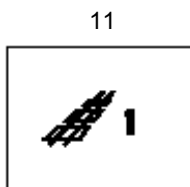
Fog (1 headlight + 1 lamp)



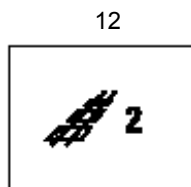
Cancellation of driver's safety device alarm



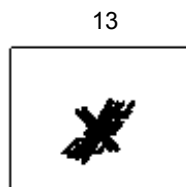
Driver's safety device test



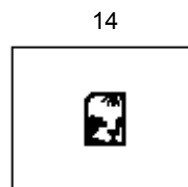
Setting of cab signal down line



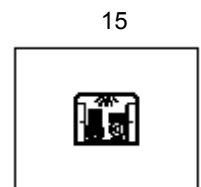
Setting of cab signal up line



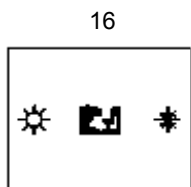
Neutralisation of cab signal



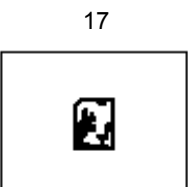
Cab lighting



Machine room lighting

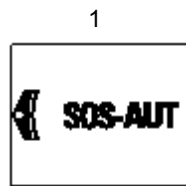


Cab air-conditioning

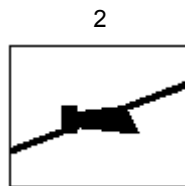


Equipment lighting

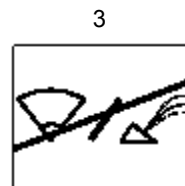
## Appendix H - Pictograms for controls not located on the driver's desk



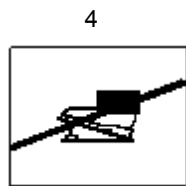
Setting of emergency brake control



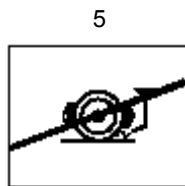
Isolation of horn



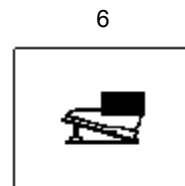
Isolation of windscreen wiper/washer



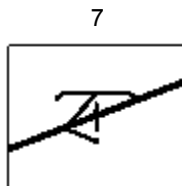
Isolation of driver's safety device



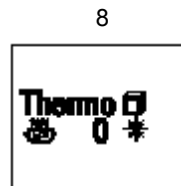
Isolation of sanding



Push-button for driver's safety device

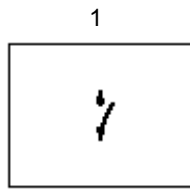


Cancellation of "maintain in service" mode

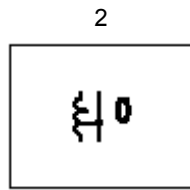


Thermal box control

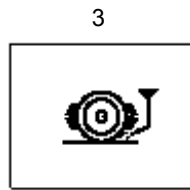
## Appendix I - Pictograms for fault indicator panel



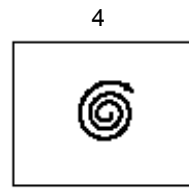
Circuit-breaker open



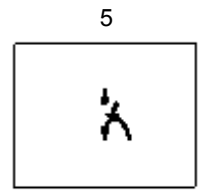
Control at zero



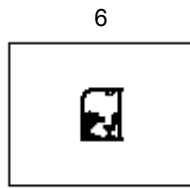
Automatic sanding



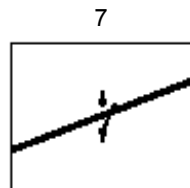
Wheel slip



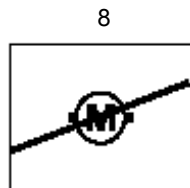
Permission to close circuit-breaker



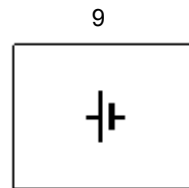
Other cab occupied



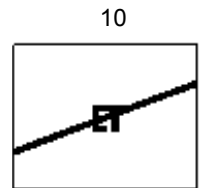
Circuit-breaker fault



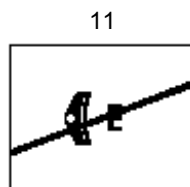
Traction fault



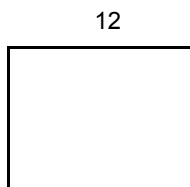
Fault in trailer vehicle battery charging



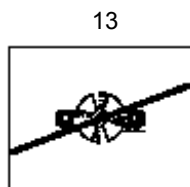
Running in Channel Tunnel prohibited



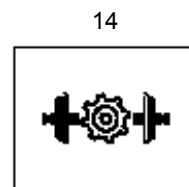
Rheostatic brake fault



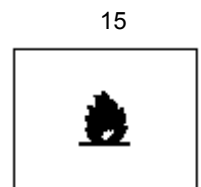
Isolation of automatic warning system ( AWS )



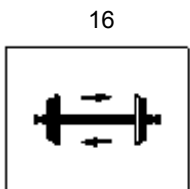
Air recirculation



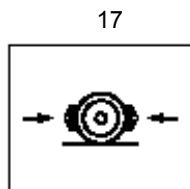
Damage to mechanical component



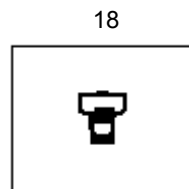
Fire alarm



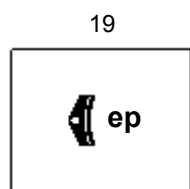
Bogie instability



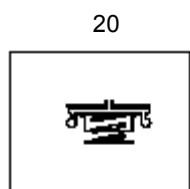
Brake not released



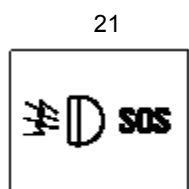
Passenger alarm



ep brake fault

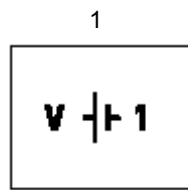


Damage to pneumatic suspension

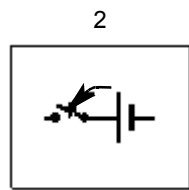


Alarm light

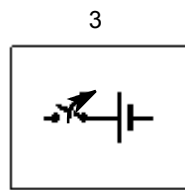
## Appendix J - Pictograms for cab control box



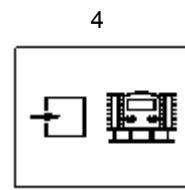
Voltage battery 1



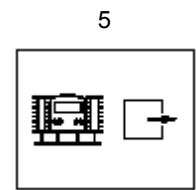
Closure of battery circuits



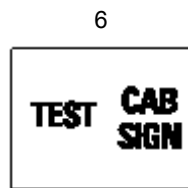
Opening of battery circuits



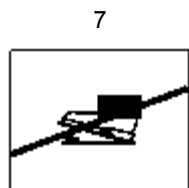
Start of washing programme



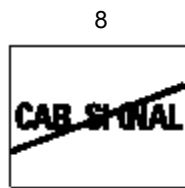
End of washing programme



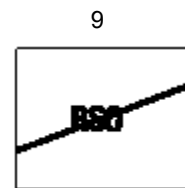
Cab signal test



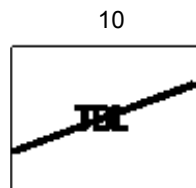
Isolation of driver's safety device



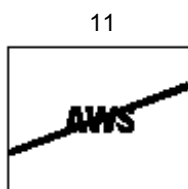
Isolation of cab signal



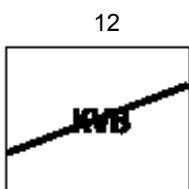
Isolation of RSO



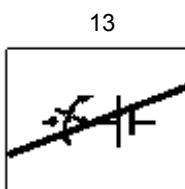
Isolation of TBL



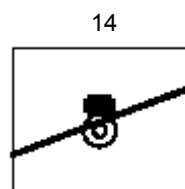
Isolation of AWS



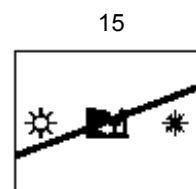
Isolation of KVB



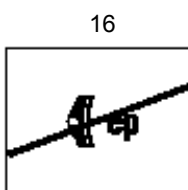
Isolation of battery control



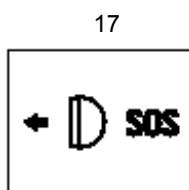
Isolation of compressor control



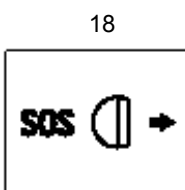
Isolation of cab air-conditioning



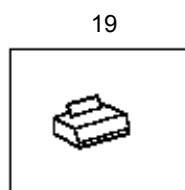
Isolation of EP brake



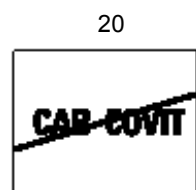
Emergency headlights/red lights. Left



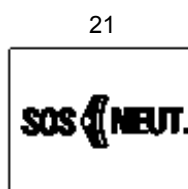
Emergency headlights/red lights. Right



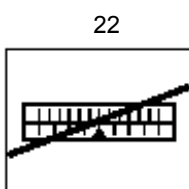
Printer



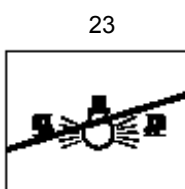
Isolation of cab signal speed control



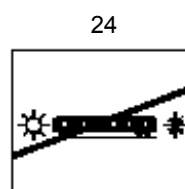
Emergency brake neutral function control



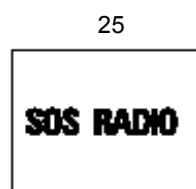
Isolation of speed indicator



Isolation of trailer vehicle lighting

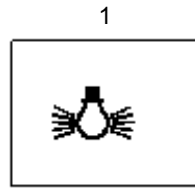


Isolation of trailer vehicle air-conditioning

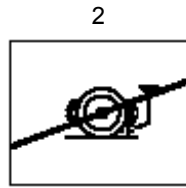


Emergency radio

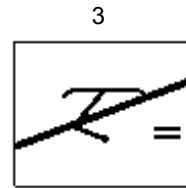
## Appendix K - Pictograms for controls in the engine room



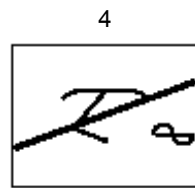
Engine compartment lighting



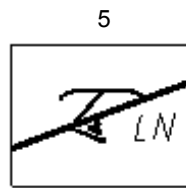
Pneumatic isolation of sanding equipment



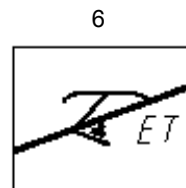
Isolation of pantograph on d.c. lines



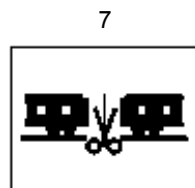
Isolation of pantograph on single-phase lines



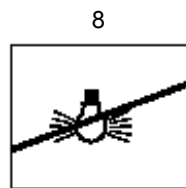
Isolation of pantograph stop on new high-speed lines



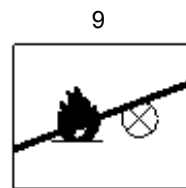
Isolation of pantograph stop in Channel Tunnel



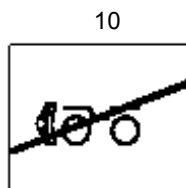
Separation control



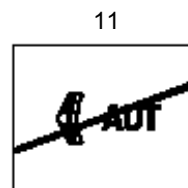
Switching-off of lighting in the engine compartment



Isolation of fire detection system

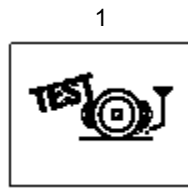


Isolation of bogie brake

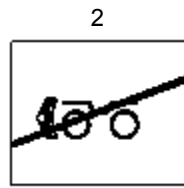


Main brake pipe stop cock

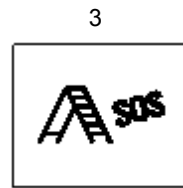
## Appendix L - External inscriptions



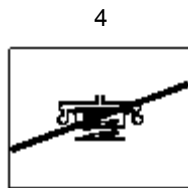
Sanding test



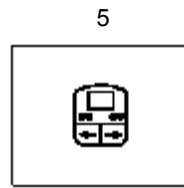
Isolation of bogie brake



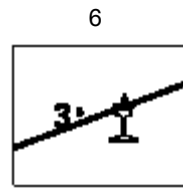
Emergency ladder



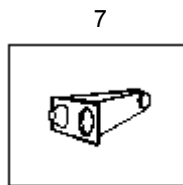
Isolation of pneumatic suspension



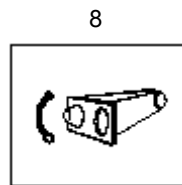
Control of nose doors



Isolation of third-rail shoe gear



Emergency coupler



Emergency coupler equipment



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*UIC Leaflet 471-1: Regulations covering the operating of lines crossing frontiers and the use of locomotives and multiple unit trains in international traffic*, 5th edition, February 2001

*UIC Leaflet 545: Brakes - Inscriptions, marks and signs*, 7th edition, April 2002

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*UIC Leaflet 627-2: Filling devices for diesel stock*, 2nd edition of 1.7.80

*UIC Leaflet 627-5: Regulations applicable to the construction of internal combustion-engined railcars accepted on international train ferry services*, 2nd edition of 1.7.80

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### **International Union of Railways (UIC)**

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