

GE/RT8000/SS2
Rule Book

Shunting

Issue 2

April 2008

Comes into force 07 June 2008



Published by:
Rail Safety and Standards Board
Evergreen House
160 Euston Road
London NW1 2DX

**Contents approved by Traffic Operation and Management
Standards Committee.**

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Issue	Date	Comments	Comes into force
1	June 2003	Initial issue	06 December 2003
2	April 2008	Replaces issue 1	07 June 2008

You will need this module if you carry out the duties of a:

- driver
- shunter
- guard
- signaller.

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Definitions

Shunting movement	Any movement of a train or vehicle other than a train passing normally along a running line.
Loose shunting	Shunting of vehicles that do not remain attached during the movement.
Points worked from a signal box	Includes points worked from a ground frame.
Shunter	The person in control of a specific shunting movement.
Unaccompanied driver	For the purpose of this module, a driver carrying out a shunting movement without an accompanying shunter.

2 Prohibitions or restrictions

The people responsible: driver, shunter

2.1 Movements

a) Using a traction unit

Unless otherwise authorised, as shown in section 2.1 b), you must start a shunting movement with a traction unit.

driver,
shunter

b) Using a chain, a rope or pushing with a road vehicle

On a running line or access to a running line

Providing the Network Rail area operations manager specifically authorises it for the line concerned, you may move vehicles using a chain or rope, or by pushing with a road vehicle, on:

- any running line, or
- any other line from which access to a running line can be made (for example, a line under possession or a siding where the route is set for the main line).

On non-running lines

You may move vehicles on non-running lines (for example, in depots or sidings) using any of the methods described above **providing** it is:

- published in local instructions, **and**
- authorised by the person in charge of the premises.

c) Props or poles

You must **never** move vehicles using a prop or pole against a locomotive or any rail or road vehicle.

**driver,
shunter**

2.2 Loose shunting

You may carry out loose shunting only:

- where specially authorised, and
- under local instructions.

3

Precautions before shunting

The people responsible: driver, shunter

3.1 Reaching an understanding

Before starting any shunting, you must reach a clear understanding with each other about:

- what exactly needs to be done
- how the shunting movements will be controlled.

**driver,
shunter**

3.2 Safety checks

a) Before making any movement

You must make sure that you understand fully the method of working at the location concerned.

You must make sure that:

- the vehicles can be moved safely
- vehicles are not foul of the movement to be made
- any road vehicle or equipment is well clear
- anyone who is in a position that could become dangerous is warned to move to a safe position
- anyone who is working on the outside of vehicles on an adjacent line is warned to keep clear.

**shunter (or
unaccompanied
driver)**

You must also check that any derailer or scotch block has been removed.

b) Checking points

**shunter (or
unaccompanied
driver)**

Before each movement, you must check that any hand points the movement will go over in the facing direction are fitting correctly and that any locking mechanism has engaged.

4 Safeguards while shunting

The people responsible: driver, shunter, guard

4.1 General

You must work only to the shunter's instructions.

driver

You must only make a movement, even when a signal has been cleared, if the shunter has:

- authorised the movement, or
- operated a shunting or other indicator which authorises the movement.

Except where specifically authorised, you must **not**:

- pass a signal at danger when making a movement
- exceed **5 mph** in a siding.

The driver must work only to your instructions.

shunter

The driver must only make a movement, even when a signal has been cleared, when you have:

- authorised the movement, or
- operated a shunting or other indicator which authorises the movement.

Except where specifically authorised, you must not allow a shunting movement to pass a signal at danger.

You must control the movement properly to prevent:

- heavy impacts with other vehicles or buffer stops
- collisions at fouling points.

shunter (or
unaccompanied
driver)

4.2 Controlling movements

a) By handsignals

shunter

You must use the handsignals shown on pages 11 and 12 to control a movement.

You must make sure that no other driver acts on your handsignals.

driver

You must:

- work only to the handsignals shown on pages 11 and 12
- stop the movement **immediately** if you lose sight of the shunter or the shunter's handsignals
- restart only when the shunter has given you the correct handsignal.

You must not start or continue with a movement unless:

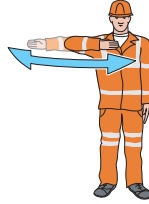
- you clearly understand the shunter's handsignal
- you are sure the handsignal applies to you.

Handsignals from shunter to driver

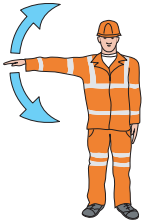
During daylight



Move **away** from the shunter



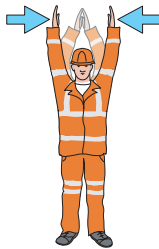
Move **towards** the shunter



Slow down



Stop immediately



Ease up

Handsignals from shunter to driver

During darkness

Move away from the shunter **Slowly move away from the shunter**

Move towards the shunter **Slowly move towards the shunter**

Stop immediately **Ease up**

b) By radio

You must:

- clearly identify the correct train and driver
- keep in constant communication with the driver (or other person controlling the movement) throughout each movement
- speak continuously or transmit a continuous bleep signal
- instruct the driver to stop immediately if you notice the transmission is failing.

shunter

If there is a break in transmission, you must:

- stop **immediately**
- restart only when the shunter tells you to.

driver

c) By audible signals

When a movement is being controlled by whistle or other similar means, you must work to these codes:

One - stop

Two - go ahead

Three - set back.

driver,
shunter

4.3 Entering a shed or building

Before entering a shed or building you must:

- stop the movement at the entrance
- proceed only when you have checked it is safe to do so
- sound the horn as a warning before restarting.

driver

shunter

You must:

- make sure the movement is stopped at the entrance to the shed or building
- check it is safe to enter before authorising the driver to proceed.

4.4 After each movement

shunter

After each movement, you must make sure vehicles:

- are secured, where necessary, by handbrakes
- are well clear of any points that need to be moved.

You must scotch vehicles on which:

- there are no handbrakes, or
- the handbrakes do not work.

You do not need to scotch vehicles if they are attached to other vehicles:

- on which handbrakes can be applied, and
- which are capable of holding the unbraked vehicles.

If you are shunting vehicles against stationary vehicles, you must secure any vehicles which are to remain at a stand before you make a draw-away movement.

You must not rely on the automatic brake to secure any vehicle.

4.5 Shunting beyond a limit of shunt signal or indicator

**driver,
shunter**

You must make sure no part of the movement passes a limit of shunt signal or indicator unless the signaller has given permission.

4.6 Shunting beyond a home signal

You must not allow a wrong-direction shunting movement to go beyond a home signal unless the signaller has given permission.

driver,
shunter

If there is a falling gradient towards the signal box in rear, you must not make the movement unless:

- the automatic brake is working throughout the train, or
- the locomotive is at the end nearer to the signal box in rear.

4.7 Operating ground frames

a) Controlling movements to a siding

Before operating a ground frame which controls movements to a siding, you must reach a clear understanding with the signaller about:

shunter

- the movements required, and
- whether the train will be shut in the siding.

If you shut the train in the siding, you must confirm to the signaller that the train is clear of the running line before you restore the ground frame to normal.

b) Ground frame unlocked by train staff or token

If a ground frame on a single line section needs to be unlocked by a train staff or token for shunting purposes, you must:

guard,
shunter

- get the train staff or token from the driver
- when shunting is completed, lock the points in the correct position for trains to pass on the running line
- return the train staff or token to the driver.

shunter

4.8 Controlling movements not driven from a cab at the leading end of the movement

When a traction unit, making a propelling movement or shunting movement, is not being driven from a cab at the leading end of the movement, you must:

- ride in the leading cab, if this is at the leading end of the movement, or
- ride in the vehicle at the leading end of the movement, if this is suitable, from which you can properly control the movement, or
- control the movement from a safe place on the ground where you are in contact with the driver or where the driver can see you.

A suitable vehicle is one that has all the following safety features for the shunter:

- a platform at the leading end of the vehicle to ride on
- handrails to hold on to, or a purpose-made seat to ride on
- access steps to get to and from the platform.

Before you allow a movement to begin, you must make sure it is safe to do so.

During the movement, you must:

- stay in contact with the driver, or if controlling the movement by handsignals, stay where the driver can see you
- keep a good lookout
- obey all signals unless you are specifically authorised to pass a signal at danger
- if anyone on or near the line appears to be in danger, tell the driver to stop the movement
- warn anyone on or near the line about the approaching movement.

You must control the movement so that it is made at a safe speed which will allow you to instruct the driver to stop the movement within the distance that the line is clear.

Riding in the leading cab or at the leading end

If you are riding in the leading cab or at the leading end of the movement, you must:

- keep a good lookout
- use the warning horn or a portable horn as necessary.

You must signal to the driver as necessary by:

- using the bell or buzzer code
- cab to cab telephone
- driver-guard communication equipment
- radio
- handsignal.

In an emergency you must stop the movement by using the automatic brake.

Controlling the movement from the ground

If you are controlling the movement from a safe place on the ground, you must signal to the driver as necessary by radio or handsignal.

If you are using radio, you must carry out the instructions shown in section 4.2 b) of this module.

If you are using handsignals, you must stay in view of the driver at all times.

shunter

5

Shunter's personal safety

The people responsible: shunter, driver

5.1 Riding on the step of a locomotive or vehicle

shunter

You must not ride on the step of a locomotive or vehicle.

You may ride on the special platform if provided on a shunting locomotive.

5.2 Using a brake stick or shunting pole

shunter

You must not ride on a brake stick or shunting pole.

To avoid the danger of going between vehicles to couple or uncouple, you must use a shunting pole whenever possible.

When using a shunting pole, you must not attempt to throw the link over the draw-hook until the buffers are touching.

5.3 Coupling or uncoupling

a) General

shunter, driver awareness

If you have to go between vehicles, you must:

- wait until the vehicles have stopped completely
- display a hand danger signal to the driver or instruct the driver not to move.

shunter

If there is any possibility that other vehicles might be shunted against those you are going to work between, you must instruct the other shunters not to make any movements towards them.

You must:

- **never** go between vehicles unless you are absolutely sure that the vehicles cannot move
- **never** remain between vehicles during an ease-up movement.

shunter

b) Automatic couplers

If you have to go between vehicles to deal with automatic couplers, you must wait until the vehicles have stopped a safe working distance apart, which must be at least 2 metres.

c) Multiple-unit trains

If you have to go between vehicles to couple or uncouple multiple units, you must:

- make sure the driver is present
- reach a clear understanding with the driver as to what exactly is to be done.

You must reach a clear understanding with the shunter as to what exactly is to be done.

driver

5.4 Dealing with the automatic brake

shunter

When **uncoupling**, you must disconnect the brake pipes before any other connections.

When **coupling**, you must connect the brake pipes after any other connections.

When dealing with the other connections (including the automatic couplers) you must prevent any movement of the vehicles by:

- leaving the air-brake pipe cocks open, or
- leaving the vacuum-brake pipes off the dummy couplings.

5.5 Dealing with the electrical train supply (ETS) connections

a) Making sure the power is switched off

shunter

You must make sure the ETS is switched off or the shore supply is disconnected before:

- opening the dust caps on cable sockets
- coupling or uncoupling the ETS.

b) Coupling or uncoupling the connections

If you can safely reach the connections from alongside the vehicles, you may couple or uncouple them before dealing with the brake pipes.

When coupling or uncoupling the connections, you must make sure:

- the cables do not trail on the ground
- you take special care if there is conductor rail equipment.

6

Driving a traction unit from the leading cab

The person responsible: driver

6.1 Shunting movements

You must always drive a light locomotive (single or in multiple), on-track machine, multiple-unit or push/pull train from the leading cab when a shunting movement is:

- within a maintenance depot, servicing depot or stabling siding
- entering a shed or building
- proceeding onto vehicles
- approaching buffer stops.

However, you can drive a light locomotive from another cab, provided that both of the following apply:

- a shunter is controlling the movement by radio
- it is not necessary for you to observe signals or handsignals.

You must drive from the leading cab whenever possible when making any other shunting movement. If you cannot do so, you can drive from another cab, providing a shunter can control the movement, as shown in section 4.8 of this module.

driver

6.2 When the driving controls are defective

driver

If the driving controls are defective in the leading cab, you can drive from another cab, which must be a forward-facing cab if one is available.

A competent person must:

- ride in the leading cab
- keep a good lookout
- use the warning horn as necessary
- observe all signals.

The competent person must signal to you as necessary by:

- using the bell or buzzer code
- cab to cab telephone
- driver-guard communication equipment
- radio
- handsignal.

The competent person must be prepared to stop the movement by using the automatic brake in an emergency.

If the emergency bypass switch (EBS) has been operated on a multiple-unit train, you must carry out the instructions shown in module TW5 *Preparation and movement of trains: Defective or isolated vehicles and on-train equipment*.

6.3 Propelling movements

If you are making a propelling movement, you must drive from the leading cab unless either of the following applies:

- you are required to observe signals or handsignals, and you will have a better view of these signals from another cab
- a shunter is controlling the movement by radio, and it is not necessary for you to observe signals or handsignals during the movement.

driver

7

Attaching and detaching vehicles

The people responsible: driver, shunter

7.1 Passenger and postal trains

driver

You must make sure the automatic brake is in use on movements which involve attaching to or detaching from:

- a passenger train, or
- a train carrying sorting staff.

7.2 Attaching a traction unit to a train or vehicles

driver

You must:

- stop at any distance set out in the instructions for the class of traction unit involved
- always stop the traction unit 2 metres from the vehicle
- move forward only when authorised by the shunter (or when it is safe to do so if a shunter is not with you).

7.3 Detaching a locomotive or vehicle from a train

Before detaching a locomotive you must:

shunter

- apply enough handbrakes or scotches to secure the train
- apply them at the lower end of the train when it is on a gradient.

You must not rely on the automatic brake to secure a train or vehicles after detaching the locomotive.

After detaching a vehicle from a train, you must properly secure the vehicle by handbrake or scotches.

7.4 Detaching traction units that are coupled together on a running line

You must not uncouple a traction unit from another traction unit on a running line except:

driver

- at a signal box
- at a signal which has a telephone
- on a platform line.

Before uncoupling traction units at a location where this does not happen regularly, you must tell the signaller what movements need to be made.

8

Movements over points worked from a signal box

The people responsible: shunter, signaller, driver

Reference in this section to points worked from a signal box includes those worked from a ground frame. Reference to the signaller includes a ground-frame operator.

8.1 Authorising the movement

a) Getting the signaller's permission

shunter (or unaccompanied driver)

Before authorising a movement over points worked from a signal box, you must:

- get the signaller's permission either verbally or by a handsignal described in 8.1 b) below.
- check the points are fitting correctly, where possible.

b) Signaller giving permission

signaller

You must give the shunter or driver permission:

- by speaking directly to the shunter or driver, where appropriate, or
- by these handsignals:
 - During daylight - arm raised above the head.
 - During darkness - white light moved quickly by twisting the wrist.

c) When the signaller's permission is not needed

You do not need the signaller's permission if either of the following apply:

**shunter (or
unaccompanied
driver)**

- The signaller has cleared a signal for the movement.
- The movement will pass a shunting or position-light signal which has a yellow 'normal' indication, and the points are set for a route to which the signal does not apply when it is cleared.

Before moving these points, you must check that no shunting movement will be affected.

signaller

8.2 Shunting between sidings and a running line

When a shunting movement needs to be made between sidings and a running line, you must reach a clear understanding with the shunter or driver before moving any points.

signaller

8.3 When the movement is clear of points

**shunter (or
unaccompanied
driver)**

If you need to indicate to the signaller that a movement is clear of points that need to be moved, you must do so as follows:

Shunter

Day - arm raised above the head.

Night - white light moved quickly by twisting the wrist.

Unaccompanied driver

Any time - one short blast on the horn.

driver

If your locomotive is near to points which need to be moved, you must indicate to the signaller that the train is clear of them by sounding the horn, as follows:

After crossing from one running line to another - one long blast followed by one short blast

After shunting clear of all running lines - three short blasts.

signaller

You must not move the points concerned after a movement has been made until the shunter or driver has given you the correct handsignal or audible signal.

9

When shunting is completed

The people responsible: shunter, driver, signaller

Reference in this section to the signaller includes a ground-frame operator.

9.1 Leaving vehicles in a safe position

You must make sure that vehicles are:

- not left by mistake on a running line
- not fouling any other line
- well clear of any points which need to be moved
- left within the protection of any trap points, derailleurs or scotch blocks.

shunter (or
unaccompanied
driver)

You must also make sure that there is enough room at fouling points for anyone to pass safely between:

- the vehicles which are to be left, and
- any movement on the adjoining line.

9.2 Securing vehicles and traction units

You must check that vehicles are properly secured to prevent them moving.

shunter

To secure any traction unit you must apply the parking brake or handbrakes.

driver

You must not rely on the automatic brake to secure any vehicle or traction unit.

shunter,
driver

9.3 Leaving vehicles on a dead-end line

shunter

When leaving vehicles on a dead-end line, you must make sure that:

- the vehicles are properly secured
- if the buffer stop has a red or white light, a light of the same colour is placed on the end of the vehicle which faces approaching movements.

driver

If you leave a traction unit on a dead-end line, you must make sure that:

- it is properly secured
- if the buffer stop has a red or white light, you place a light of the same colour on the end of the unit which faces approaching movements.

9.4 Protecting running lines

shunter

You must make sure that:

- ground-frame operated points and derailleurs are left in the normal position
- scotch blocks, where provided, are placed across the rails.

9.5 Checking that all running lines are clear

signaller

If necessary, you must ask the shunter or driver to confirm that all running lines are clear.

The term	Includes or means:
Aspect	The indication of a colour light signal that the driver sees.
Conductor rail	A rail through which electricity is supplied to electric-powered trains.
Ground frame	A control point containing levers or switches to allow points in running lines and sidings, and any associated signals, to be operated locally. This local operation is only possible when the signaller at the controlling signal box gives a release. Also includes a ground-switch panel.
Hand points	Points that are worked manually by lever independent of any other signalling controls.
Home signal	The first stop signal on the approach to a signal box using the absolute block system of signalling.
Main aspect	The following aspects of a colour light signal: <ul style="list-style-type: none">• red• yellow• two yellows• flashing yellow• two flashing yellows• green.
Maintenance depot	A location defined in a train operator's Contingency Plan with the facilities to repair or replace specified items of defective on-train equipment.

The term	Includes or means:
Protection	Ways of making sure that a line is protected. This includes keeping signals at danger, placing detonators on the line, using a track circuit operating clip and showing a hand danger signal.
Running line	A line as shown in Table A of the <i>Sectional Appendix</i> .
Siding	A line on which vehicles are marshalled, stabled, loaded, unloaded or serviced clear of a running line.
Single line	One line is available for movements in both directions.
Station limits	The line between the home signal and the section signal worked by the same signal box and in the same direction of travel. This does not apply on a track circuit block line.
Token	Any single line token, train staff or tablet.
Track circuit block	A method of signalling trains in a section of line using track circuits or other means of automatic train absence detection and without using block instruments.
Traction unit	Locomotive, multiple unit, self-propelled rail vehicle or road/rail vehicle operating in rail mode.
Train	Light locomotive, self-propelled rail vehicle or road-rail vehicle in rail mode.
Trap points	Facing points at an exit from a siding or converging route that derail an unauthorised movement, so protecting the adjacent line.

