

# TRACK CIRCUIT BLOCK REGULATIONS ISSUE 11/07

I, the undersigned, acknowledge receipt of this publication. I undertake to familiarise myself with any alterations which apply to me.

**FULL NAME (CAPITALS)** \_\_\_\_\_

**STAFF NUMBER** \_\_\_\_\_

**GRADE** \_\_\_\_\_

**LOCATION** \_\_\_\_\_

**SIGNATURE** \_\_\_\_\_

**DATE RECEIVED** \_\_\_\_\_

**Please hand this form to your Manager/  
Supervisor on completion**

### REISSUED PAGES

- some alterations are being made to these Regulations
- for convenience, all pages are reissued and the existing pages must be discarded
- each new or altered item on the reissued pages is indicated by a vertical black line in the margin
- a short vertical black line against a blank space indicates that an item has been deleted

### EXPLANATION OF PRINCIPAL CHANGES

#### **Regulation 3.6**

- these requirements were previously shown in Rule Book, Section M

#### **Regulation 10.2 & 10.3**

- these Regulations now include instructions previously shown in Rule Book, Section M

#### **OPERATIVE DATE**

- these alterations apply from 24th November 2007

Not Used

**INDEX**

1.0	Definitions	2
2.0	Description of system	2
3.0	Mode of signalling	3
4.0	Obstruction of the line	9
5.0	Stop and examine train	12
6.0	Train proceeding without authority	14
7.0	Train an unusually long time in section	17
8.0	Train without tail lamps	18
9.0	Examination of the line	18
10.0	Admission of train to an obstructed section	22
11.0	Failure of signalling equipment	24
12.0	Single Line Working	35
13.0	Opening or closing of signal boxes	37

## 1.0 DEFINITIONS

- **SECTION** - the line between two stop signals (whether or not these are within the area of control of the same signal box)
- **OVERLAP** - the distance ahead of a stop signal up to which the line must be clear before the signal next in rear can clear

## 2.0 DESCRIPTION OF SYSTEM

- Track Circuit Block signalling permits a signal to exhibit a proceed aspect when:
  - all track circuits in the line ahead are clear up to and including the overlap beyond the next stop signal
  - all necessary points within that distance are detected in the correct position for the safe passage of the train
  - on a single or bi-directional line, the traffic direction controls are also correctly set
- controlled signals (some of which may be set to work automatically) are operated directly by the Signaller and automatic signals are operated by the passage of trains
- Automatic Route Setting is provided at some signal boxes
- trains are described by train describer apparatus or telephone

## **3.0 MODE OF SIGNALLING**

### **3.1 GENERAL INSTRUCTIONS**

- you must observe the Track Circuit Block Regulations together with the relevant Signalmen's General Instructions (SGI)
- you must describe trains, operate controlled signals and, on a single or bi-directional line, ensure that the traffic direction controls are correctly set in sufficient time to avoid delays to trains

### **3.2 WORKING OF SIGNALS**

- before operating the signal control device to permit a train to proceed, you must ensure that:
  - the Rules and Regulations have been complied with
  - no conflicting movement requiring preference is to be made
  - the route is set or free to be set by the interlocking
  - where necessary, a release has been obtained from any other Signalman involved
  - in the case of a single or bi-directional line, the traffic direction controls are correctly set
- when a signal has been cleared, it must not be replaced to Danger, except in emergency, unless you are certain that the aspect of the signal ahead of any approaching train will not be changed

## 3.0 MODE OF SIGNALLING

- when you are required to place or maintain a signal at Danger, this also applies to an automatic signal for which an emergency replacement facility is provided in the signal box
- you must not allow the line within the overlap of a signal to be obstructed or to be occupied by an unsignalled movement until:
  - any approaching train has been stopped at that signal, or
  - the controlled signal next in rear has been replaced to Danger to protect the obstruction or movement
- before permitting a movement which, by occupying a track circuit, would alter the aspects displayed at signals, you must place or maintain the necessary signals at Danger to protect the movement
- where the signal concerned is controlled by another Signaller, you must request that person to place or maintain that signal at Danger

## 3.3 DESCRIBING TRAINS

- where train describers are provided, care must be taken to ensure that trains are correctly described
- the cancellation of a description must be done by train describer or telephone
- you must make the necessary correction if a train is incorrectly described
- two or more light locomotives coupled together must be described as a light locomotive

### **3.0 MODE OF SIGNALLING**

- if the movement will pass beyond your area of control, you must advise the other Signaller of the precise formation
- if a train required to stop in section will pass beyond your area of control, you must advise the other Signaller of the type of train and where it will stop

### **3.4 SIGNALLING OF TRAINS ON OCCUPIED PLATFORM LINES**

- you must not permit any train or movement to enter an occupied platform line except:
  - a passenger train, or
  - an empty coaching stock train, or
  - a light locomotive(s), or
  - a shunting movement for the purpose of attaching or detaching or removing vehicles from that line
- before signalling a passenger train (loaded or empty) to enter an occupied platform line, you must be certain there is sufficient room for the train to be dealt with
- if necessary, you must obtain a suitable assurance from the Person in Charge of the platform
- if you have previously authorised a movement on that line, you must obtain an assurance that it is completed



## **3.0 MODE OF SIGNALLING**

- you must not signal a train into an occupied platform line at a station where it is not booked to call unless you have first advised the Driver of the circumstances

### **3.5 SIGNALLING BY TELEPHONE DURING A FAILURE OF SIGNALLING EQUIPMENT OR SINGLE LINE WORKING**

#### **3.5.1 General Instructions**

- you must signal trains by telephone as shown in Regulations 11 or 12 when it is not possible to use the train describer
- when normal working is to resume, you must come to a clear understanding with the other Signaller

#### **3.5.2 Mode of signalling**

- the mode of signalling (A and B representing two Signallers) must be as follows during signalling by telephone:

#### **INSTRUCTIONS TO A**

- check that the previous train has passed clear
- ascertain from B whether the line concerned is clear
- give the description of the train which is to enter the section
- when accepted by B, the train may proceed
- tell B when the train concerned enters the section

## 3.0 MODE OF SIGNALLING

### INSTRUCTIONS TO B

- provided the line is clear (as shown below) and no conflicting movement has been authorised, you may accept a train from A
- do this using the words “ ..... line is clear for ..... train”, giving the name of the line and the train description
- **during a failure of signals and/or track circuits**, the line must be clear to the end of the overlap of the first stop signal
- **during Single Line Working**, the line must be clear as shown in Regulation 12
- after you have accepted the train, you must not permit any obstruction of the line on which it is required to run within the clearance point described above until:
  - the train concerned has passed the clearance point, or
  - the train is stopped at the first stop signal worked from your signal box, or
  - you have been informed by A that the train is not now required to enter the section
- if you are not in a position to accept the train, you must tell A that the line is blocked and give the reason for non-acceptance
- when the train complete with tail lamps has passed the clearance point described above, you must tell A that the train concerned has passed clear of the section

## 3.0 MODE OF SIGNALLING

### 3.6 WORKING IN WRONG DIRECTION

#### 3.6.1 When this Regulation applies

- when an assisting train is to proceed in the wrong direction over an adjacent line to assist a failed train from the front

#### NOTES

- (1) **the assisting train must comprise a light engine(s) or an empty multiple unit train**
- (2) **this Regulation 3.6 is not authorised where there is a tunnel in the section**

#### 3.6.2 Before authorising the movement

- you must ensure that the line is clear and safe for the movement in accordance with Rule Book, Section D
- you must obtain the permission of the Signal Box Supervisor, where provided
- you must first arrange for the points where the assisting train will return to the right line to be set for the movement
- where necessary, you must obtain an assurance from the other Signaller or the Ground Frame Operator that this has been done
- where a protecting signal is not provided at those points or the points are trailing for the movement, you must first ensure that a suitable person is stationed at those points to handsignal to the Driver

## 3.0 MODE OF SIGNALLING

### 3.6.3 When authorising the movement

- you must observe the appropriate provisions of Rule Book, Section D
- tell the Driver the approximate position of the disabled train on the other line

## 4.0 OBSTRUCTION OF THE LINE

### 4.1 WHEN THIS REGULATION APPLIES

- if it necessary to stop trains because of an obstruction of the line or any incident or emergency where trains may be endangered

### 4.2 IMMEDIATE ACTION TO BE TAKEN

- if it is necessary to stop trains in an emergency, you must immediately take whatever action is appropriate to the circumstances and in whatever order is most likely to prevent (or minimise) danger in the shortest time
- this includes:
  - placing or maintaining signals at Danger
  - arranging for trains to be stopped by use of train-radio (or any other means of communication)
  - diverting trains to another line
  - alerting any Crossing Keeper affected

## 4.0 OBSTRUCTION OF THE LINE

- where the obstruction is within the overlap of the protecting signal, you must also arrange for the signal next in rear (which can be controlled to Danger) to be placed and maintained at Danger unless there are facing points which can be set for an unaffected route
- you must also place or maintain any release/acceptance switch (where provided) in the normal position

## 4.3 WHERE ANOTHER SIGNALMAN IS INVOLVED

- you must immediately advise any other Signaller controlling a signal(s) which protects the affected section
- when located in another signal box, you must make an emergency call to this Signaller, using the words Obstruction Danger, followed by the necessary information
- if you receive such advice from another Signaller, you must observe this Regulation 4
- tell the Signaller sending this advice if you have been able to stop the train(s) proceeding towards the obstruction
- if unable to stop such a train proceeding, you must comply with Regulation 6

## 4.4 AFTER TRAINS HAVE BEEN STOPPED

- provided adequate signal protection is being given, you may tell the Driver or person concerned that Emergency Detonator Protection is not required or, if such arrangements have already started, need not be continued
- tell the Driver of any train detained in rear of the affected section to remain there and not proceed until authorised by you (even if a signal clears)

## 4.0 OBSTRUCTION OF THE LINE

- you must not allow a train to proceed into the affected section until the line is again clear and safe for the passage of trains unless it is necessary to:
  - examine the line in accordance with Regulation 9, or
  - allow a train to proceed in accordance with Regulation 10, or
  - work to and from a point of obstruction, or
  - serve an intermediate location where this can be done safely, or
  - allow a train to pass through a diverging junction before reaching the obstruction
- you must reach a clear understanding with any other Signaller involved when making these arrangements

## 4.5 ANIMALS AND MINOR OBSTACLES

- if there are animals likely to cause an obstruction or minor obstacles on the line, you must arrange for the line to be cleared
- the above instructions in this Regulation 4 do not apply, but if any train is to pass through the affected section before the line is cleared, you must:
  - advise the Driver of the circumstances
  - instruct the Driver to proceed cautiously
  - tell the Driver not to enter any tunnel unless it has been ascertained that the tunnel is clear
- you must also inform any other Signaller involved who must then observe this Regulation 4.5

## 5.0 STOP AND EXAMINE TRAIN

### 5.1 WHEN THIS REGULATION APPLIES

- if it is necessary to stop a train which is affected by any irregularity such as an insecure load, a vehicle on fire, a hot axle box or door open or other mishap

**EXCEPTION:** this Regulation does not apply in the circumstances listed in Regulation 6 or 8

### 5.2 IMMEDIATE ACTION TO BE TAKEN

- you must immediately arrange for the train concerned to be stopped and examined or dealt with as necessary
- you must also arrange for trains to be stopped which would either:
  - pass the train concerned on an adjacent line, or
  - pass over the affected route on the same or any other line
- if necessary you must follow the procedures for stopping trains in emergency as shown in Regulation 4
- if the train concerned will pass beyond your area of control, you must immediately advise the other Signaller who must then observe this Regulation 5
- when located in another signal box, you must make an emergency call to the Signaller, using the words Stop and examine train, followed by the necessary information

## 5.0 STOP AND EXAMINE TRAIN

### 5.3 AFTER THE TRAIN CONCERNED HAS BEEN STOPPED

- if it is confirmed that no other line is obstructed, you may allow normal working to resume on that line(s)
- you must arrange for the Driver of any train stopped on that line(s) to be advised of the circumstances
- if however, nothing can be found wrong with the train concerned, you must arrange for the Driver of the first train over the affected portion of route (on any line) to be:
  - advised of the circumstances
  - instructed to proceed cautiously
- if the train concerned is stopped but it is not possible to deal with it, you must make the following arrangements:
  - if it is safe to do so, the train may proceed to a place where it can be dealt with
  - the train must not pass, or be passed by, another train on the adjacent line unless this can be done safely
- when located in another signal box, you must make an emergency call to this Signaller, using the words Stop and examine train, followed by the necessary information



## **5.0 STOP AND EXAMINE TRAIN**

### **5.4 ACTION TO BE TAKEN IF A DOOR IS OPEN ON A PASSENGER TRAIN**

- you need not detain trains on any line to ascertain whether the line is obstructed
- you must, however, arrange for the Driver of the first train over each line on the affected portion of the route to be:
  - advised of the circumstances
  - instructed to proceed cautiously
- if it known that a passenger has fallen from a train, you must, instead, arrange for the line to be examined in accordance with Regulation 9

## **6.0 TRAIN PROCEEDING WITHOUT AUTHORITY**

### **6.1 WHEN THIS REGULATION APPLIES**

- if either of the following occurs or is suspected:
  - a train is proceeding without authority
  - vehicle(s) are running away

### **6.2 IMMEDIATE ACTION TO BE TAKEN**

- you must immediately take whatever action is appropriate to the circumstances and in whatever order is most likely to prevent (or minimise) danger in the shortest time
- this includes:
  - placing or maintaining signals at Danger to stop the train concerned
  - placing or maintaining signals at Danger to prevent the approach of trains which may be endangered

## 6.0 TRAIN PROCEEDING WITHOUT AUTHORITY

- arranging for the train concerned and/or any other which may be endangered to be stopped by use of train-radio (or any other means of communication)
- diverting trains to another line
- alerting any Crossing Keeper affected

## 6.3 WHERE ANOTHER SIGNALMAN IS INVOLVED

- you must immediately advise any other Signalman controlling a signal(s) which is required to be placed or maintained at Danger as shown above
- when located in another signal box, you must make an emergency call to this Signalman, using whichever of the following words is appropriate, followed by the necessary information:
  - Train proceeding in wrong direction without authority, or
  - Train proceeding in right direction without authority, or
  - Train proceeding without authority, in the case of a single line
- if you receive such advice from another Signalman, you must observe this Regulation 6

## 6.4 AFTER A TRAIN PROCEEDING WITHOUT AUTHORITY HAS BEEN STOPPED

- you must observe the provisions of SGI 9 (Drivers inadvertently passing signals at Danger)
- provided the train concerned has stopped safely, normal working may resume on the other line(s)

## **6.0 TRAIN PROCEEDING WITHOUT AUTHORITY**

- normal working may resume on the line concerned only after the provisions of SGI 9 have been observed

### **6.5 AFTER RUNAWAY VEHICLES HAVE COME TO A STAND**

- you must arrange for a competent person to be provided to:
  - secure the vehicles
  - arrange assistance protection (in accordance with Rule Book, Section M)
  - report their location
- you must check whether any other line is affected
- provided this is not the case, normal working may resume on the other lines, but you must arrange for the Driver of the first train over any other line to be:
  - informed of the circumstances
  - instructed to proceed cautiously
- if you cannot ascertain whether any other line is affected, you must arrange for the section to be examined in accordance with Regulation 9
- you must observe the instructions in Regulation 10 when arranging for the runaway vehicles to be cleared from the section

## 7.0 TRAIN AN UNUSUALLY LONG TIME IN SECTION

### 7.1 WHEN THIS REGULATION APPLIES

- if a train is not making normal progress or progress appropriate for the circumstances

**NOTE:** if the Driver of a failed train is unable to contact you immediately and the train will be able to restart within ten minutes, you will not receive advice of the failure

### 7.2 ACTION TO BE TAKEN

- you must try to ascertain the cause
- use train-radio (where available) or other means of communication
- if necessary, you must arrange for the Driver of the first train over any other line to be:
  - advised of the circumstances
  - instructed to proceed cautiously
- you must not, however, allow any train to proceed over any other line, except as shown in Regulation 9, until you have ascertained that the line is clear if:
  - there is fog or falling snow, or
  - there is a tunnel in the section

### 7.3 WHERE ANOTHER SIGNALMAN IS INVOLVED

- you must advise any other Signaller involved, who must then observe this Regulation 7

## 8.0 TRAIN WITHOUT TAIL LAMPS

### 8.1 WHEN THIS REGULATION APPLIES

- if a train is proceeding with one or both tail lamps missing or unlit

### 8.2 ACTION TO BE TAKEN

- you must establish whether the train is complete
- if the train concerned will pass beyond your area of control, you must immediately advise the other Signaller who must then observe this Regulation 8

### 8.3 IF IT IS ESTABLISHED THAT THE TRAIN IS COMPLETE

- the train may continue as shown in Rule Book, Section H
- if the train is to continue its journey with other than the normal tail indication, a message to this effect must be sent forward to the signal boxes on the route concerned

## 9.0 EXAMINATION OF THE LINE

### 9.1 WHEN THIS REGULATION APPLIES

- if it is necessary to use a train to ascertain whether a line(s) is clear in accordance with Regulations 4, 5, 6, 7 or 11

**EXCEPTION:** a train must not be used to examine any line affected by a subsidence or suspected damage to a structure above or beneath the railway unless you have first obtained an assurance from a competent Civil Engineering Department employee that the line appears safe for the passage of trains, even if only at reduced speed

## 9.0 EXAMINATION OF THE LINE

### 9.2 LINE TO BE USED

- the examining train may pass over any line except that, in the case of a track circuit failure (TCF) or suspected track defect, it must pass over the affected line
- the movement must take place in the right direction (either direction on a single or bi-directional line)

### 9.3 TRAIN TO BE USED

- you may use any train to examine the line except as follows
- during darkness, fog or falling snow or where there is a tunnel in the affected section, you may use a train on which the headlight has failed ONLY if a portable headlight is in use
- during fog or falling snow, you may use a passenger train ONLY if the examination is in connection with a TCF
- you must not permit a passenger train examining the line to enter a tunnel unless:
  - it is not affected, or
  - it has been established that it is clear
- where necessary, you can establish that a tunnel is clear by obtaining an assurance from:
  - a member of the traincrew or other competent person who has walked through the tunnel, or
  - in the case of a TCF or suspected track defect, the Driver of a train which has passed through the tunnel on an unaffected line

## **9.0 EXAMINATION OF THE LINE**

### **9.4 ACTION TO BE TAKEN BEFORE EXAMINATION OF THE LINE**

- you must reach a clear understanding with any other Signaller involved as to what is required
- make sure that the last train on any line has passed clear of the overlap of the signal beyond the affected portion of line
- check that no other movement has been authorised in either direction on any line
- if the line is to be examined in connection with a TCF or suspected track defect, any train may, in the meanwhile, be signalled normally over an unaffected line, but the Driver must be:
  - advised of the circumstances
  - instructed to proceed cautiously
  - told to report the state of the affected line
- if the Driver reports that the affected line appears to be clear, normal working may resume on the unaffected line(s) until an examining train is ready to enter the section of the line concerned

### **9.5 WHEN INSTRUCTING THE DRIVER OF THE EXAMINING TRAIN**

- advise the Driver of the circumstances
- instruct the Driver to proceed cautiously over the affected portion of the line, prepared to stop short of any obstruction, and report whether the line is clear
- if there is any possibility of a derailment at catch points in the section, tell the Driver to stop short of that location and not proceed without ensuring it is safe to do so

## 9.0 EXAMINATION OF THE LINE

- tell the Driver to arrange to be accompanied by the Guard or other employee during darkness, or fog or falling snow, or in a tunnel (unless illuminated)

**EXCEPTION:**      **this does not apply if the examination is in connection with a TCF**

- you must observe the provisions of Rule Book, Section D when authorising the Driver to pass any signal held at Danger by a TCF

## 9.6 WHILE THE LINE IS BEING EXAMINED

- you must not allow any other train to enter the section concerned on the same or an adjacent line until the examination is completed and it is established which lines are safe for the passage of trains

## 9.7 AFTER THE LINE HAS BEEN EXAMINED

- if it is established that the line is clear following an examination in connection with a TCF, you must observe the requirements of Regulation 11 in respect of the following trains
- if it is reported that the line appears safe for the passage of trains following an examination in connection with a suspected track defect, you must ensure that the Driver of each subsequent train over that line is:
  - informed of the circumstances
  - instructed to proceed cautiously over the affected portion of the line
- this must continue until the line is confirmed to be safe by a competent Civil Engineering Department employee



## 10.0 ADMISSION OF TRAIN TO AN OBSTRUCTED SECTION

### 10.1 WHEN THIS REGULATION APPLIES

- if it is necessary for a train to enter an obstructed section in order to:
  - proceed to an obstruction
  - assist a disabled train
  - recover runaway vehicles
  - recover the rear portion of a divided train

### 10.2 BEFORE AUTHORISING THE MOVEMENT

- you must have a clear understanding of the location of the obstruction, disabled train or vehicles to be recovered from the section
- in the case of a disabled train, you must obtain an assurance from the Driver that it will not be moved
- make certain that the Driver of the disabled train is either:
  - positioned at the Assistance Protection point in the direction from which the assisting train will arrive, waiting to conduct it from there, or
  - already conducting the assisting train, or
  - immediately proceeding to the Assistance Protection point
- in the latter case, you must not let the assisting train enter the section until sufficient time has elapsed to enable the Driver of the disabled train to reach the Assistance Protection point
- you must arrange for the Driver of any train on an adjoining line to be instructed to proceed cautiously through any tunnel unless it is known that the tunnel is clear

## 10.0 ADMISSION OF TRAIN TO AN OBSTRUCTED SECTION

- you must observe the appropriate provisions of Rule Book, Section D
- you may permit the overlap of a stop signal ahead of a disabled train to be occupied or fouled provided:
  - you have an assurance that the disabled train will not be moved, AND
  - the assisting train has not yet entered the section

## 10.3 WHEN AUTHORISING THE MOVEMENT

- you must speak personally to the Driver of the assisting train
- you must reach a clear understanding with that Driver as to:
  - what is required
  - the approximate location of the disabled train
  - the end of the section to which the train is to be moved
- where necessary, you must authorise the Driver to pass the protecting signal at Danger in accordance with Section D

## 10.4 WHEN THE LINE IS AGAIN CLEAR

- you must arrange for the Driver of the first train over the line concerned to be:
  - informed of the circumstances
  - instructed to proceed cautiously over the affected portion of line

## **10.0 ADMISSION OF TRAIN TO AN OBSTRUCTED SECTION**

### **10.5 IF ANOTHER SIGNALMAN IS INVOLVED**

- you must reach a clear understanding with any other Signaller involved as to what is required
- if an assisted train will continue beyond your area of control, you must advise the other Signaller of the circumstances

## **11.0 FAILURE OF SIGNALLING EQUIPMENT**

### **11.1 WHEN THIS REGULATION APPLIES**

- if a failure of train describers, signals or track circuits occurs (see Regulations 11.2 to 11.5)
- during an extensive failure or disconnection of signalling equipment (see Regulation 11.6)
- if a train fails to operate track circuits (see Regulation 11.7)
- if an indications failure occurs (see Regulation 11.8)
- when using override controls (see Regulation 11.9)

### **11.2 FAILURE OF TRAIN DESCRIBERS**

- if the train describer equipment fails, you must, as far as possible, record the identity of trains within your area
- when a train passes beyond your area, you must advise the other Signaller its identity unless trains are running in the normal sequence
- if this is not possible, but the signalling equipment is otherwise in order, trains may be allowed to proceed and signals must be worked normally

## 11.0 FAILURE OF SIGNALLING EQUIPMENT

- if this occurs on a single line controlled by adjoining signal boxes, you must use any available means of communication to establish with the other Signaller the order in which trains are to proceed
- if an undescribed train enters your area, you must, if necessary, ascertain its identity by contacting the Driver

## 11.3 FAILURE OF SIGNALS

- this Regulation 11.3 applies if you are unable to clear a signal (on a double or single line) because of a failure but all track circuits in respect of that signal are indicating correctly and showing CLEAR
- you may then authorise the Driver to pass the signal concerned at Danger provided:
  - the previous train has passed beyond the overlap of the next stop signal
  - no conflicting movement is authorised
  - the requirements of Rule Book, Section D, clause 4, are observed
  - you have reached a clear understanding with any other Signaller involved as to what is required
- when authorising the Driver to pass the signal at Danger, you must:
  - advise the Driver of the circumstances
  - tell the Driver that all track circuits in respect of that signal are clear
  - instruct the Driver to proceed in accordance with the requirements of Rule Book, Section D, to the next stop signal

## 11.0 FAILURE OF SIGNALLING EQUIPMENT

### 11.4 FAILURE OF TRACK CIRCUITS ON DOUBLE LINES

- this Regulation 11.4 applies if a track circuit fails to clear after the passage of a train or otherwise shows occupied
- you must arrange for the line concerned to be examined in accordance with Regulation 9
- provided the line concerned is then reported clear, you may authorise the Driver of each subsequent train to pass the signal held at Danger in accordance with Rule Book, Section D
- before the second and subsequent trains enter the section, you must establish that the previous train has passed beyond the overlap of the next stop signal
- you must do this by adopting one of the following arrangements:
  - visually observing (where practicable) that the line is clear, or
  - obtaining an assurance from a competent person provided for this purpose that the previous train has passed clear, or
  - observing the occupation and clearance of a track circuit by the previous train after passing beyond the overlap of the next stop signal, or
  - working in accordance with Regulation 3.5
- on a bi-directional line, trains must work in one direction only while these arrangements apply
- if it is necessary for a train to pass in the opposite direction, WSLP must first be introduced

## 11.0 FAILURE OF SIGNALLING EQUIPMENT

- WSLP must then continue until normal working is resumed or until after the passage of the last train required to pass in the opposite direction

## 11.5 FAILURE OF TRACK CIRCUITS ON SINGLE LINES

- this Regulation 11.5 applies if a track circuit fails to clear after the passage of a train or otherwise shows occupied
- you must arrange for WSLP to be introduced
- if you will be unable to establish whether trains leaving the section are complete, you must tell the Pilotman to accompany each train and inform you when it has passed clear of the section
- where two signal boxes are involved, trains must be signalled in accordance with Regulation 3.5
- the first train (which must be suitable for this purpose) must be used to examine the line in accordance with Regulation 9

## 11.6 EXTENSIVE FAILURE OR DISCONNECTION OF SIGNALLING EQUIPMENT

### 11.6.1 When this Regulation 11.6 applies

- if it is necessary to authorise Drivers to pass two or more consecutive stop signals (normally capable of exhibiting a main aspect) **at a time** on a double line

**NOTE:** if an extensive failure or disconnection of signalling equipment affects a single line, WSLP must be introduced as shown in Regulation 11.5

## 11.0 FAILURE OF SIGNALLING EQUIPMENT

### 11.6.2 Authority for Temporary Block Working (TBW)

- TBW must be introduced whenever this Regulation 11.6 applies
- this must be authorised by the Local Manager who will appoint a suitable person to take charge of the arrangements
- TBW must not continue longer than 24 hours unless authorised by the Operating Officer

### 11.6.3 Limits of TBW

- TBW must apply between a signal which can be maintained at Danger in rear of the section concerned and a similar signal ahead of the section
- if the line is to be divided into two or more consecutive TBW sections, such working must apply over each section using a similar signal(s) to divide the sections at strategic locations(s)

### 11.6.4 TBW tickets

- the Driver of each train to enter or foul the TBW section must be in possession of a completed TBW ticket unless the train is to enter an obstructed section in accordance with Regulation 10

**NOTE:** the Ticket is carried by the Driver of the leading locomotive where the train is worked by two locomotives

## 11.0 FAILURE OF SIGNALLING EQUIPMENT

### 11.6.5 Appointment of person at exit signal

- you must appoint a person at the signal controlling the end of the TBW section
- you must tell this person to observe the following procedure:
  - a hand Danger signal (which may be placed on ground) must be exhibited to the Driver of each approaching train until it has stopped and one detonator must be kept on the line concerned
  - the TBW Ticket must be collected from the Driver of each train and the Signaller told when this has been done (the Authority Number on the ticket must be given)
  - the detonator may then be removed and the Driver instructed to obey the signal when cleared or to contact the Signaller if it cannot be cleared
  - the Signaller must be told when the train, complete with tail lamps, has passed 200 metres (200 yards) beyond this signal
  - collected TBW Tickets must be returned to the Signaller when TBW is withdrawn
- communication must be available between you and the person at the end of the TBW section

### 11.6.6 Before a train enters a TBW section

- you must ensure that:
  - the TBW section is clear
  - the Driver of the previous train has given up the TBW Ticket to the person at the signal at the end of the section
  - the train has passed 200 metres (200 yards) beyond this signal



## 11.0 FAILURE OF SIGNALLING EQUIPMENT

- all points in the section are set and secured as shown in Rule Book, Section D
- where this working applies between two signal boxes, the requirements of Regulation 3.5 have been observed

### 11.6.7 When a train is to enter a TBW section

- you must give the necessary instructions to enable the Driver to complete a TBW Ticket (Part A) at your dictation
- do this slowly, giving and asking the Driver to repeat not more than two or three details at a time, in the order of inclusion on the Ticket
- when completed, ask the Driver to read back what has been entered on the Ticket (Part A)
- provided you are sure this is correct, you must then give the Driver an Authority Number together with the time
- you may then authorise the Driver to proceed

### 11.6.8 Working of signals

- the signal controlling entrance to the TBW section must be maintained at Danger
- you must not clear the signal at the end of the TBW section for a train to proceed until informed that the person there is in possession of the Ticket which has been recovered from the Driver of the train concerned

## 11.0 FAILURE OF SIGNALLING EQUIPMENT

### 11.6.9 Recording in the Train Register

- you must record:
  - the details of the Train ID and the Authority Number issued, together with the time
  - the time you authorise the Driver to enter the TBW section
  - the time when you receive confirmation that the train has passed 200 metres (200 yards) beyond the signal at the end of the TBW section
- where there are consecutive TBW sections, you must maintain a separate record for each section

## 11.7 FAILURE OF TRAINS TO OPERATE TRACK CIRCUITS

### 11.7.1 When this Regulation 11.7 applies

- if a track circuit fails to show occupied during the passage of a train

### 11.7.2 Immediate action to be taken

- you must immediately place or maintain signals at Danger to prevent the passage of any **other** train over or across the affected portion of the line
- you must consider the affected portion of line to include:
  - the failed track circuit(s)
  - the next three track circuits to correctly show occupied and then clear beyond the failed track circuits

## 11.0 FAILURE OF SIGNALLING EQUIPMENT

- you must not then permit any other train to enter the affected portion of line (except a train required to assist a disabled train) until the train concerned has passed clear

### 11.7.3 After the train concerned has passed clear

- trains may be signalled normally but only one train or movement at a time may be permitted on the affected portion of line
- trains must, however, be cautioned (in accordance with SGI 30) before approaching any automatic level crossing or barrow crossing with white light indications in the affected portion of line
- auto-lower and auto-raise switches, where provided in connection with CCTV level crossings, must be kept in the MANUAL position
- during the failure of an interlocking, only one train or movement at a time may be permitted on the line concerned **in the area of the interlocking** unless a competent person(s) is appointed to report when trains complete with tail lamps pass clear of the affected portion of line
- the above arrangements (in this Regulation 11.7.3) must continue until:
  - the Signal Technician confirms that the track circuit was defective and the defect is now remedied, or
  - where no defect has been found, authority is given by the Operating Officer for normal working to resume
- until normal working resumes, you must specially observe the operation of the defective track circuit(s)

## 11.0 FAILURE OF SIGNALLING EQUIPMENT

### 11.7.4 Where another Signaller or a Crossing Keeper is involved

- you must advise any other Signaller involved who must then observe this Regulation 11.7
- you must also advise any Crossing Keeper controlling a CCTV level crossing and give the necessary instructions concerning the auto-lower and auto-raise switches

### 11.8 INDICATION FAILURES

- this Regulation 11.8 applies when it can be established that an apparent failure of signalling equipment is a failure of indications only (affecting signals, points or track circuits)
- trains may be allowed to proceed normally in these circumstances provided:
  - there is no indication of a failure of an electronic link or remote control system
  - when cleared, controlled signals exhibit the correct proceed aspect and any appropriate indication of route
  - automatic signals exhibit the correct proceed aspect when the line ahead is clear
- before assuming that only indications have failed if a track circuit fails to clear after the passage of a train or otherwise shows occupied, you must:
  - ensure that the previous train has passed clear
  - instruct the Driver of the next train to proceed cautiously and report the aspect exhibited at each signal concerned

## 11.0 FAILURE OF SIGNALLING EQUIPMENT

- obtain confirmation that each signal has exhibited the correct proceed aspect and any appropriate indication of route
- where there is more than one route, you must observe this procedure in respect of each route affected

## 11.9 OVERRIDE CONTROLS

- this Regulation 11.9 applies when necessary to operate the override controls
- before operating the switch to OVERRIDE, you must ensure that:
  - any train not proceeding on the pre-determined route has passed clear or is stopped, if necessary by operating the switch to SIGNALS ON
  - all individual point switches are in the centre position
  - all releases are NORMAL
- if a train is to proceed on a route for which override facilities are not provided, you must:
  - operate the switch to SIGNALS ON
  - wait 4 minutes unless any train within the predetermined route is stopped or has passed clear
  - instruct the Points Operator to operate the points manually
- you must then keep the switch at SIGNALS ON until the movement is completed and the points restored for the pre-determined route

## 12.0 SINGLE LINE WORKING

### 12.1 WHEN THIS REGULATION APPLIES

- whenever Single Line Working (in accordance with Rule Book, Section N, Part 1) applies

### 12.2 MODE OF SIGNALLING

- the Pilotman must be present where the train is to enter the single line
- trains in the right direction over the single line must be signalled normally
- before clearing the signal controlling the entrance to the single line in the right direction, you must ensure that the Pilotman has given the necessary instructions to the Driver
- before giving authority to the Pilotman to allow a train to enter the single line in the wrong direction, you must ensure that the line is clear to and including 200 metres (200 yards) beyond the Handsignalman opposite the signal protecting the crossover at the other end of the section
- before giving authority to that Handsignalman to allow a train to proceed (in the wrong direction), you must ensure that:
  - the crossover is secured in the correct position

#### **AND**

- where the crossover is facing to the movement, the line is clear to and including the overlap of the next signal beyond the crossover

## 12.0 SINGLE LINE WORKING

OR

- where the crossover is trailing to the movement, the necessary signals are at Danger to protect the drawing forward movement

**REMINDER:** you must tell the Handsignalman to make absolutely sure that the Driver understands when the train is to draw forward and then set back through the crossover, before authority is given to start movement

### 12.3 WHERE THE CROSSOVERS ARE WORKED FROM GROUND FRAMES

- this Regulation 12.3 applies ONLY where the signals protecting the ground frame are not individually and directly controlled from the signal box
- tell the person(s) operating the ground frame(s) to maintain the release in the RELEASED position during Single Line Working
- trains must be authorised to pass at Danger the signals protecting the ground frame

### 12.4 WHERE THE CROSSOVERS ARE WORKED FROM DIFFERENT SIGNAL BOXES

- you must describe trains in the right direction by the normal method whenever possible
- otherwise, you must use the telephone
- you must signal trains in the wrong direction in accordance with Regulation 3.5

## **12.0 SINGLE LINE WORKING**

### **12.5 RECORDING IN THE TRAIN REGISTER**

- you must record the times that trains enter and leave the single line whether or not this is normally done

## **13.0 OPENING OR CLOSING OF SIGNAL BOXES**

### **13.1 WHEN THIS REGULATION APPLIES**

- when your signal box is to open or close

### **13.2 INSTRUCTIONS TO BE OBSERVED**

- on opening your signal box, you must:
  - ascertain whether the adjacent signal boxes are open
  - tell the Signaller there that your signal box is open
- before closing your signal box, you must:
  - check that all train movements have ceased
  - ensure that all controlled signals are placed to Danger
- you must tell the Signaller at adjacent signal boxes when your signal box is to close



Not Used