

EAST COAST RAILWAY  
KHURDA ROAD DIVISION

NO. 03

**STATION WORKING RULES OF BARITHENGARH STATION**

BG Station.

Date of Issue: 28.02.13

Date brought into force: 01.03.13

**NOTE:**

The Station Working Rules must be read in conjunction with General & Subsidiary Rules, Block Working Manual and Operating Manual. These rules do not in any way supersede any rules in the above books.

**1.0 STATION WORKING RULE DIAGRAM:**

The Station Working Rule diagram No. SI/WRD/11196 ALT-D based on CSTE/East Coast Railway's Signal Interlocking Plan No. SI/11196 ALT-D shows the complete lay out of the yard, the Signaling and Interlocking arrangements, Gradients and Level crossing within the station limits.

**2.0 DESCRIPTION OF STATION:****2.1. LOCATION:**

BARITHENGARH (Code: BRTG) is a class 'C' station (Block Hut) on Howrah-Visakhapatnam Main line, Double line electrified (BG) section in KUR division of East Coast Railway. It is situated at Km. 379.602 from Howrah. The station is provided with Standard-III Interlocking and equipped with Multiple Aspect Colour Light Signals. The station is worked under Absolute Block System of GR & SRs.

[Refer GR 8.01 (1) (b), 8.04, 1.03 (2) and other provisions of General and Subsidiary Rules & BWM].

**2.2. BLOCK STATIONS, IBH, IBS ON EITHER SIDE AND THEIR DISTANCE AND OUTLAYING SIDINGS:****i. BLOCK STATIONS ON EITHER SIDE AND THEIR DISTANCES:**

BARITHENGARH station is situated between Dhanmandal (Code: DNM) at North end situated at a distance of 6.35 Km. and Byree (Code: BYY) at South end situated at a distance of 4.46 Km.

**ii. IBH/IBS/OUT LYING SIDING/DK STATION:**

NIL

**iii PASSENGER HALT:**

NIL

**2.3.a. BLOCK SECTION LIMITS ON EITHER SIDE OF THE STATION ON DIFFERENT DIRECTIONS:**

Between Stations	The Point from which the 'Block Section' Commences	The Point at which the 'Block Section' ends
DNM-BRTG UP Direction	UP Advanced Starter Signal No. 13 of DNM station	400 m beyond UP Home Signal No. 3 of NGMP.
BRTG-BYY UP Direction	UP Home Signal No. 3 of BRTG	Outer most facing point No. 21A of BYY.

(A.K.JENA)  
DSTE/KUR

(B.PANDA)  
DOM/KUR

BYY-BRTG DN Direction	DN Advanced Starter Signal No. 8 of BYY station	400 m beyond DN Home Signal of No. 2 of BRTG.
BRTG-DNM DN Direction	DN Home Signal No. 2 of BRTG.	BSLB on DN Line of DNM.

## 2.4 **GRADIENTS:**

### a) **TOWARDS HWH END:**

Chainage in Meters

From	To	Gradient
CSB	CH: 2114.0 m	Level
CH: 2114.0 m	Towards Block Section	1 in 250 'R'

### b) **TOWARDS VSKP END:**

Chainage in Meters

From	To	Gradient
CSB	CH: 927.94 m	Level
CH: 927.94 m	Towards Block section	1 in 150 'R'

## 2.5 **LAYOUT:**

The station is provided with two running lines i.e. DN & UP Main line are provided with 25KV AC electric traction.

### **PLAT FORM:**

Line No. 1 (UP Main) : R.L.P.F.  
Line No. 2 (DN Main) : R.L.P.F.

### 2.5.1 **RUNNING LINES, DIRECTION OF MOVEMENT & HOLDING CAPACITY IN CSL:**

#### **DIRECTION OF TRAFFIC:**

The trains coming from BYY end are DN trains and the trains coming from DNM end are UP trains.

### 2.5.2 **HOLDING CAPACITIES:**

NIL

### 2.5.3 **NON-RUNNING LINES AND THEIR CAPACITIES IN CSL:**

NIL

### a. **ANY SPECIAL FEATURES IN THE LAYOUT:**

NIL

### b. **RESTRICTIONS:**

Whenever there is any speed restrictions imposed between the station and the adjacent block stations, the station master on duty shall repeat such imposition or cancellation to the concerned adjacent station where the train has to be stopped for serving the caution order to Loco Pilot.

In case of emergency as per Subsidiary Rule 4.09.03 (e) (i), the SM on duty will issue caution order to the trains till such time the adjacent SM acknowledges by exchanging Private Number and indicating first train served with such caution order.

## 2.6 **LEVEL CROSSINGS:**

- (i) There is a 'B1' class non-interlocked level crossing gate No. 162 situated at Km. 374/15-17 (UP) & 374/14-18 (DN) between DNM and BRTG. Telephone communication is provided between the Gate lodge and the SM's office at DNM.
- (ii) There is a 'C' class non-interlocked level crossing gate No. 164 situated at Km. 376/9-11 (UP) & 376/12-10 (DN) between DNM and BRTG. Telephone communication is provided between the Gate lodge and the SM's office at DNM.
- (iii) There is a 'C' class non-interlocked level crossing gate No. 165 situated at Km. 378/1-3 (UP) & 378/4-2 (DN) between DNM and BRTG. Telephone communication is provided between the Gate lodge and the SM's office at BRTG.
- (iv) There is a 'C' class manned non-interlocked level crossing gate No. 167A situated at Km. 380/19-21 (UP) & 380/22-20 (DN) between BYY-BRTG. Telephone communication is provided between the gate lodge and the SM/BRTG.

### 3.0 **SYSTEM AND MEANS OF WORKING:**

At this Block Hut trains are worked under Absolute Block System by means of Block Panel by axle counter for double line between DNM-BRTG and BRTG-BYY in terms of Chapter-XIV of GR & SR and Chapter-IV of BWM. The Block Panel shall be operated by Station Master on duty and keys of the Block Panel shall remain under personal custody of SM on duty. The Block Panel should be operated by the SM on duty and they will maintain the Train Signal Register and other relevant records. The signals are operated by the SM on duty through relevant SM's slide control. Taking off of the last stop signal is the authority for the Loco Pilot to proceed into the block section vides GR 14.08 (a). The Block Panel by axle counter are non-co-operative type. Line clear is granted/obtained through telephone attached with Block Panel by axle counter.

### 4.0 **SYSTEM OF SIGNALING AND INTERLOCKING:**

This Block Hut is provided with Standard-III interlocking and an electrical slide controlled machine (12 nos. of slide) to control both UP & DN Home signals at the station on either direction. The slide control machine is provided with locking arrangement and can be locked with all the slides in the slide control machine in the normal position or with one or more slides in pulled condition. The key of this box must be in the personnel custody of SM on duty. [Refer Chapter-XIV of GR & SRs, SR 3.36.03 (a) and Chapter-IVA of BWM). Block Panel with miniature push Buttons are provided in the SM's office to electrically control all signals.

### 4.1 **STATION MASTER'S SLIDE CONTROL:**

This Block Hut is provided with an electrical slide controlled machine (12 nos. of slide) to control both UP & DN Home signals at the station on either direction. The slide control machine is provided with locking arrangement and can be locked with all the slides in the slide control machine in the normal position or with one or more slides in pulled condition. The key of this box must be in the personnel custody of SM on duty vided SR 3.36.03 (a).

### i) **TRACK CIRCUITS:**

Two short track circuits of 3 rail length (Approx.) have been provided, one just beyond UP Home signal No. 3 and another beyond 400 m beyond UP Home signal No. 3. These two track circuits are nomenclatured as 3T and 3T1 respectively. Similarly, two short track circuits of 3 rail length (Approx.) have been provided, one just beyond DN Home signal No. 2 and another beyond 400 m beyond DN Home signal No. 2. These two track circuits are nomenclatured as 2T and 2T1 respectively. These track circuits have been provided for automatic restoration of Home signals to 'ON' position. Indications are

provided for all the track circuits in the SM's office.

ii) **AXLE COUNTERS:**

The entire Block Section on both side UP & DN lines between the stations BRTG-BYY & BRTG-DNM are monitored by Analog Axle counter system. Analog Axle Counters along with associated entrance and exit points are provided at both end of the Block sections.

**UP LINE:**

A pair of electronic axle counters is provided on UP line between DNM-BRTG. One just beyond UP Advanced Starter Signal of DNM and the other on track circuit No. 3T1 i.e. beyond 400 m of UP Home Signal of BRTG. Similarly, another pair of Axle Counter is provided on UP line between BRTG-BYY Block Section, one on track circuit no. 3T i.e. just beyond UP Home signal No. 3 of BRTG and another on track circuit 1T1 i.e. beyond UP Home Signal of BYY.

**DN LINE:**

A pair of electronic axle counters is provided on DN line between BYY-BRTG. One just beyond DN Advanced Starter Signal of BYY and the other on track circuit No. 2T1 i.e. beyond 400 m of DN Home Signal of BRTG. Similarly, another pair of Axle Counter is provided on DN line between BRTG-DNM block section, one on track circuit no. 2T i.e. just beyond DN Home signal No. 2 of BRTG and another on track circuit 2T1 i.e. just beyond DN Home Signal of DNM.

These pair of axle counters will monitor the track and count the axles 'IN' and axles 'OUT' to indicate whether Block Section is clear of trains as well as to verify the last vehicle of incoming train. The position of the Block Section whether cleared or occupied are reflected in the illuminated panel diagram provided in the Station Master's office which shows 'GREEN' when the Block Section is clear and 'RED' when occupied.

(Details of resetting procedure given in Appendix-'B')

4.2 **CUSTODY OF RELAY ROOM KEY AND PROCEDURE FOR ITS HANDING OVER AND TAKING OVER BETWEEN STATION MASTER AND S&T MAINTENANCE STAFF:**

The relay room should be kept locked with two separate locks. The arrangement should be such that one key is kept with on duty SM and other key with Maintainer. Whenever required, the SM shall hand over the key to Maintainer with proper acknowledgement in basement/relay room register. The maintainer on receipt of key from SM may use the same and key in his custody to open the basement/relay room by inserting key one after another separately into earmarked locks. After completion of the work, the basement/relay room is to be locked using both the keys separately and designated key to be handed over to the SM. The details of the transactions are to be properly recorded in basement/relay room register maintained at the station and duly signed by the SM and Maintainer respectively.

4.3 **POWER SUPPLY:**

1. A changeover switch is provided in the Station Master's Office with the three power supplies viz. UP AT, DN AT and Local for changing the switch to the required supply position. A luminous indicator above the circuit breaker for each supply indicates the availability of the supply.
2. Normally the switch will be kept towards UP AT or DN AT position. Whenever power block is to be given on the line, the on duty SM must ascertain that power is available on the other AT.

- E.g.: If power block is to be given on the UP line, DN AT must be available and vice-versa.
3. In case of failure of one of the AT supply without any power block, the on duty SM. has to check whether the circuit breaker has tripped. (Three circuit breakers are provided in the changeover switch board, one for each supply and their normal position is down and when tripped it goes up.) In case of failure of both AT supplies, the Local supply shall be utilized by operating the switch.  
If the circuit breaker is tripping even after resetting, no attempt shall be made to hold it by any other mean and a message shall be given to the AEE and CTFO/PSI for prompt rectification.
  4. A two position changeover switch is provided in the SM's office. Due to defective cable or for any other reasons, if all the three supplies are not coming to the station, by operating the switch the second position, local supply is extended to station over a different line. In such cases, information must be given immediately to the concerned SE (Electrical) and SSE (Electrical)/PSI for prompt rectification.
  5. Whenever there is a failure of power supply in one AT the SM shall take prompt action to inform to all concerned for the rectification. The SM himself, during his daily checks, shall test the availability of power supply on both ATs and make an entry in the Station Diary duly initiating action for rectification of failure, if any.

#### 5.0 **TELECOMMUNICATIONS:**

- a) The station is connected to Khurda Road control Board on the BHC-JKPR-DATR-NYG control circuit.
- b) Telephone attached to block panel by axle counter at either section.
- c) Telephones are provided in SM's office connecting the gate lodges of L.C. Gate at Km. 378/4-2 (DN) & 378/1-3 (UP) and L.C. Gate at Km. 380/19-21 & 380/22-20.
- d) VHF set is provided at the station.
- e) This station is connected to BHC-BRAG traction control circuit.

#### **NOTE**

- a. For obtaining line clear VHF should be used as a last alternative and not as a sole means of communication.
- b. VHF & Walkie Talkie sets should not be used for unnecessary discussion with Loco Pilots/Guards and any other staff.

#### 6.0 **SYSTEM OF TRAIN WORKING:**

Movement of train is regulated by the section controller on duty whose orders must be carried out provided they do not contravene any General Rules & Subsidiary Rules, Block Working Manual, Operating Manual, Station Working Rules and any other safe working instructions issued from time to time.

In the event of suspension of control working the SM on duty shall work independently in conjunction with the SM of the adjacent block stations and shall be responsible for reception and dispatch of train.

He shall ensure that preference is given to important trains and at the same time no undue detention occurs to other trains.

#### 6.1 **DUTIES OF TRAIN WORKING STAFF IN EACH SHIFT:**

The following is the complement of operating staff at the block hut

	<b><u>In each shift</u></b>
SM/ASM	1 in each shift.
Traffic Points man	1 in each shift.

The above staff shall work as per the rosters issued from time to time by Divisional Railway Manager (P), Khurda Road and these rosters shall be conspicuously displayed in the Station Master's office. (Details of duties are given in Appendix 'D').

**6.1.2 RESPONSIBILITY FOR ASCERTAINING CLEARANCE OF LINES AND ZONES OF RESPONSIBILITY:**

The SM on duty is responsible to ascertain the clearance of 400m beyond the concerned Home signal in both UP & DN directions.

**6.1.3 ASSURANCE OF THE STAFF IN THE ASSURANCE REGISTER:**

All staff before taking up independent charge of their duties at this station shall make a written declaration in the Assurance Register that they have read the SWR thoroughly and understood the system of working in force at the station and must sign such declaration.

No Railway servant shall be entrusted with any duty involving the safety of the public unless the SM is satisfied that the concerned staff is competent for the post. No Railway servant unless duly examined and certified shall be allowed to work the signals. The SM is responsible to see that all the staff are well conversant with the Station Working Rules of the Station and their signature obtained in the Assurance Register after he is satisfied that they have thoroughly understood the working Rules of the Station. In case of class-IV staff, their signature/thumb impression must be obtained after explaining full about their duties and responsibility.

The SM is personally responsible for maintaining the Assurance Register and for obtaining declaration from the staff working under him. The Assurance Register must be maintained in two parts one for Group-'C' staff and other for Group-'D' staff & duplicate copy of the Assurance Register must be maintained and kept in the personal custody by the SM.

The declarations are to be renewed in the following cases:

Whenever there is any change in the Station Working Rules,

For any staff who have not worked at the station or were away from the station for a period of 15 days and over.

**6.1.4 USE OF PRIVATE NUMBER BOOKS AND IDENTIFICATION NUMBER SHEETS:**

Sufficient private number books and identification number sheets in sealed covers shall always be kept in stock by SM, under lock and key by maintaining one register for this purpose.

**6.2 CONDITIONS FOR GRANTING LINE CLEAR:**

Before granting line clear to a train, the SM on duty shall ensure that:-

- i) The whole of the last preceding train has passed complete 400m beyond the Home signal and is continuing its journey and,
- ii) All signals taken off for the preceding train have been put back to 'ON' behind the said train.

**NOTE:**

- i) Before granting line clear to a train the SM on duty shall ensure that all signal lights pertains to the train are glowing properly. If the light of the reception signal is found not burning, line clear shall not be granted for a train till such time it is ensured that the concerned Loco Pilot is notified of the fact in writing by the SM of the station to which such line clear is to be granted.
- ii) Before granting line clear to an UP train, the SM on duty shall ensure closure of the L.C. gate at Km. 378/1-3 from the gateman on duty under exchange of private number.

- iii) Before granting line clear to a DN train the SM on duty shall ensure closure of the L.C. gate at Km. 380/22-20 from the gateman on duty under exchange of private number.

**6.2 CONDITIONS FOR TAKING “OFF” HOME SIGNALS:**

- a. The adequate distance must be clear for taking off Home signal. Block section ahead must be clear of trains and line clear must be obtained from the Block station in advance.
- b. The Station Master on duty at the station shall ensure by physical verification that the line over which the train is to be passed is clear and free from all obstructions for 400 meters beyond the Home Signal and then he shall grant line clear for a train.
- c. While the train is passing the Block Hut, the SM on duty and the Token Porter on duty shall be responsible to observe the condition of the vehicles on the passing train. The SM shall exchange signal with the LP and guard at the off side, placing himself at a safe place, by waving Green Hand Signal. In case anything wrong is noticed on the train they shall at once change their Green hand signal to red and take prompt action to stop the train. If this cannot be done from the Block Hut, intimation shall be given to the station in advance to stop and examine the train.
- d. Before taking off a DN Home Signal, the SM on duty shall ensure closure of the L.C. Gates at Km. 378/4-2 from the gateman on duty under exchange of private number.
- e. The L.C. Gates at Km. 374/18-16 & 376/12-10 are having telephonic communication with SM/DNM. Before dispatching a DN train, SM/BRTG shall advise SM/DNM the number description, direction and expected time of passage of the train at the gates under exchange of private numbers separately.
- (i) Such advice shall be given before obtaining line clear.
- (ii) SM/DNM shall in turn convey the same advice to the gateman, under exchange of private numbers separately.
- (iii) Gatemen shall close the gates and thereafter give their private numbers to the SM/DNM.
- (iv) Only then shall the SM/DNM grant line clear to SM/BRTG. [Refer SR 16.03.03 (c),(b)]
- f. Before dispatching an UP train, the SM on duty shall ensure closure of the L.C. Gate at Km. 380/19-21 from the gateman on duty under exchange of private number.

**6.3.1 RESPONSIBILITY OF STATION MASTER FOR RESTORATION OF SIGNALS TO “ON”:**

Station Master on duty should ensure that signal is put back to “ON” after passage of the train as per GR 3.36.2 (b).

**6.4 SIMULTANEOUS RECEPTION/DESPACTH AND PRECEDANCE OF TRAINS:**

NIL

**6.4.1 RECEPTION OF TRAINS:**

Observing ‘WHITE’ indication in the Panel diagram for which line clear is given, the SM on duty shall take off signal for a train in consultation with the Section Controller on duty. Unless Panel indication for the concerned line is ‘Clear’ even with other conditions satisfied, the operation of panel control.

**6.5 COMPLETE ARRIVAL OF TRAINS:**

The entire block section between BRTG-DNM and BRTG-BYY on both UP and DN Lines are monitored by axle counter system and the position of the block section whether occupied or clear is indicated in panel diagram. As soon as train passes the Advanced Starter signals of rear stations, the RED indication appears on the panel. After whole train clears 400 mts. beyond the concerned home signals the GREEN indication appears on the panel. This confirms the complete arrival of train and the SM on duty shall give

'Train out of Block Section' report to the station in rear on seeing the section clear indication (GREEN) on the panel.

In case of failure of Axle counter at either end, the SM on duty is responsible for watching the last vehicle indicator of the train and to ensure that train passes complete by observing the tail board/tail lamp. Then he shall put back the signal to 'ON' and send the 'Train Out of Block Section' report to the station in rear, and "Train entering Block Section" to the Station in advance.

If the train passes the Block Hut without last vehicle indicator, the Station Master on duty shall immediately report the fact to the Station Master on duty at the station in advance and the section Controller. He shall withheld closing of the Block Section to ensure that no train is allowed to enter the block section from the station in rear. Train passing on adjacent line should be stopped and the Loco Pilot is to be intimated through Caution Order to proceed cautiously and be prepared to stop short of any obstruction as per SR 4.17.03.

6.6 **DESPATCH OF TRAINS:**

For dispatching of trains, SM on duty shall (i) obtain line clear from the station in advance (ii) ensure closure of the non-interlocked L.C. Gate at Km. 378/1-3 for DN trains and 380/19-21 for UP trains. Thereafter, he shall take off the concerned Home Signal.

6.7 **TRAINS RUNNING THROUGH:**

While the train is passing the station, the Station Master on duty and the Traffic Points man on duty shall be responsible to observe the condition of the vehicles on the passing train. The Station Master shall exchange all right signal with the loco pilot and Guard from the station. The on duty traffic Points man shall exchange signal with the loco pilot and Guard at the off side, placing himself at a safe place, by waving Green Hand Signal. In case anything wrong is noticed on the train then he shall at once change his Green hand signal to red and take prompt action to stop the train. If this cannot be done from the station, intimation shall be given to the station in advance to stop and examine the train.

6.8 **WORKING IN CASE OF FAILURE:**

**PROCEDURE TO BE FOLLOWED FOR WORKING OF TRAINS DURING FAILURE /SUSPENSION OF INTERLOCKING /SIGNALS:**

a. **TRACK CIRCUIT:**

In the event of failure of track circuits in the advance of Home signals, Home signals will be remain suspended with the concerned adjacent stations till its rectification and trains shall be piloted 'OUT'.

b. **AXLE COUNTER:**

In the event of failure of axle counter initiation be taken for resetting the same.

c. **BLOCK INSTRUMENT(S):**

In the event of partial/total failure of block instrument the concerned block instrument shall be suspended till its rectification and trains shall work as per GR. [Refer GR 6.02.03 and SR 6.02.06]. During this period of time the authority will be T/369(3b) with identification number and Private Number issued from the station in advance written both in figure and words.

d. **DEFECTIVE SIGNALS:**

(A.K.JENA)  
DSTE/KUR

(B.PANDA)  
DOM/KUR



In the event of failure of Home signals, Block working will remain suspend between the adjacent stations. During this period, the authority T/369(3b) will be with identification number and Private Number issued from the station in advance written both in figure and words.

e. **DEFFECTIVE/DAMAGED POINTS:**

NIL

6.9 **PROVISIONS FOR WORKING OF TROLLIES/ MOTOR TROLLIES/MATERIALS LORRIES ETC”:**

Motor trolleys are run in accordance with SR 15.25.03 to 15.25.07.

7.0. **BLOCKING OF THE LINES:**

NIL

7.1 **USE OF SLIDE COLLARS:**

Whenever running line is blocked or when a train is detained for line clear or the Block Section in advance is occupied, slide collars shall be placed on the Home Signal slide to prevent taking off signals inadvertently. The slide collars shall be removed when such obstruction has been cleared.

8.0 **SHUNTING:**

NIL

9.0 (i) **ABNORMAL CONDITION:**

When the Block Instrument is under suspension and during partial failure of other available means of communication trains shall be worked in terms of SR. 6.02.06 and Chapter- IV of BWM. The authority for the driver of a train to proceed is T/369(3b) bearing the Private Number and Identification Number received from station in advance written in both words and figures.

**THE AUTHORITY TO PROCEED IN OCCUPIED BLOCK SECTION IN CASE OF OBSTRUCTION OF LINE OR ACCIDENT:**

Rules and regulations for working trains on an obstructed line in case of obstruction or accident on the authority of block ticket (T/A-602) when communications are available shall be followed in accordance with the provisions which are summarized as follows. [Refer SR 6.02.05]

- (i) After sending a train on Block ticket, a following train shall not be dispatched in the same direction unless:
- (ii) The previous block ticket is collected & cancelled, or
- (iii) Necessary endorsement is given on the previous block ticket with the advice to wait at the site for a next train to follow ,or
- (iv) The previous train has met with an accident or has been disabled, or
- (v) The block ticket has been collected from the loco pilot of the previous train by the official in-charge at the site & kept in the personal custody & shall be kept until the arrival of the next train & such assurance of the Block Ticket so collected.
- (vi) SM will suspend the absolute block system of working and both SM's concerned should arrange for running of trains on the authority of Block Ticket.
- (vii) SM at the dispatching end will hand over to the Loco Pilot the BLOCK TICKET as the authority which shall include.
- (a) Caution order: Existing speed restriction shall be indicated in the Caution Order portion. The speed restriction to 15Kmph during clear visibility and 10Kmph when visibility is obstructed shall be clearly indicated.

- (b) An authority to pass the stop signals at 'ON' position.

Before resumption of normal working a message between the SM's of the concerned station shall be exchanged with private number. [Refer SR 6.02.05 (d) (vi)].

The block ticket so issued must be collected by SM of either end with a certificate about the complete arrival of the train with its time and the section is clear of all obstructions from the loco pilot/Guard of the train and cancels it.

(iii) **TRAINS DELAYED IN BLOCK SECTIONS:**

If a train carrying passenger does not arrive within 10 minutes or if a goods train does not arrive within 20 minutes after allowing for its normal running time from the station in rear, the SM at the station in advance shall immediately advise the station in rear and the section controller this fact. Thereafter SMs at either end of the Block section shall immediately stop all trains proceeding in to the block section on adjacent line in either direction and warn the loco pilot and Guards of such trains by issue of suitable Caution Orders. [Refer GR 6.04 & SRs thereto].

(iv) **REPORTING FAILURE OF TRACK CIRCUIT/AXLE COUNTER AND INTERLOCKING:**

Whenever there is a failure of track circuit/axle counter and interlocking the failure should be reported by SM on duty to the concerned signaling maintenance staff on duty responsible for attending the failure and only after receipt of the written memo from the signaling maintainer for rectification of the fault, SM should restore the normal working. The entries in failure register to be done with message to the section controller.

9.1 **TOTAL FAILURE OF COMMUNICATION:**

In the event of total failure of communications between BRTG-DNM and BRTG-BYY i.e. when line clear cannot be obtained by any one of the following means stated in order of preference viz.

- (i) Block Instruments, Track Circuits or Axle counters.
- (ii) Telephone attached to the Block Instruments.
- (iii) Control telephone.
- (iv) VHF sets.

The procedure detailed in SR 6.02.03, shall be followed by the SM on duty for train passing. Each train before being allowed into the Block Section should be stopped and the Guard and Loco Pilot of the train apprised of the situation. The SM on duty will hand over an authority (T/C 602) for working of trains during total failure of communication which includes:

- a. An authority to proceed without 'Line Clear'.
- b. An authority to pass the Last Stop Signal at its "ON" position.
- c. A caution order restricting the speed to 25 KMPH by day when view ahead is clear and 10 KMPH when curve & view ahead is not clear.
- d. No train shall be allowed to enter the Block Section until there is a clear interval of 30 minutes between the train about to leave and the train, which has immediately proceeded.
- e. Fixed signals except the last stop signal may be taken "OFF" for the dispatch of the train and for the reception of the train at the next block station and reception signals may be taken only after the train has been brought to a stand outside it.
- f. On arrival at the next block station the Loco Pilot shall hand over the authority to proceed without line clear to the SM on duty who will preserve the same for further inspection.

Before resuming normal working when any means of communication is established, SM of either end must satisfy that there is no train in the block section. [Refer SR 6.02.03].

9.2 **TEMPORARY SINGLE LINE WORKING ON DOUBLE LINE SECTION:**

whenever it becomes necessary to introduce single line working between the adjacent block stations at either end of block hut due to accident or obstruction of one of the lines the SM on duty at the block hut shall comply Para 4 of SR 6.02.01 to carry out the instructions of the SM on duty of the adjacent block stations proposing single line working.

The Block Hut shall be treated as closed during this period after exchanging Private Number with the adjacent block stations. Temporary single line working shall be introduced between BYY-DNM (Refer SR 6.02.01). Block instrument shall be kept in "Train on line" position during the period single line working. The signals shall be kept at 'ON' position and train shall be passed by the authority (T/D 602) given by the adjacent station.

After the obstructed track is free and safe for passage of trains, when double line working is introduced the block hut shall be brought to use immediately. The station master on duty at the block hut shall exchange message supported by a Private Number and resume normal working in consultation with the section controlled when the section is clear of trains.

An entry shall be made in the train signal register showing the time double line working suspended and the time normal working resumed.

9.3. **ISSUE OF BLOCK TICKET:**

Trains may be worked in the obstructed line in case of obstruction/accident or to assist a crippled train on the authority of block ticket T/A 602 as per the provisions of SR 6.02.05 before introducing that system proper messages should be exchanged between the two concerned stations suspending the absolute block system and obtaining concurrence supported by private number.

Before allowing a train on block ticket both the Guard and loco pilot of the train should be apprised of the situation obtaining their signatures thereof. The Block ticket should clearly details.

- i). Whether the train is to return or to wait at the place of obstruction for the arrival of another following train(s) or to proceeds to the next station.
- ii). An authority shall be given to the loco pilot which shall include
  - a) Block ticket.
  - b) Caution order: The existing speed restrictions shall be clearly indicated in the caution order portion of the authority. Speed restriction of 15 KMPH when view ahead is clear and 10 KMPH when view ahead is not clear shall be clearly indicated.
  - c) An authority to pass the last stop signal at 'ON' position.  
After sending a train o Block ticket a following train shall not be dispatched in the same direction unless
    - 1) The previous block ticket is collected and cancelled or
    - 2) Necessary endorsement was given on the previous block ticket to wait at the site for a next train to follow or
    - 3) The previous train has met with an accident or disabled or
    - 4) The previous block ticket has been collected by the official in charge at the site and kept in his personal custody and assured as such over the telephone quoting the serial number of the block ticket so collected.

Intimation of departure or return of such trains shall be given by message to the station master at the other end supported by a Private Number.

On arrival at the station block ticket of the trains concerned shall be collected by to SM on duty after duly obtaining the signatures of the Guard and loco pilot indicating the time of arrival and complete arrival.

When the cause of obstruction is removed and an assurance in written is obtained from PWI or Guard and /or loco pilot that the section is clear the SM concerned may resume the normal working after exchanging proper messages supported by Private Number.[Refer SR 6.02.05 (d) (vi)]

10. **VISIBILITY TEST OBJECT:**

The Signal lights of Up and DN home signals during day and night are the visibility test objects vide GR 3.61 (2) (b), (iii).

11. **ESSENTIAL EQUIPMENT AT THE STATION:**

(Details are given in Appendix-'E')

12. **FOG SIGNAL MEN NOMINATED TO BE CALLED IN CASE OF FOG.**

**FOG SIGNALLING:**

In case of thick, foggy or tempestuous weather impairing visibility, whenever it is necessary to indicate to the loco pilot of an approaching train the locality of a signal, the SM on duty at station shall arrange for signaling in terms of General Rules 3.61 and Subsidiary Rules thereto. The assurance of the staff shall be obtained in the month of October every year in the Fog Signal Register vide SR 3.61 as a token of their acknowledgement in fog signaling Rules.

Fog signalmen shall be detailed for duty at stations being recruited partly from the station traffic staff and partly from Engineering Gang man.

**STATION DETONATOR REGISTER (OPT/124)**

A Register regarding detonator is maintained at the station.

(a) **INSTRUCTIONS:**

This register contains the following parts.

Part. - I: Particulars of fog signal men posted at the station from time to time.

Part – II: Particulars of receipt and stock of detonating (fog) signals at the station to be filled in whenever detonators are used or received.

Part – III: Periods of fogs, fog signalmen on duty and details of detonators used.

Part – IV: Particulars of issue and testing of fog signals at the station.

(b) In charge of the station shall ensure that the information maintained in the register is kept up to date and is accurate in all respects.

(c) Transportation inspectors shall check the registers and also the stock of detonators on hand each time they visit the station and initial with date as an indication having done so.

**APPENDICES**

- APPENDIX-A : WORKING OF LEVEL CROSSING GATES
- APPENDIX-B : SYSTEM OF SIGNALLING AND INTERLOCKING AND  
COMMUNICATION ARRANGEMENTS AT THE STATION.
- APPENDIX-C : ANTI COLLISION DEVICE (RAKSHA KAVACH)
- APPENDIX-D : DUTIES OF TRAIN PASSING STAFF AND STAFF IN EACH  
SHIFT
- APPENDIX-E : LIST OF ESSENTIAL EQUIPMENTS PROVIDED AT THE STATION
- APPENDIX-F : RULES OF WORKING OF DK STATION, HALTS, IBH, IBS AND  
OUTLYING SIDINGS
- APPENDIX-G : RULES FOR WOKING OF TRAINS IN ELECTRIFIED SECTIONS

**1.0 WORKING INSTRUCTION FOR 'C' CLASS NON-INTERLOCKED LEVEL CROSSING GATE NO. 165 SITUATED AT KM. 378/1-3 (UP) & 378/4-2 (DN) BETWEEN DNM-BRTG**

**1.1 DESCRIPTION OF THE LEVEL CROSSING GATE**

1.	Number of Level Crossing Gate	165
2.	Engineering gate or Traffic Gate	Engineering
3.	Under the control	SSE/ (P.Way)/HDS
4.	Location at Km	Km. 378/1-3 (UP) & 378/4-2 (DN)
5.	At Station	-
6.	In between station	DNM-BRTG
7.	BG/MG/NG	BG
8.	Single line/ Double line	Double Line
9.	Normal position	Closed to Road Traffic
10.	Interlocked/ Non Interlocked	Non – Interlocked
11.	Means of Interlocking	-
12.	Provision of Gate Signal	UP- - DN- -
13.	Signaling Arrangements	-
14.	Means of communication	Telephone with SM/BRTG
15.	Width of the Level Crossing Gate	7.50 m.
16.	Type of Road	Others
17.	Name of Road	Village Road
18.	Metaled/Non metaled	Non Metaled
19.	Approach Road	Moorum/C.Conc.
20.	Width of the Road	5.50 m.
21.	Angle of road crossing (in case of SKEW Gates)	-
22.	Road gradient a. North/East side b. South /West side	1:30 1:30
23.	Road alignment (straight / curve) a). North/East side b). South /West side	Straight Straight
24.	Provision of height gauge	Yes
25.	Type of Barrier	Lifting
26.	Length of check Rail	9.50m.
27.	Road surface in between Level-Crossing Gates	C.C. Block
28.	Length of Rumble strip/speed breaker	10.00 m.
29.	Road Signs	Available
30.	Speed breakers indication boards...	Available
31.	TVU	4120, December – 2012
32.	Census next due on	December - 2015
33.	Demarcation for placement of detonators	Available
34.	No. of gateman working	2
35.	Nearest Rly. medical Assistance	Cuttack
36.	Nearest private Medical Assistance available (if any)	Barchana P.H
37.	List of equipment available Yes/No	Yes

1.2 **EQUIPMENT TO BE AVAILABLE AT THE GATE**

Sl. No.	Items	Quantity
1	LED tri-color flashing signal lamp	3
2	Hand signal flag Green	1 mounted on stick
3	Hand signal flag Red	3 mounted on sticks
4	Banner flag Red	3
5	Posts for exhibiting Red banner flag	2
6	Spare chains with padlocks	2 With stop mark
7	Detonators	10 in tin case
8	Gate Lamps	2
9	Tommy bar	1
10	Mortar pan	1
11	Spade/Fowrah	1
12	Rammer	1
13	Pick axe	1
14	Tin case for flag	1
15	Can for oil	1
16	Water pot/Bucket	1
17	Canister for Muster roll	1
18	Set of spare spectacles of gateman wearing glasses	1
19	Board demarcating protection of level crossing gate diagram in case of obstruction on gate.	1
20	Basket	1
21	Whistle	1
22	Wall clock	1
23	Small size chain with Pad lock	2

1.3. **RECORDS TO BE KEPT AT GATE LODGE**

- (i) Gate Working Instructions in Hindi/English.
- (ii) Gate Working, Instructions in local vernacular language.
- (iii) Gateman Rule Book in local vernacular language.
- (iv) List for tools and books.
- (v) Duty Roster.
- (vi) Certificate for working as Gateman.
- (vii) Bio-data particulars of Gatemen, including date of passing vision test, initial/refresher course, safety camp, etc.
- (viii) Accident Register.
- (ix) Record of last census of road traffic at Level Crossing Gate.
- (x) Public Complaint Book.
- (xi) Inspection Book.

1.4 **MODE OF OPERATION:****NORMAL WORKING OF THE LEVEL CROSSING GATE (NON-INTERLOCKED):**

The level crossing gate is normally kept closed against road traffic and it will be opened for passage of road traffic only when it is necessary and safe to do so. The Gateman on duty before opening the gate shall ensure that he has not exchanged any Private Number with the station or if he has exchanged Private Number with the station, the whole of the train with last vehicle indicator has passed over the level crossing gate and the Station Master has not exchanged Private Number with him for any movement

immediately in the rear of that train or on the adjacent line (s). Before opening the gate, he shall display a banner flag across the track.

1.5 **DUTIES OF GATEMAN:**

(1) **ALERTNESS:** The gateman shall be alert and be prepared to take immediate action, should danger be apprehended. Keys of the gate shall be in his personal custody.

(2) **POSITION DURING PASSAGE OF TRAINS:**

During passage of trains, gateman will stand in the manner indicated below:

- (i) Gateman will stand attentively in front of the gate lodge facing the approaching train.
- (ii) In day time, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- (iii) In night time, gateman shall hold lighted hand signal lamp with white light facing the track.
- (iv) He shall keep the whistle slung around his neck from a cord.

(3) **ROUTINE DUTIES OF GATEMAN:**

- (i) Gateman shall ensure that red banner flag is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- (ii) Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously from sunset to sunrise.
- (iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless reliever arrives and takes charge of it. However, if it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- (iv) Except where otherwise prescribed under instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- (v) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle / wagons / train / battery box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- (v) Gateman shall also be prepared to repeat any signal which Guard may give to Loco Pilot on walk talkie or in any other way.
- (vi) If lifting barriers/gates get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- (viii) Gateman shall report to the nearest Station Master, Gang mate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- (ix) In the event of gate signal becoming defective the gateman shall maintain the signal in the 'ON' position even by disconnecting the signal or the wire if necessary.
- (x) At the gate whose signal have become defective, the gateman shall close and lock and lifting barriers on sighting a train and hand signal or pilot the train past the defective signal. In such case he should inform the Loco Pilot to report the defect at the next station.
- (xi) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- (xii) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- (xiii) Gateman shall work the gate as per Gate Working Instructions and remain well conversant with these instructions.
- (xiv) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- (xv) Gateman shall see that the channel for the flange of the wheel is kept clear.



- (xvi) Gateman shall keep the road surface well watered and rammed in case of unmetalled roads.
- (xvii) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- (xviii) Gateman on electrified section shall watch that road vehicles / animals passing from gate are within the height loading gauge provided on either side of the level crossing gate.
- (xix) Gateman shall prevent trespassing by persons or cattle to the maximum extent.

**(4) ACTION IN CASE OF UNUSUAL OCCURRENCE ON TRAIN:**

- In case gateman observes anything unusual with a passing train, he shall take following action.
- (i) He shall take prompt action to warn the Loco Pilot / Guard of the passing train by showing red flag by day and red light by night.
  - (ii) He shall simultaneously try to draw the attention of the Loco Pilot / Guard by whistling continuously, shouting, gesticulating, throwing ballast on the brake van or by any other means.
  - (iii) If Loco Pilot/Guard fails to take notice, gateman shall immediately inform the Station Master, to take appropriate action, under exchange of private number.
  - (iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
  - (v) He shall endeavor to attract the attention of the Loco Pilot/Guard by whistling continuously, shouting, gesticulating and by raising both hands vertically above, quickly parting them and bringing them together in repeated UP and DN motion as high and as low as possible.
  - (vi) In case the train does not stop, gateman shall immediately inform the Station Master, if connected on telephone, to take appropriate action, under exchange of private number.

**(5) ACTION IN AN EMERGENCY AT THE LEVEL CROSSING:**

- (i) In case of an obstruction at the level crossing gate, gateman shall maintain the gate signals, in the 'ON' position.
- (ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master on duty, regarding the defects/obstructions at the gate, under exchange of private number.
- (iii) If there is no response from the Station Master after two or three attempts, he shall first protect the gate and then inform on phone.

**(a) The gateman shall protect the line as under:-**

- (i) If both lines are obstructed the gateman shall plant a red banner flag by day and a red light by night 5 meters away on posts duly provided for the purpose. He shall first protect the line on which a train is expected to arrive first.
- (ii) The he will similarly plant the other red banner flag by day and red light by night on the other line 5 meters away from the site of obstruction.
- (iii) Gateman shall then proceed to protect the gate along with detonators, LED tri-color flashing signal lamp and red flag by day and red hand signal lamp by night.
- (iv) Gateman shall proceed exhibiting red flag by day and red hand signal lamp by night on the line on which a train is expected to arrive first, to a point 600 meters on BG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 on BG from the level crossing gate and place 3 detonators on the track 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.

- (v) Thereafter, he shall 'proceed' on the other line, showing red hand signal, similarly place detonators as described in Para (iv) above and return to the site of obstruction, picking up the intermediate detonator on his way back.
- (vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the Loco Pilot of the approaching train.
- (vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
- (viii) Thereafter, he shall light up the LED tri-color flashing signal lamp to warn the Loco Pilot and stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly.

**(b) Other action to be taken by Gateman:**

- (i) At night gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub Para (a) above.
- (ii) The gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.
- (iii) He shall note down the particulars of the road vehicle, vehicle number, name of the Driver, owner and relay these details to the nearest Station Master or Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available

**1.6 EXCHANGE OF PRIVATE NUMBER:**

- (i) The normal position of the level crossing gate is "Closed to Road Traffic".
- (ii) The SM before permitting each train to enter into the block section, shall ask Gateman on the telephone by giving a Private Number weather, gate is closed against road traffic for the passage of train. The Gateman only after ensuring that the gate is actually closed and locked against road traffic shall give a Private Number to the SM in assurance of gate being closed & locked against road traffic.
- (iii) The SM shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of Private Number.
- (iv) When the gateman desires to open the gate for passage of road traffic he should ensure that:
  - (a) He has not exchange any private number with the station as per 1.6(ii) above, or
  - (b) If he has exchanged private number with the SM, the whole of the train with last vehicle indicator has passed over the level crossing gate and SM has not exchanged private number with him for any other movement immediately in rear of that train or on the adjacent line(s).

Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate. Then he shall open the gate for passing the road traffic, keeping a red flag/red hand signal lamp ready by his hand to stop approaching train if any.

- (v) In case the Gateman is not responding on the telephone or incase the telephone becomes defective or private number is not received from the Gateman, the SM shall adhere to the procedure prescribed in SR 16.03.04.
- (vi) In the event of failure of telephone, if the gate is required to be opened for the passage of road traffic, the gateman shall look out in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag

during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He will thereafter, open the gate for passing the road traffic keeping a red flag/red hand signal lamp ready in his hand to stop approaching train if any.

### **1.7 FAILURE OF TELEPHONIC COMMUNICATION**

When telephonic communication fails or it does not get any response from gateman despite 2 or 3 attempts, the following procedure should be adopted:

- (i) Station Master at dispatching end shall issue caution order to the Loco Pilot of the departing train.
- (ii) The caution order shall advise the Loco Pilot to whistle continuously and approach the gate cautiously.
- (iii) The Loco Pilot shall be instructed to pass the gate cautiously, on being hand signaled by the gate man. If hand signal is not seen, the Loco Pilot should prepare to stop short of the gate and depute his assistant Loco Pilot to see the condition of the gate. If gate is closed, the assistant Loco Pilot will give all right signal and if the gate is not closed the assistant Loco Pilot must close the gate and then give all right signal. In the absence of the assistant Loco Pilot, the Loco Pilot may take the assistance of assistant Guard/Guard.
- (iv) In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number that the telephone at the gate has failed.
- (v) The Station Master at the dispatching end shall then issue a caution order to the Loco Pilot before dispatching a train in the block section from his end.
- (vi) The Station Master shall advise the gateman through gang man/patrol man or the Loco Pilot of the first train that the telephone has become defective.
- (vii) He should also advise S&T staff responsible for maintenance of the telephone to rectify the same at the earliest.
- (viii) Normal working will be resumed only after S&T staff rectifies the telephone and issue reconnection/fit memo for the same.

### **1.8 FAILURE OF LIFTING BARRIERS OR LEAF GATES:**

- (i) When the gate cannot be closed due to failure of lifting barriers or leaf gates, the gateman will immediately inform the Station Master on duty, under exchange of private number, and ensure that lifting barriers or leaf gates do not foul the track.
- (ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- (iii) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.
- (iv) After securing the gate against road traffic, gateman shall show green hand signal flag by day and green light at night to the Loco Pilot of the approaching train.
- (v) Station Master on duty shall issue caution order to the Loco Pilot of departing train.
- (vi) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before dispatching a train in the block section from his end.
- (vii) Station Master shall advise maintenance staff responsible for maintenance of lifting barriers/ leaf gates to rectify the defect at the earliest.
- (viii) Normal working will resume only after maintenance staff rectifies the lifting barrier/ leaf gates and issue reconnection/ fit memo for the same.

**1.9 OBSTRUCTION AT THE GATE:**

- (i) If the gate is broken by a road vehicle which is fouling the track or if lifting barriers/ leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.
- (ii) Immediately after this, the gateman shall advise the Station Master on duty, regarding the defects / obstructions at the gate, under exchange of private number.
- (iii) Station Master on duty shall be advised to put the reception/ departure signals back to 'ON' position, if taken 'OFF' for a train.
- (iv) If there is no response from the Station Master after two or three attempts, he shall first protect the gate and then inform on phone.
- (v) Gateman shall then rush with detonators, LED tri-color flashing signal lamp and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate vide GR 16.07.
- (vi) Thereafter he shall protect the gate from the other direction also.
- (vii) He shall note down the particulars of the road vehicle, name of the Driver, owner and relay these details to the Station Master who shall not start the train unless he has been ensured by the gateman that the road vehicle or the lifting barriers/ leaf gates are not fouling the track.
- (viii) The Station Master shall also inform the Station Master at the dispatching end, under exchange of private number, asking him not to dispatch any train in the block section from his end, until the track has been cleared of all obstruction.
- (ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.
- (x) Station Master shall then issue a caution order to Loco Pilots of all trains to proceed cautiously, and pass the gate on green hand signal of the gateman, if the gate is broken, but clear of any obstruction.
- (xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and there after exhibit green hand signal, if the gate is not obstructed.
- (xii) Station Master shall advise maintenance staff responsible for maintaining the lifting barriers/leaf gate to repair the same at the earliest.
- (xiii) Normal working will be resumed only after maintenance staff rectifies the defective lifting barriers/ leaf gates and issue reconnection/ fit memo for the same.

**1.10 OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:**

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item No. 1.9 above. If the obstruction fouls the Level Crossing Gate, gate man must keep the gates closed against road traffic till the track is cleared of the obstruction.

**2.0 WORKING INSTRUCTION FOR 'C' CLASS NON-INTERLOCKED LEVEL CROSSING GATE NO. 167A SITUATED AT KM. 380/19-21 (UP) & 380/22-20 (DN) BETWEEN BRTG-BYY.**

**2.1 DESCRIPTION OF THE LEVEL CROSSING GATE:**

1.	Number of Level Crossing Gate	167A
2.	Engineering gate or Traffic Gate	Engineering
3.	Under the control	SSE/SE (P.Way) / HDS
4.	Location at Km	Km. 380/19-21 (UP) & 380/22-20 (DN)
5.	At Station	-
6.	In between station	BRTG-BYY
7.	BG/MG/NG	BG
8.	Single line/ Double line	Double Line
9.	Normal position	Closed to Road Traffic
10.	Interlocked/ Non Interlocked	Non – Interlocked
11.	Means of Interlocking	-
12.	Provision of Gate Signal	UP- -                      DN- -
13.	Signaling Arrangements	-
14.	Means of communication	Telephone with SM/BRTG
15.	Width of the Level Crossing Gate	7.50 m.
16.	Type of Road	Others
17.	Name of Road	Village Road
18.	Metaled/Non metaled	Metalled
19.	Approach Road	Metalled
20.	Width of the Road	5.50 m.
21.	Angle of road crossing (in case of SKEW Gates)	-
22.	Road gradient    a. North/East side b. South /West side	Level Level
23.	Road alignment (straight / curve) a). North/East side b). South /West side	Straight Straight
24.	Provision of height gauge	Yes
25.	Type of Barrier	Lifting
26.	Length of check Rail	9.50m.
27.	Road surface in between Level-Crossing Gates	C.C. Block
28.	Length of Rumble strip/speed breaker	10.50 m.
29.	Road Signs	Available
30.	Speed breakers indication boards...	Available
31.	TVU	-
32.	Census next due on	-
33.	Demarcation for placement of detonators	Available
34.	No. of gateman working	2
35.	Nearest Rly. medical Assistance	Cuttack
36.	Nearest private Medical Assistance available (if any)	Barchana P.H
37.	List of equipment available Yes/No	Yes

**2.2 EQUIPMENT TO BE AVAILABLE AT THE GATE:**

Sl. No.	Items	Quantity
1.	LED tri-color flashing signal lamp	3
2.	Hand signal flag Green	1 mounted on stick
3.	Hand signal flag Red	3 mounted on sticks
4.	Banner flag Red	3
5.	Posts for exhibiting Red banner flag	2
6.	Spare chains with padlocks	2 With stop mark
7.	Detonators	10 in tin case
8.	Gate Lamps	2
9.	Tommy bar	1
10.	Mortar pan	1
11.	Spade/Fowrah	1
12.	Rammer	1
13.	Pick axe	1
14.	Tin case for flag	1
15.	Can for oil	1
16.	Water pot/Bucket	1
17.	Canister for Muster roll	1
18.	Set of spare spectacles of gateman wearing glasses	1
19.	Board demarcating protection of level crossing gate diagram in case of obstruction on gate.	1
20.	Basket	1
21.	Whistle	1
22.	Wall clock	1
23.	Small size chain with Pad lock	2

**2.3. RECORDS TO BE KEPT AT GATE LODGE:**

- (i) Gate Working Instructions in Hindi/English.
- (ii) Gate Working, Instructions in local vernacular language.
- (iii) Gateman Rule Book in local vernacular language.
- (iv) List for tools and books.
- (v) Duty Roster.
- (vi) Certificate for working as Gateman.
- (vii) Bio-data particulars of Gatemen, including date of passing vision test, initial/refresher course, safety camp, etc.
- (viii) Accident Register.
- (ix) Record of last census of road traffic at Level Crossing Gate.
- (x) Public Complaint Book.
- (xi) Inspection Book.3

**2.4 MODE OF OPERATION:****NORMAL WORKING OF THE LEVEL CROSSING GATE (NON-INTERLOCKED):**

The level crossing gate is normally kept closed against road traffic and it will be opened for passage of road traffic only when it is necessary and safe to do so. The Gateman on duty before opening the gate shall ensure that he has not exchanged any Private Number with the station or if he has exchanged Private Number with the station, the whole of the train with last vehicle indicator has passed over the level crossing gate and the Station Master has not exchanged Private Number with him for any movement

immediately in the rear of that train or on the adjacent line (s). Before opening the gate, he shall display a banner flag across the track.

## 2.5 **DUTIES OF GATEMAN:**

(1) **ALERTNESS:** The gateman shall be alert and be prepared to take immediate action, should danger be apprehended. Keys of the gate shall be in his personal custody.

### (2) **POSITION DURING PASSAGE OF TRAINS:**

During passage of trains, gateman will stand in the manner indicated below:

- (i) Gateman will stand attentively in front of the gate lodge facing the approaching train.
- (ii) In day time, gateman shall hold red and green flags furled up on separate sticks in right and left hands respectively.
- (iii) In night time, gateman shall hold lighted hand signal lamp with white light facing the track.
- (iv) He shall keep the whistle slung around his neck from a cord.

### (3) **ROUTINE DUTIES OF GATEMAN:**

- (i) Gateman shall ensure that red banner flag is placed across the track whenever the gate is kept in open condition for passage of road vehicles.
- (ii) Gateman shall ensure that gate lamps and lamps of all gate signals are lighted and kept burning continuously from sunset to sunrise.
- (iii) Gateman shall perform his duties strictly according to the duty roster and shall not leave the gate unless reliever arrives and takes charge of it. However, if it is necessary to leave the gate in an emergency, he must close and lock the gates against road traffic, before leaving the gate.
- (iv) Except where otherwise prescribed under A instructions, he shall observe all passing trains and be prepared to take such action as may be necessary to ensure safety of trains.
- (vi) Gateman shall watch all passing trains and keep sharp look out for any unusual like hot axle, hanging chains, hanging battery, any vehicle / wagons / train / battery box on fire, shifted load, falling material like brake blocks, brake beams, safety bracket, vacuum cylinder or any other situation endangering safe running of trains.
- (vii) Gateman shall also be prepared to repeat any signal which Guard may give to Loco Pilot on walk talkie or in any other way.
- (vii) If lifting barriers/gates get damaged or becomes out of order, the gateman shall use the spare chain with disc and padlocks for securing the gate against road traffic.
- (viii) Gateman shall report to the nearest Station Master, Gang mate or Permanent Way Inspector any defect in his gate or apparatus pertaining to it, as soon as possible.
- (ix) In the event of gate signal becoming defective the gateman shall maintain the signal in the 'ON' position even by disconnecting the signal or the wire if necessary.
- (x) At the gate whose signal have become defective, the gateman shall close and lock and lifting barriers on sighting a train and hand signal or pilot the train past the defective signal. In such case he should inform the Loco Pilot to report the defect at the next station.
- (xi) Gateman shall wear badge and prescribed uniform while on duty at level crossing gate.
- (xii) Gateman shall ensure that he is having competency certificate in his possession while on duty.
- (xiii) Gateman shall work the gate as per Gate Working Instructions and remain well conversant with these instructions.
- (xiv) Gateman shall ensure that equipment supplied at the gate is in good order and ready for immediate use.
- (xv) Gateman shall see that the channel for the flange of the wheel is kept clear.

- (xvi) Gateman shall keep the road surface well watered and rammed in case of un-metalled roads.
- (xvii) Gateman must be vigilant to see that inconvenience to road users due to closure of gates should be to the minimum possible extent.
- (xviii) Gateman on electrified section shall watch that road vehicles / animals passing from gate are within the height loading gauge provided on either side of the level crossing gate.
- (xix) Gateman shall prevent trespassing by persons or cattle to the maximum extent.

**(4) ACTION IN CASE OF UNUSUAL OCCURRENCE ON TRAIN:**

- In case gateman observes anything unusual with a passing train, he shall take following action.
- (i) He shall take prompt action to warn the Loco Pilot / Guard of the passing train by showing red flag by day and red light by night.
  - (ii) He shall simultaneously try to draw the attention of the Loco Pilot / Guard by whistling continuously, shouting, gesticulating, throwing ballast on the brake van or by any other means.
  - (iii) If Loco Pilot/Guard fails to take notice, gateman shall immediately inform the Station Master, to take appropriate action, under exchange of private number.
  - (iv) In case of train parting, gateman shall not show stop hand signal but shall show prescribed signal for train parting.
  - (v) He shall endeavor to attract the attention of the Loco Pilot/Guard by whistling continuously, shouting, gesticulating and by raising both hands vertically above, quickly parting them and bringing them together in repeated UP and DN motion as high and as low as possible.
  - (vi) In case the train does not stop, gateman shall immediately inform the Station Master, if connected on telephone, to take appropriate action, under exchange of private number.

**(5) ACTION IN AN EMERGENCY AT THE LEVEL CROSSING:**

- (i) In case of an obstruction at the level crossing gate, gateman shall maintain the gate signals, in the 'ON' position.
- (ii) Thereafter, if he is unable to remove the obstruction, gateman shall immediately advise the Station Master on duty, regarding the defects/obstructions at the gate, under exchange of private number.
- (iii) If there is no response from the Station Master after two or three attempts, he shall first protect the gate and then inform on phone.

**(a) The gateman shall protect the line as under:-**

- (i) If both lines are obstructed the gateman shall plant a red banner flag by day and a red light by night 5 meters away on posts duly provided for the purpose. He shall first protect the line on which a train is expected to arrive first.
- (ii) The he will similarly plant the other red banner flag by day and red light by night on the other line 5 meters away from the site of obstruction.
- (iii) Gateman shall then proceed to protect the gate along with detonators, LED tri-color flashing signal lamp and red flag by day and red hand signal lamp by night.
- (iv) Gateman shall 'proceed' exhibiting red flag by day and red hand signal lamp by night on the line on which a train is expected to arrive first, to a point 600 meters on BG and place one detonator on the line. Thereafter he shall proceed to a distance 1200 on BG from the level crossing gate and place 3 detonators on the track 10 meters apart. Having thus protected the line he shall return to the level crossing gate picking up the intermediate detonator on his way back.



- (v) Thereafter, he shall 'proceed' on the other line, showing red hand signal, similarly place detonators as described in Para (iv) above and return to the site of obstruction, picking up the intermediate detonator on his way back.
- (vi) Having returned to the gate, he must then take steps to remove the obstruction and warn the Loco Pilot of the approaching train.
- (vii) In case the gateman observes or hears a train approaching when he is still on his way to protect and before he reaches the stipulated distance to place detonators, he shall place detonators on the line at a distance as far away as he can go.
- (viii) Thereafter, he shall light up the LED tri-color flashing signal lamp to warn the Loco Pilot and stop the approaching train by waving his red flag by day red hand signal lamp by night repeatedly.

**(b) Other action to be taken by Gateman:**

- (i) At night gateman shall light two hand signal lamps and take action to exhibit red light and protect the lines as described in sub Para (a) above.
- (ii) If the gate is broken by a road vehicle which is fouling the track, or if lifting barriers or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall take immediate action.
- (iii) He shall note down the particulars of the road vehicle, vehicle number, name of the Driver, owner and relay these details to the nearest Station Master or Permanent Way Inspector regarding the particulars and obstructions at the level crossing gate, through messenger or other means available.

**2.6 EXCHANGE OF PRIVATE NUMBER:**

- (i) The normal position of the level crossing gate is "Closed to Road Traffic"
- (ii) The SM before permitting each train to enter into the block section, shall ask Gateman on the telephone by giving a Private Number weather, gate is closed against road traffic for the passage of train. The Gateman only after ensuring that the gate is actually closed and locked against road traffic shall give a Private Number to the SM in assurance of gate being closed & locked against road traffic.
- (iii) The SM shall not permit any train to enter the block section, unless he is assured of the closure and locking of the gate by the gateman supported by exchange of Private Number.
- (iv) When the gateman desires to open the gate for passage of road traffic he should ensure that:
  - (1) He has not exchange any private number with the station as per 2.6(ii) above, or
  - (2) If he has exchanged private number with the SM, the whole of the train with last vehicle indicator has passed over the level crossing gate and SM has not exchanged private number with him for any other movement immediately in rear of that train or on the adjacent line(s).

Before opening the gate for road traffic, he shall display banner flag/danger signal at either side of the track at a distance of 5 meters away from the gate. Then he shall open the gate for passing the road traffic, keeping a red flag/red hand signal lamp ready by his hand to stop approaching train if any.

- (v) In case the Gateman is not responding on the telephone or incase the telephone becomes defective or private number is not received from the Gateman, the SM shall adhere to the procedure prescribed in SR 16.03.04.
- (vi) In the event of failure of telephone, if the gate is required to be opened for the passage of road traffic, the gateman shall look out in both directions before opening the gate to ensure that no train is approaching from either end. He shall then plant a banner flag

during day and a hand signal lamp with the red light during night, 5 meters away from the gate on the track on either side. He will thereafter, open the gate for passing the road traffic keeping a red flag/red hand signal lamp ready in his hand to stop approaching train if any.

## **2.7 FAILURE OF TELEPHONIC COMMUNICATION**

When telephonic communication fails or it does not get any response from gateman despite 2 or 3 attempts, the following procedure should be adopted:

- (i) Station Master at dispatching end shall issue caution order to the Loco Pilot of the departing train.
- (ii) The caution order shall advise the Loco Pilot to whistle continuously and approach the gate cautiously.
- (iii) The Loco Pilot shall be instructed to pass the gate cautiously, on being hand signaled by the gate man. If hand signal is not seen, the Loco Pilot should prepare to stop short of the gate and depute his assistant Loco Pilot to see the condition of the gate. If gate is closed, the assistant Loco Pilot will give all right signal and if the gate is not closed the assistant Loco Pilot must close the gate and then give all right signal. In the absence of the assistant Loco Pilot, the Loco Pilot may take the assistance of assistant Guard/Guard.
- (iv) In case of an approaching train, the Station Master shall advise the Station Master at the dispatching end, under exchange of private number that the telephone at the gate has failed.
- (v) The Station Master at the dispatching end shall then issue a caution order to the Loco Pilot before dispatching a train in the block section from his end.
- (vi) The Station Master shall advise the gateman through gang man/patrol man or the Loco Pilot of the first train that the telephone has become defective.
- (vii) He should also advise S&T staff responsible for maintenance of the telephone to rectify the same at the earliest.
- (viii) Normal working will be resumed only after S&T staff rectifies the telephone and issue reconnection/fit memo for the same.

## **2.8 FAILURE OF LIFTING BARRIERS OR LEAF GATES:**

- (i) When the gate cannot be closed due to failure of lifting barriers or leaf gates, the gateman will immediately inform the Station Master on duty, under exchange of private number, and ensure that lifting barriers or leaf gates do not foul the track.
- (ii) He shall immediately fix red banner flag by day and red light by night on the post at that end first from which the train is approaching and then at the other end.
- (iii) Gateman shall secure the gate against road traffic by means of safety chains and padlocks.
- (iv) After securing the gate against road traffic, gateman shall show green hand signal flag by day and green light at night to the Loco Pilot of the approaching train.
- (v) Station Master on duty shall issue caution order to the Loco Pilot of departing train.
- (vi) He shall also advise the Station Master at the dispatching end, under exchange of private number, to similarly issue a caution order to the Loco Pilot before dispatching a train in the block section from his end.
- (vii) Station Master shall advise maintenance staff responsible for maintenance of lifting barriers/ leaf gates to rectify the defect at the earliest.
- (viii) Normal working will resume only after maintenance staff rectifies the lifting barrier/ leaf gates and issue reconnection/ fit memo for the same.

**2.9 OBSTRUCTION AT THE GATE:**

- (i) If the gate is broken by a road vehicle which is fouling the track or if lifting barriers/ leaf gates or any other part of the gate foul the track, or if there is any other obstruction at the gate, the gateman shall immediately fix red banner flag by day and red lamp by night on posts provided at both ends of the gate, for this purpose.
- (ii) Immediately after this, the gateman shall advise the Station Master on duty, regarding the defects / obstructions at the gate, under exchange of private number.
- (iii) Station Master on duty shall be advised to put the reception/ departure signals back to 'ON' position, if taken 'OFF' for a train.
- (iv) If there is no response from the Station Master after two or three attempts, he shall first protect the gate and then inform on phone.
- (v) Gateman shall then rush with detonators, LED tri-color flashing signal lamp and red flag by day and red hand signal lamp by night in the direction of the approaching train and protect the gate vide GR.16.07.
- (vi) Thereafter he shall protect the gate from the other direction also.
- (vii) He shall note down the particulars of the road vehicle, name of the Driver, owner and relay these details to the Station Master who shall not start the train unless he has been ensured by the gateman that the road vehicle or the lifting barriers/ leaf gates are not fouling the track.
- (viii) The Station Master shall also inform the Station Master at the dispatching end, under exchange of private number, asking him not to dispatch any train in the block section from his end, until the track has been cleared of all obstruction.
- (ix) After the track has been cleared of all obstructions the gateman shall inform the Station Master accordingly, under exchange of private number.
- (x) Station Master shall then issue a caution order to Loco Pilots of all trains to proceed cautiously, and pass the gate on green hand signal of the gateman, if the gate is broken, but clear of any obstruction.
- (xi) Gateman shall secure the gate against road traffic by means of safety chains and padlocks and there after exhibit green hand signal, if the gate is not obstructed.
- (xii) Station Master shall advise maintenance staff responsible for maintaining the lifting barriers/leaf gate to repair the same at the earliest.
- (xiii) Normal working will be resumed only after maintenance staff rectifies the defective lifting barriers/ leaf gates and issue reconnection/ fit memo for the same.

**2.10 OBSTRUCTION ON THE TRACK NEAR LEVEL CROSSING GATE:**

If there is a rail fracture or obstruction on the track due to falling of a tree, fouling by road vehicle or derailment which is visible to the gateman, the gateman and Station Master will adopt the procedure given under item No. 2.9 above. If the obstruction fouls the Level Crossing Gate, gate man must keep the gates closed against road traffic till the track is cleared of the obstruction.

1.0 This is a 'C' class station (Block Hut) and the station is equipped with Multi Aspect Colour Light Signals operated from slide SM's control panel.

2.0 **WORKING OF INTERLOCKING AND SIGNALS:**

- (i) All signals are operated from the Block Hut.
- (ii) UP and DN Home signals are interlocked with the respective Block Panel Instrument. Unless line clear is obtained through the Block Instrument, concerned Home Signal cannot be taken OFF.
- (iii) When the Block Panel Instrument is suspended, the respective Home signal shall be treated as out of order and train shall be piloted out in terms of SR 3.70.01.
- (iv) The Home Signal can be put back to 'ON' position by the Station Master on duty by normalizing the Home signal slide.

3.0 **SALIENT FEATURE OF INTERLOCKING:**

- i) A short track circuit of three Rail Length (Approx) (2T) has been provided ahead of DN Home Signal No. 2 and a short track circuit of three Rail lengths (Approx) (3T) has been provided ahead of UP Home Signal No.3 for automatic replacement of Home Signal to 'ON' after passage of train.
- ii) Similarly, track circuit of three Rail Length 2T1 & 3T1 have been provided at a distance of 400 meters beyond the DN Home Signal and UP Home signal respectively for concerned Block Section.
- iii) Luminous indication of each signal and track circuit is provided at the Station Master's office in the Diagram Board. The track circuit indication shows 'white' when 'clear' and 'Red' when occupied. The aspect indication of signal also obtainable in the diagram board.

4.0 **FUNCTION OF SLIDES:**

In the Station Master's office, there is an electrical slide Control Machine with 12 slides to control UP & Down Home signals with a locking arrangement. The SM on duty can put back the Home signal in case of emergency by normalizing the concerned slide. The individual function of each slide is detailed below:-

SLIDE NO	FUNCTION
1.	Spare.
2.	DN Home Signal,
3.	UP Home Signal
4.	Spare.
5.	Spare.
6.	Spare.
7.	Spare.
8.	Spare.
9.	Spare.
10.	Spare.
11.	Spare.
12.	Spare.

5.0 **AUTOMATIC REPLACEMENT OF SIGNALS AT BARITHENGARH:**

UP Home signal No. 3 is controlled through 3T for automatic replacement to "ON" position. DN Home signal No. 2 is controlled through 2T for automatic replacement to "ON" position.

## 6.0 **ASPECT CONTROL OF SIGNALS:**

### A) **UP & DN DISTANT SIGNALS:**

These are Two Aspect Colour Light Permissive Signals with disc type “P” marker, normal aspect of which is one yellow. This signal is located at a distance of 1 Km. from the concerned Home signals at Left Hand Side (LHS) of the concerned track.

The aspects and indications of colour light distant signal is as follow:

- i. One yellow aspect means caution, which indicates to proceed and be prepared to stop at the next stop signal.
- ii. Green aspect means “proceed” which means to proceed at permissible speed. The aspect of the distant signals is controlled automatically through the aspect of concerned Home signals ahead.

### B) **UP & DN HOME SIGNALS:**

UP Home Signal No. 3 is two aspect colour light stop signal i.e. Red and Green. The normal aspect of signal is Red. This signal is located at a distance of 1 Km. from UP Distant signals on the LHS of the concerned track. This signal will assume green aspect when the Line clear has been obtained from the ‘Block Station in advance and Home signal taken off. Similarly DN Home Signal No. 2 is two aspect colour light stop signal i.e. red and green. The normal aspect of signal is Red. This signal is located at a distance of 1 Km. from DN Distant signal on the LHS of the concerned track. The signal will assume green aspect when the line clear has been obtained from block station in advance and concerned Home signal taken off.

## 7.0 **USE OF LEVER COLLARS AND SLIDE COLLARS:**

Slide collars are to be placed on the respective slides as shown in the tabular form whenever running lines are blocked vide SR 5.04.01 and SR 3.36.03.

Line No.	Slide Collars to be placed on SM’s slide
DN Main	2
UP Main	3

The above chart shall be exhibited in SM’s office vide O.M. No. 20.04 (7).

## 8.0 **MAINTENANCE OF S&T INSTALLATION AND ADHERENCE TO MAINTENANCE SCHEDULES:**

The regular maintenance of S&T installations and adherence to the schedules of maintenance as also to the mandatory schedules of testing of track circuits, signals and interlocking apparatus i.e. Cable and SM’s slide functional tests is a must for the safe and satisfactory working of these installations at BARITHENGARH.

The tests, checks and replacements etc., including overhauling shall confirm to these schedules of maintenance as indicated in the signal engineering manual as also in the current an extant instructions/circulars on the subject.

## 9.0 **PROCEDURE WHEN FIXED SIGNAL AND/OR INTERLOCKING IS DEFECTIVE:**

When the Station Master on duty becomes aware that any signal has become defective or has ceased to function properly he shall immediately advise the officials concerned with full particulars for early rectification of the defect and for issue of Caution Orders.

When Interlocking goes out of order the officials concerned shall be promptly advised for attending the failures by using failure memo.

Trains are to be piloted out in terms of Subsidiary Rule 3.70.01.

Before permitting the maintenance staff to attend repairs of defective signals or interlocking, the Station Master on duty shall obtain a "Disconnection Memo" from the person attending in terms of Subsidiary Rule 3.51.04. On completion of the work the Station Master on duty shall test the function of the signal and satisfy that it is in good working order. He shall then obtain a "Reconnection Memo" from the Maintainer before resumption of normal working. Failure Register, Disconnection/Reconnection Memo Register and Relay Room Key Register to be maintained properly.

10.0 **PILOTING/AUTHORISING OF TRAIN PAST FIXED STOP SIGNAL AT "ON" POSITION:**

Whenever it is necessary to pass a train past fixed stop signal at "ON" position due to any cause the procedure detailed in General Rule 3.70 and Subsidiary Rule 3.70.01 shall be followed by the Station Master on duty.

The Loco Pilot of the train shall be given a written authority on the prescribed Form T/369 (3b) for passing Home Signal at "ON" position. These are to be written in carbon process. The original being made over to the Loco Pilot, the carbon copy shall be retained as record.

In the event of the defective Signal/Interlocking, Failure of Lock and Block Instrument, the concerned officials must be intimated.

11.0 **NORMALISATION OF THE BLOCK AXLE COUNTER AND IT'S RESETTING PROCEDURE:**

Analog Axle Counters are provided on both UP and DN line block section between BRTG-BYY & BRTG-DNM. The occupation and clearance of the axle counter section are indicated on the panel by 'Red' and 'Green' light. If any Block proving Axle Counter section fails, the last stop signal at the rear station cannot be taken 'OFF' and block instrument at Advance station cannot be turned to 'Line Closed' position after arrival of a train. Even after completion of reset operation, LVCD Axle Counter will show clear only if next train is passed. The next train is to be piloted 'OUT'. No train should be allowed on signal to leave a station in any particular direction unless:- Track clear indication is available for the relevant axle counter track circuited portion and Last Stop Signal is taken OFF.

12.0 **RESETTING OF AXLE COUNTER WHEN FAILED:**

After a train has been received at the receiving end station or when no train has entered in to the Block section, if the "Line Occupied (RED)" indication still persists, then receiving station SM and sending station SM shall adopt the following procedure for resetting the axle counter. Dispatching end station will give permission for resetting.

<b>ACTION TO BE TAKEN BY THE SS ON DUTY AT DESPATCHING END STATION</b>		<b>ACTION TO BE TAKEN BY THE SS ON DUTY AT RECEIVING END STATION</b>
1.		After complete arrival of train vide SR 4.17.01, if the Axle counter free indication does not clear or Axle counter free indication (G) does not appear in the panel he shall inform the station in rear through telephone giving details of last train that has arrived complete at his station and the block section is clear.
2.		The receiving station shall inform the sending station as to whether the last train that entered into the section has arrived or not and if arrived fully then he shall exchange private number with the sending station and ask for granting permission for resetting the axle counter.
3	On getting advice from the receiving station for resetting the sending station pushed the 'Permission Granted" button and presses keeping it for some time.	
4.		An indication lamp provided in the panel for permission received shall lit up. Then insert the reset key, turn, press the permission acknowledgement button and keep it for some time.
5.	The RED indication does not change to "GREEN".	
6.		Veeder counter provided on Block Panel shows next higher number. The same may be recorded in the reset register.
7.	The dispatching station will 'Pilot Out" the first train to the concerned Block Section.	
8.		After complete arrival of the first train at the receiving Piloted out at the station. In rear, the "GREEN" indication appears on the Panel and RED indication disappears.
9.	Observes "GREEN" indication on Block Panel.	
10.	Block Instruments on block panel can be normalized.	

If the axle counter section indication does not appear "GREEN" after complete arrival the first train piloted out by the dispatching end. The concerned Block section shall be suspended and intimation to be given to ESM/SE(S)/JE (Signal) for early rectification.

**13.0 SIGNAL LIGHTS:**

The Station Master on duty at 00.00 Hrs (2<sup>nd</sup> night shift) must also ensure from panel board that all the signal lights are glowing properly and brightly. This fact must be recorded in the Diary under a separate entry and confirm to the Section Controller on duty.

**14.0 CORRECTING TIME IN STATION CLOCK:**

The SM shall set the time on his Clock according to the time signal given by the Section Controller on duty at 16.00 hrs. everyday according to G &SR 4.01.01 and 4.01.02.

**15.0 TELECOMMUNICATIONS:**

- a) The station is connected to Khurda Road control Board on the BHC-JKPR-DATR-NYG control circuit.
- b) Telephone attached to block panel by axle counter at either section.
- c) Telephones are provided in SM's office connecting the gate lodges of L.C. Gate at Km. 378/4-2 (DN) &378/1-3 (UP) and L.C. Gate at Km. 380/19-21 & 380/22-20.
- d) VHF set is provided at the station.
- e) This station is connected to BHC-BRAG traction control circuit.

**NOTE**

- a. For obtaining line clear VHF should be used as a last alternative and not as a sole means of communication.
- b. VHF & Walkie-Talkie sets should not be used for unnecessary discussion with Loco Pilots/Guards and any other staff.



**ANTI COLISION DIVICE (RAKSHA KAVACH)**

=== NIL ===

(A.K.JENA)  
DSTE/KUR

(B.PANDA)  
DOM/KUR

**1. STATION MASTER( IN-CHARGE)**

He is the In-charge of the Station. He shall perform day shift duty for train passing duties in turn with his assistants. He is responsible for the efficient discharge of duties devolving upon all the staff employed at the station according to rules, safe working instructions and Station Working Rules. He shall see that all signals and whole machinery at the station are in proper working order. He shall report all defects to the concerned officials. He shall satisfy himself that the staff employed under him at this station are thoroughly conversant with Station Working Rules and perform their duties correctly. It is his personal responsibility to maintain the station working rules, other rule books, Safe Working Instructions issued from time to time and the Assurance Registers up to date. He shall see that all records of the station are properly maintained and due statements, returns and other corresponding documents are up to date. He shall see that the staff are civil courteous and help full to all users of railway. He shall see that all station premises are kept clear and tidy. He is responsible for booking off all Group-‘C’ and Group-‘D’ staff for PME and refresher course/safety camp in their due time.

His special attention is drawn to Chapter-II of GR and SR and GR 5.01 to 5.08 with relevant SRs, Chapter-XXII of operating Manual. He shall follow the instructions laid down in SR 3.68.01 (c) & (d) and SR 14.07.01 Para 2.09 (e) of Block Working Manual. He shall supervise the works of staff and conduct night inspections, Safety meetings and fire drills and report lapses of staff working under him. He shall also ensure that the safety equipments in the station as mentioned in the station working rules are supplied in full and they are good working order with necessary relief stock.

The SM's special attention is drawn to the GR 5.01 to 5.23 where details are indicated.

**1.1. ASSURANCE REGISTER :**

All staff before taking up independent charge of their duties at this station shall make a written declaration in the Assurance Register that they have read the SWR thoroughly & understood the system of working in force at the station and must sign such declaration.

No railway servant shall be entrusted with any duty involving the safety of the public unless the SM is satisfied that the concerned staff is competent for the post. No Railway servant unless duly examined and certified shall be allowed to work the signals. The Station Master (In-charge) is responsible to see that all the staff are well conversant with the Station Working Rules of the station and their signature obtained in the Assurance Register after he is satisfied that they have thoroughly understood the working rules of the station. In case of Class-IV staff, their signature/thumb impression must be obtained after explaining full about their duties and responsibility.

The Station Master is personally, responsible for maintaining the Assurance Register and for obtaining declaration from the staff working under him. The Assurance Register must be maintained in two parts, one for Group-‘C’ and the other for Group-‘D’ staff. A duplicate copy of the Assurance Register must be maintained and kept in personal custody by the Station Master.

(B.PANDA)  
DOM/KUR

The declarations are to be renamed in the following cases:

- (i) Whenever there is a charge in the Station Working Rule.
- (ii) For any staff who have not worked at the station or other away from the station for the period of 15 days and over.

1.2. **USE OF PRIVATE NUMBER BOOKS AND IDENTIFICATION NUMBER SHEETS:**

Sufficient Private Number books and Identification Number sheets in sealed covers shall always be kept in stock by Station Master (In-charge) under lock and key by maintaining one Register for this purpose.

1.3. **ACCIDENTS:**

Accidents shall be recorded, reported and immediate action shall be taken by the Station Master, in accordance with the instructions laid down in the accident manual. Whenever the Station Master receives report of an accident, he shall take all necessary precautionary measures to protect the traffic and shall arrange earliest possible assistance as required at the site of accident. He shall frame the accident message and report and follow up all safety principles without delay.

- 1.4 The SM (In-charge) shall test the working of the Home Signal daily during the day when there is no train due to arrive/leave the station and record the results in the SM's diary.

2. **ASSISTANT STATION MASTER:**

He shall work for train passing duties. The Asst. Station Master on duty shall record in the diary the condition of the running lines, the caution orders at the time of handing over charge. These entries shall be counter signed by the Station Master/ Asst. Station Master coming on duty and taking over charge. This will not however relieve the Station Master of his responsibility to ensure by physical check, that the respective line is clear of obstruction before admission of any train on it. The Asst. Station Master on duty who makes an entry in the train signal register shall continue till all the pertaining to the trains are completed vide SR 14.07.01. The Asst Station Master is responsible for safe reception and dispatch of trains. Operation of panel, operation of Block Instruments strictly in accordance with the procedures and rules as laid down in Chapter-IV of the Block Working Manual. He is responsible for ensuring that the work is carried out in safe and proper manner. He shall report any defect or deficiency to the concerned official for early rectification. He shall not allow any unauthorized persons to enter into the station or allow him allow them to interfere in the Panel and Block Instrument. He shall not leave his duty spot till relieved by a component railway servant. He shall exchange signals with the train staff to take action as required under rules. He shall see that safety equipment is available in good working order. Inspection register, failure Register and safety equipment chart are to be maintained up to date.

He shall promptly bring to the notice of SM all irregularities and accidents in course of his duties. During the absence of SM In-charge, the duties of SM In-charge devolve on him. His special attention is drawn to Chapter-II of GR & SR and GR 5.01 to 5.08 with relevant SRs.

(B.PANDA)  
DOM/KUR

**3. HANDING OVER AND TAKING OVER CHARGES:**

The SM on duty shall record all the movements in the diary. The condition of running lines, the Caution Orders in force and the Private Numbers used last at the time of handing over charge. These entries must be checked and counter signed by the ASM/SM coming on duty before and taking over charge. He shall also ensure by physical check that the lines are clear of all obstruction before admission of any train on it.

**4. TRAFFIC POINTSMAN:**

He shall work under the instructions of SM on duty and follow the GR 02.05 to 2.11 and other relevant rules laid down in GR and SR.

- i). Coupling and un-coupling of vehicles.
- ii). Protection of line in an emergency
- iii). Piloting of trains of trains when necessary and handing over caution orders/or any other line clear authorities to the Loco Pilot and guards of the trains.
- iv). Attending off side to observe safe running of run through trains at stations and correct display of hand signals and ringing the station bell.
- v). Being conversant with the layout of the yard.
- vi). Observing General Rules 5.13 to 5.21 and relevant Subsidiary Rules during shunting.
- vii). Cleaning and lighting of hand signal lamps, if required.
- viii). Cleaning and oiling of clamps and padlocks, if required.
- ix). Cleaning and Dusting of SM's office room furniture and equipments of the Office.
- x). Working as fog signal man as and when required.
- xi). Filling up the fire buckets with sand/water.
- xii). Getting train intact arrival register (T/1410) signed by the Guard as and when required.
- xiii). Any other duties entrusted to him by the SM on duty from time to time.

**GENERAL**

- 1) A set of flags and LED tri-color flashing signal lamp will be part of the essential equipment of the staff while on duty. He shall not leave the station except when required by the SM on duty or with his permission and shall comply with Subsidiary Rules 4.42.02 (b) (i) and (d).
- 2) Staff working at the station must be able to distinguish UP and DN line clear tickets and educated in distinguishing other operational forms and documents, delivered to Loco Pilot's and Guards and must also know how and when to ring the station bell.

A list of Essential Safety Equipment's which should be kept readily available in good working order with necessary relief stock.

Sl. No.	Description	Station
1.	Detonator Signals	10
2.	LED tri-color flashing signal lamp	3
3.	Hand Signal Flags	3 set (3 Red & 3 Green)
4.	Safety chain with Padlocks.	2 Nos.
5.	Skids	02 Nos.
6.	Fire and Sand Buckets.	02 Nos.
7.	Slide Collar	02 Nos.
8.	Motor Trolley on line label.	02 Nos.
9.	Fire Extinguisher	01 (DCPT)
10.	First Aid Box	01 No
11.	Stretcher	01 No
12.	Power Block Collar	02 Nos.

(A.K.JENA)  
DSTE/KUR

(B.PANDA)  
DOM/KUR

**RULES FOR WORKING OF DK STATIONS HALTS, IBH, IBS, AND OUTLYING SIDINGS**

1.1 **MID-SECTION OUTLAYING SIDING:**

There is no mid-section siding on either end of block section.

1.2. **IBH, IBS/DK STATION:**

There is no IBH or IBS or DK station on either end of block section.

1.3. **HALT STATION:**

NIL

(A.K.JENA)  
DSTE/KUR

(B.PANDA)  
DOM/KUR

