

उत्तर रेलवे

प्रधान कार्यालय
बडौदा हाउस नई दिल्ली

संख्या: 422-T/O/1/Pt-IX/Loose-III/OPtg.

दिनांक: 13.02.2014

मण्डल रेल प्रबन्धक,

उत्तर रेलवे /फिरोजपुर, दिल्ली, लखनऊ, मुरादाबाद एवं अम्बाला।

विषय:- ब्लॉक संचालन नियम पुस्तक 2007 का संशोधन पत्र स0 05 दिनांक- 14.10.2013.

(हिन्दी)

ब्लॉक संचालन नियम 2007 का संशोधन पत्र स0 05 दिनांक 14.10.2013. की प्रतिलिपि आपके सूचनाार्थ एवं कार्यवाही हेतु भेजी जा रही है।

एम.एस. 1/25
कृते महाप्रबन्धक/परि
13/2/14

प्रतिलिपि :-

1. सीवेव/संरक्षा, रेलवे बोर्ड, नई दिल्ली।
2. रेल संरक्षा आयुक्त, सफदरजंग रेलवे स्टेशन बिल्डिंग, चाणक्य पुरी, नई दिल्ली।
3. प्रधानाचार्य, क्षेत्रीय रेलवे प्रशिक्षण संस्थान, उ0 र0 चन्दौसी।
4. प्रशिक्षक इंचार्ज, संरक्षा शिविर सैफटी कैम्प/ कानपुर सेन्ट्रल, फिरोजपुर, लखनऊ धर्मपुर, कुरुक्षेत्र एवं मुरादाबाद।
5. वरि0 मण्डल परि0 प्र0, फिरोजपुर, दिल्ली, लखनऊ, मुरादाबाद एवं अम्बाला।
6. वरि0 मंडल बिजली अभि0, (आर एस ओ) दिल्ली, मुरादाबाद, अम्बाला, फिरोजपुर एवं लखनऊ।
7. वरि0 मण्डल परि0 प्र0/सा0, फिरोजपुर, दिल्ली, लखनऊ, मुरादाबाद एवं अम्बाला।
8. वरि0 मंडल सिग्नल एवं दूर संचार अभि0, फिरोजपुर, दिल्ली, लखनऊ, मुरादाबाद एवं अम्बाला।
9. वरि0 मंडल संरक्षा अधिकारी, फिरोजपुर, दिल्ली, लखनऊ, मुरादाबाद एवं अम्बाला।
10. वरि0 मंडल यांत्रिक अभि0, फिरोजपुर, दिल्ली, लखनऊ, मुरादाबाद एवं अम्बाला।
11. मुख्य अभियन्ता, बडौदा हाउस, नई दिल्ली।
12. मुख्य घल स्टाफ अभियन्ता, बडौदा हाउस, नई दिल्ली।
13. मुख्य बिजली अभि0, बडौदा हाउस, नई दिल्ली।
14. मुख्य सिग्नल एवं दूर संचार अभि0, बडौदा हाउस, नई दिल्ली।
15. मुख्य यांत्रिक अभि0, बडौदा हाउस, नई दिल्ली।
16. मुख्य संरक्षा अधिकारी, बडौदा हाउस, नई दिल्ली।
17. मुख्य मुद्रण एवं लेखन सामग्री प्रबन्धक, जमि0 शकूरबस्ती (दो प्रति)

कृपया उपरोक्त संशोधन पत्र स0- 05 दिनांक 14.10.2013. को उ0 र0 गजट में प्रकाशित करें।

AMENDMENT SLIP NO. 5 DATED 14.10.13 TO THE BLOCK WORKING MANUAL, 2007 OF NORTHERN RAILWAY.

Add new sub para 3017 (d) under para 3017 (c):

Para 3017:

(d) Neale's Token Ball/Tablet instrument shall be considered failed and working of the Block Instrument shall be suspended in the following circumstances:

1. When bell signals are received indistinctly or fail altogether.
2. If the needle of the galvanoscope fails to move when bell signals are given or received or shows a wrong-indication viz. to the right instead of left and vice versa.
3. When a token is broken or damaged in any way during or after extraction.
4. If a token cannot be taken out from the instrument after proper signals have been exchanged and no token is out from either instruments of a section.
5. When a token can be taken out from the instrument without proper signals being exchanged with the station at the other end of the section.

NOTE: Above test shall be made when the operators take charge of the block instrument.

6. If a token cannot be put back into the instrument or jams when being put back into the instrument.
7. If a train arrives at a station without a token referring to the Block Section over which the train has passed.
8. When the token belonging to a Block section has been over carried to another station, or is lost and cannot be found.
9. When there is a reason to believe that there is contact between the Block wire and any other circuit.

NOTE: If a contact exists between the block wire and any other circuit, there will be either a permanent or intermittent deflection of the needle in the dial and possibly irregular beats on the bell. A contact between two block wires of adjacent sections would cause signals if given on one instrument to be repeated on the adjacent instrument.

10. If the operating handle cannot be turned to any one of the three positions with a prolonged beat from the distant station.
11. If the operating handle can be turned to any one of the three positions without a prolonged beat from the station at the other end.
12. If dial glass of the galvanoscope is broken.
13. If instrument or its battery counter is found unlocked.
14. When the key of the token receiver drum is lost or its lock is out of order.
15. When a private number cannot be obtained from the Station Master at the other end of Station though the Block Telephone.
16. If known that the instrument is defective in any way and which is not specified above.

(Mohd. Jamshed)
Chief Operations Manager

दिनांक: 24.8.2012.

पत्र संख्या: - 403-T/23/PTD/OPG

मण्डल रेल प्रबन्धक,

उत्तर रेलवे,

दिल्ली, अम्बाला, फिरोजपुर, मुरादाबाद एवं तहल्लु।

विषय: ब्लॉक संवातन नियमवली अनुसूची 1987 का संशोधन पत्र संख्या - 4 दिनांक 13-8-2012 (हिन्दी एवं अंग्रेजी) की प्रतिनिधि प्रतियों एवं अन्यक कर्मचारी के लिए भेजी जा रही है।

कृते मह. प्रबन्धक (संयोजक)

प्रतिनिधि:-

5. सचिव/संरक्षा, रेलवे बोर्ड, नई दिल्ली।
6. रेल संरक्षा आकृत, सफरकां रेलवे स्टेशन निर्दिष्ट, वास्तव्य पूरी, नई दिल्ली।
7. प्रधानकार्य, क्षेत्रीय प्रशिक्षण संस्थान तथा वरिष्ठ यांत्रिक प्रशिक्षक, उत्तर रेलवे, कन्दौली।
8. प्रशिक्षक इंजन, संरक्षक शिविर (Safety Camp), कानपुर सेन्ट्रल, फिरोजपुर, तहल्लु, धर्मपुर, कुरुक्षेत्र, मुरादाबाद, प्रधानकार्य विविध इंजीनियर, प्रशिक्षण केन्द्र कानपुर।
5. वरिष्ठ मण्डल परिकल्पन प्रबन्धक - दिल्ली, अम्बाला, फिरोजपुर, मुरादाबाद एवं तहल्लु।
6. वरिष्ठ मण्डल संरक्षा अधिकारी - दिल्ली, अम्बाला, फिरोजपुर, मुरादाबाद एवं तहल्लु।
7. वरिष्ठ मण्डल सिग्नल एवं दूर संचार अभियन्ता - दिल्ली, अम्बाला, फिरोजपुर, मुरादाबाद एवं तहल्लु।
18. वरिष्ठ मण्डल विजिली अभियन्ता (R.S.O.) दिल्ली एवं अम्बाला।
19. वरिष्ठ मण्डल यांत्रिक अभियन्ता - दिल्ली, अम्बाला, फिरोजपुर, मुरादाबाद एवं तहल्लु।
20. COM, CPTM, CFTM, COM/G, CTPM, DY. COM/Chg. Dy.COM Plg., Dy. COM(FOIS) Dy. COM/Goods I & II.
21. प्रमुख मुख्य अभियन्ता, बड़ौदा हाऊस, नई दिल्ली।
22. मुख्य विजिली अभियन्ता, बड़ौदा हाऊस, नई दिल्ली।
23. मुख्य सिग्नल एवं दूर संचार अभियन्ता - बड़ौदा हाऊस, नई दिल्ली।
24. मुख्य यांत्रिक अभियन्ता - बड़ौदा हाऊस, नई दिल्ली।
25. मुख्य चल स्टॉक इंजीनियर, कोचिंग एवं माल - बड़ौदा हाऊस, नई दिल्ली।
26. मुख्य संरक्षा अधिकारी - बड़ौदा हाऊस, नई दिल्ली।
27. मुख्य मृदा एवं संकेत सम्बन्धी प्रबन्धक, गुरुग्राम, नई दिल्ली।

कृपया उपरोक्त संशोधन पत्र संख्या 4 दिनांक 13.8.12 की 2000 प्रति अंग्रेजी तथा 2000 प्रति हिन्दी में प्रामाणिकता देकर मूद्रा करें। कृपया इस पत्र को उत्तर रेलवे मण्डल में भी प्रकाशित करें।

ब्लॉक संचालन नियमावली 2007 उत्तर रेलवे का संशोधन पत्र संख्या 4 दिनांक 13.8.2012.

फार्म संख्या टी/369-3 (बी) , टी/सी-1425 एवं टी/डी-1425 को हटायें व निम्नलिखित को प्रतिस्थापित करें ।

संलग्नक . I, II व III

(शिव कुमार चौधरी)
मुख्य परिचालन प्रबन्धक

ऑन या खराब स्थिति में सिगनलों को पार करने के लिए प्राधिकार
(रिकॉर्ड/चालक)

दिनांक
समय

गाड़ी नं. अप/डाउन के चालक को

सिगनल का नं. और विवरण [] [] [] स्टेशन पर सिगनल खराब हो गया है/गए हैं आपको "ऑन" स्थिति में खराब बाहरी/होम/इनर होम/मार्ग सूचक/स्टार्टर/मध्यवर्ती स्टार्टर/अग्रिम स्टार्टर/आई बी एस सिगनल/सिगनलों को ऐसी रफ्तार से पार करने के लिए प्राधिकृत किया जाता है जो 15 कि.मी. प्र.घं. से अधिक न हो।

*गाड़ी लाइन नं. (अंकों में) एवं (शब्दों में) पर प्रवेश करेगी।

**अग्रिम स्टार्टर सिगनल/अंतिम रोक सिगनल में खराबी होने पर, अंतिम गाड़ी संख्या (अंतिम वाहन सहित) स्टेशन पर प्राप्त हुआ। लाइन क्लियर स्टेशन से बिजली सुप्रेषण यंत्र पर प्राप्त की जा चुकी है। प्राप्त किया गया प्राइवेट नं. (अंकों में) (शब्दों में)

चालक के हस्ताक्षर

स्टेशन मास्टर के हस्ताक्षर

स्टेशन मास्टर की मोहर

दिनांक

दिनांक

*यदि मार्ग सूचक/इनर होम/होम सिगनल खराब हो जाता है।

**यदि दोहरी लाइन वाले क्षेत्र में अग्रिम स्टार्टर/अंतिम रोक सिगनल में खराबी आ जाती है।

Northern Railway

Form No. T/369-3(b)

AUTHORITY TO PASS SIGNALS IN 'ON' OR DEFECTIVE POSITION
(Record/Loco Pilot)

Station:

Date:

Time:

To
The Loco Pilot of train no. Up/Down

Description and No. of signals [] [] [] AT STATION is/are OUT OF ORDER. You are hereby authorized to pass the defective Outer/Home/Inner Home/Router/Starter/Intermediate Starter/Advance Starter/IBS signals at "ON" position at a speed not EXCEEDING 15 KMPH.

*The train will be admitted on line No. (in figures) and (in words)

**In case of failure of Advanced Starter Signal/Last Stop Signal- Last Train No. (with its Last Vehicle) cleared section at station and line clear has been obtained on Electrical Communication Instrument from station. Private No. received (in figures) (in words)

Signature of Loco Pilot

Signature of Station Master

Date

Station Master Stamp

Date

*In case of Router/Inner Home/Home Signal is defective

**In case of failure of Advance Starter/Last Stop Signal on Double Line Territory

INSTRUCTION

Strike out whichever is not applicable. Driver proceeding on this authority must observe instructions mentioned at the back of this form.

उत्तर रेलवे
पेपर लाइन क्लियर टिकट
(चालक/रिकॉर्ड)

अप

गाड़ी सं. _____ अप

विवरण _____

दिनांक _____ समय _____

बजकर _____ मिनट

स्टेशन मास्टर से

गाड़ी नं. _____ अप के चालक को।

लाइन क्लियर है और आपको _____ स्टेशन के लिए आगे बढ़ने के लिए प्राधिकृत किया जाता है।

अंतिम गाड़ी सं. (अंतिम वाहन सहित) _____ ने _____ स्टेशन पर सेक्शन क्लियर किया।

प्राप्त किया प्राइवेट नं. (अंकों में) _____ (शब्दों में) _____

'ऑन' स्थिति में सिगनल पार करने के लिए प्राधिकार

*आपको अंतिम रोक सिगनल एवं अन्य प्रस्थान सिगनलों को यदि कोई हो को खतरे में पार करने हेतु प्राधिकृत किया जाता है, जब सिगनल ब्लॉक उपकरण के साथ इंटरलाकड हो।

स्टेशन मास्टर के हस्ताक्षर

स्टेशन मास्टर की मोहर

और लागू न. हो उसे काट दें।

Form No. T/C-1425

Sr. No. _____

NORTHERN RAILWAY
PAPER LINE CLEAR TICKET

(Loco Pilot/Record)

Up

Train No. _____ Up

Description _____

Date _____

Time _____ hours _____ minutes

From Station Master _____

To The Loco Pilot of Train No. _____ UP

The line is clear and you are authorized to proceed to _____ Station.

Last train No. (with its last vehicle) _____ cleared the section at _____ Station.

Private No. received (in figures) _____ (in words) _____

AUTHORITY TO PASS SIGNAL AT ON POSITION

*You are authorized to pass Last Stop Signal and other departure signal if any in danger, when the signal is interlocked with Block Instrument.

Signature of Station Master

Station Master Stamp

*Strike out whichever is not applicable.

उत्तर रेलवे
पेपर लाइन क्लियर टिकट
(चालक/रिकॉर्ड)

डाउन
गाड़ी सं _____ डाउन विवरण _____
दिनांक _____ समय _____ बजकर _____ मिनट
स्टेशन मास्टर से

गाड़ी नं _____ डाउन के चालक को।
लाइन क्लियर है और आपको _____ स्टेशन के लिए आगे बढ़ने के लिए प्राधिकृत
किया जाता है।
अंतिम गाड़ी सं. (अंतिम वाहन सहित) _____ ने _____ स्टेशन पर सेक्शन क्लियर किया।
प्राप्त किया प्राइवेट नं. (अंकों में) _____ (शब्दों में) _____

‘ऑन’ स्थिति में सिग्नल पार करने के लिए प्राधिकार

*आपको अंतिम रोक सिग्नल एवं अन्य प्रस्थान सिग्नलों को यदि कोई हो को खतरे में पार करने हेतु प्राधिकृत
किया जाता है, जब सिग्नल ब्लॉक उपकरण के साथ इंटरलाकड हो।

स्टेशन मास्टर के हस्ताक्षर
स्टेशन मास्टर की मोहर

*जो लागू न हो उसे काट दें।

Form No. T/D-1425

Sr. No. _____

NORTHERN RAILWAY
PAPER LINE CLEAR TICKET
(Loco Pilot/Record)

Down

Train No. Down

Description.....

Date..... Time..... hours minutes

From Station Master

To The Loco Pilot of Train No. DN

The line is clear and you are authorized to proceed to Station.

Last train No. (with its last vehicle)..... cleared the section at..... Station.

Private No. received (in figures) (in words)

AUTHORITY TO PASS SIGNAL AT ON POSITION

*You are authorised to pass Last Stop Signal and other relevant signals in danger, when the
signal is interlocked with Block Instrument.

Signature of Station Master
Station Master Stamp

*Strike out whichever is not applicable.

Amendment Slip No. 3 dated 27.11.2008 to the Block Working Manual, 2007, of Northern Railway. SM 3

1. Add a New format of T/465 (For Machine following permit) in Appendix "A" as under:-

NORTHERN RAILWAY

Form T/465
Sr. No.....

MACHINE FOLLOWING PERMIT

Station Stamp

Dated.....

Incharge

Track Machine No.....

You are hereby permitted to take your Track Maintenance Machine in the block section from..... Station to Station and proceed cautiously not exceeding speed 40 KMPH following Track Maintenance Machine No. *Track Maintenance Machine No..... is following you*

On arrival at station this permit is to be handed over to the Station Master.

Private No. of line clear is (in figures) (in words)

Station Master

*If applicable

Received

Signature /Designation.

उत्तर रेलवे NORTHERN RAILWAY

सिगनल रहित लाइन पर गाड़ी लेने के लिए प्राधिकार

Authority to Receive/ aTrain on Non-Signalled Line

(रिकार्ड/चालक Record/Loco Pilot)

Station _____ स्टेशन

दिनांक Date _____ 20 _____

समय Time _____

To,

The Loco Pilot of Train No. गाड़ी सं. _____ विवरण Description _____ UP/Dn. अप/डाउन के चालक को।

आपको "ऑन" स्थिति में प्राधिकारीधारी द्वारा मार्ग दर्शित होते हुए सावधानीपूर्वक गाड़ी की गति 15 कि.मी. प्रति घं. से अधिक न रखते हुए "अप/डाउन" आउटर/होम/रूटिंग सिगनलों को पार करने के लिए प्राधिकृत किया जाता है। आपकी गाड़ी एक सिगनल रहित (विना सिगनल वाली) लाइन पर ली जा रही है इसलिये आप अपनी गाड़ी को लाइन नं. _____ (अंकों में) _____ (शब्दों में) की तरफ के सम्मुख कॉंटों पर तब तक खड़ी रखेंगे जब त्रक आगे बढ़ने के लिए हाथ सिगनल नहीं दिया जाता।

You are authorized to pass "UP/Down". Outer/Home/Routeing Signals in "ON" Position cautiously not exceeding 15 KMPH speed being piloted by the bearer on this authority and you should bring your train to a stand at facing points leading to line No. (in figures) _____ (in words) _____ until hand signaled forward as you are being received on a non signaled line.

स्टेशन मास्टर के हस्ताक्षर Signature of Station Master

स्टेशन मास्टर की मोहर Station Master Stamp

चालक के हस्ताक्षर Signature of Loco Pilot _____ दिनांक Date _____ 20 _____

*जो लागू न हो उसे काट दें। Strike out whichever is not applicable.

पञ्चन कर्मानय.

१५१. १५२. १५३. १५४.

नि. २९.५.०९

पत्र संख्या: 81-T/13/Model Room/2RT1-CH

मंडल-तै प्रकृतः

उत्तर में, -

दिल्ली, अम्बाला, तिरुवाणुर, मद्रास एवं बंगलूरु

विषय: लोक संस्कार नियमकी पुस्तक 1987 के संस्करण का संख्या 2 दिनांक 27-4-09 (हिन्दी एवं अंग्रेजी) को प्रतिष्ठान के माध्यम से सम्बन्धित कर्मचारी के लिए भेजी जा रही है।

कृते महा. प्रत्येक. परि. (नियम)

Amendment Slip No.2 dated 27-4-2009 to Block Working Manual of Northern Railway 2007.

Delete the existing Para No.1016 and replace the same as under.

1016. STATION MASTER:-The term "Station Master" wherever used in this Manual also applies to Station Superintendent /Station Master/Assistant Station Master/Cabin Master/Switchman/Cabin man and any other Competent staff, who may for the time being be incharge of Block working, provided he is in possession of a valid competency certificate. Such competency certificates shall be issued only by Principal, Zonal Railway Training Institute/Chandausi.

V.K. ROY
Chief Operations Manager.

संशोधन पत्र संख्या 02 दिनांक 27/04/2009, ब्लॉक संचालन नियमावली, उत्तर रेलवे 2007 .

वर्तमान पैरा सं० 1016 को हटाए और उसके स्थान पर निम्न की प्रतिस्थापित करें ।

1016:- स्टेशन मास्टर : इस नियमावली में जहाँ भी स्टेशन मास्टर शब्द का प्रयोग हुआ है, स्टेशन अधीक्षक /स्टेशन मास्टर /सहायक स्टेशन मास्टर /कैबिन मास्टर/स्विचमैन/कैबिन मैन तथा अन्य तक्षाम कर्मचारी, जो इस समय ब्लॉक संचालन का ईंचार्ज हों, पर भी लागू होता है । बशर्तें उसके पास एक वैध तक्षामता प्रमाणपत्र हो, ऐसी तक्षामता प्रमाणपत्र केवल डी० रे० प्र० सं० /चंदौली के प्रंधानाचार्य द्वारा जारी किया जायेगा ।

वी० के० राय
मुख्य परिचालन प्रबन्धक

SN. 2
(24)

Amendment Slip No. 01 dated. 21.04.97..... to the Block working manual 2007
of Northern Railway

- (1) Delete the existing para 2020 and substitute as under.

2020. WORKING OF DIGITAL AXLE COUNTER WITH CONVENTIONAL DOUBLE LINE BLOCK INSTRUMENTS.

1.0 Brief Description of working:- This is a means of working wherein Block Instruments are provided for Block working and Digital Axle Counters are used for proving the clearance of the Block Section, Definition of Axle counter is given in the GR 1.02/7 & at Para 11004 of Block Working Manual. In addition to conventional type block instrument, Reset boxes are kept in Station Master's office with the following indications:

- | | | |
|----|---|--|
| a) | Red - | for occupation of Block Section |
| b) | Green - | for clearance of Block Section |
| c) | Miniature Green
alongwith red- | indicates axle counter is in Preparatory Reset condition |
| d) | Yellow - | for Power On |

2.0 Line clear working:-

2.1 The types of block instruments used on double line sections are given in Para 2001 and method of signalling trains from one Block station to other block station is given in Para 2010 for SGE type block instrument and in Para 2032 for Daido type Block instrument.

2.2 At train receiving station: On receipt of line clear enquiry for an approaching train, the station master on duty shall ensure that the **Reset** box is showing green indication which will mean that the block section over which the train has to enter is clear and free from obstruction. He shall then grant line clear by following the method of working laid down in Block Working Manual as given in sub para 2.1 above. He shall turn the commutator of the block instrument to "**Line Clear**" position. As soon as the train enters the block section, the **Reset** box will show red indication and the Station Master on duty shall acknowledge the train entering section signal to train dispatching end Station Master on duty and turn the commutator of the block instrument to "**Train On Line**" position. On complete arrival of the train, the **Reset** box will show green indication indicating clearance of the block section and the Station Master on duty shall turn the commutator of the block instrument to "**Line Closed**" position. For ensuring complete arrival of a train GR 4.17 and SR therein shall be followed.

2.3 At train despatching station: When it is intended to dispatch a train, the Station Master on duty after ensuring that the reset box indication is green, shall obtain Line Clear from the Station Master on duty at the block station in advance by following the method of working laid down in Block Working Manual as given in sub para 2.1 above. On getting Line Clear from the block station in advance and then take "**off**" departure signals for the train to start. After the train enters block section the **reset** box shall show the **red** indication and the Station Master shall send the train entering signal to Station Master in advance and shall put back the departure signals to "**On**" position when the train has passed the last stop signal.

3.0 Cancellation of line clear: For cancellation of line clear the method of cancellation of line clear given in Para 2017 of BWM for double line block instruments shall be followed.

4.0 Working of Axle Counter: Whenever any train enters the block section and passes over the detection point kept at the entry of the block section, the axle counter equipment will start counting the number of axles which have entered the block section. This is recorded as IN – COUNT. Similarly, when the train reaches the destination station and passes over the detection point kept at the exit of the block section the axle counter equipment will count the number of axles which have passed over the detection point at the exit end. This is recorded as OUT-COUNT.

4.1 When OUT-COUNT is same as IN-COUNT the **Reset box** shows green indication. When the block section is occupied, the OUT-COUNT is less than the IN-COUNT and the **Reset box** will show RED indication which will mean that the block section is occupied and it is not clear. There for, when the **reset box** is showing Red /No indication, it can have two implications. It would mean either a train portion is left behind in the block section or the axle counter is defective due to any technical fault. In such a case, the ASM on duty shall ensure complete arrival of a train according to GR, 4.17 and SRs their of. In case he is unable to ensure complete arrival of a “run through” train, he shall ensure complete arrival of the train through exchange of private number from the station in advance and also the section controller. When the **Reset box** is showing RED/No Indication after complete arrival of the train, it means axle counter system has failed and resetting procedure given below shall be adopted

5.0 Failure of axle counter: When the axle counter used for clearance of block section fails and **Reset box** shows occupied a **Reset button** is provided on the **Reset box** to set the axle counter back to normal. Once the axle counter has failed and the concerned block instrument deemed to be failed and last stop signal cannot be taken “off”, the receiving station shall verify the clearance of the block section by exchange of private number with the station in rear. After ensuring that the block sections is clear, the axle counter shall be reset by the Station Masters on duty of the sending end and the receiving stations. The counter reading on the **reset box** shall increase by one on every operation of the reset button.

5.1 Register for recording Reset operations: A register with the following proforma is to be maintained for this purpose at all stations by Station Master on duty. The Station Master on duty at both sending and receiving end shall ensure that each and every operation of the reset button is properly recorded in the register indicating the movement before and after the operation of the reset button. Each axle counter shall have individual proforma.

S. No	Date	Train No. after which axle counter failed	Train No. piloted after failure of axle counter	Counter reading		Resetting time	First Train passed after normalization of axle counter	Sign of SM on duty	Remarks
				Before Resetting	After Resetting				
1	2	3	4	5	6	7	8	9	10

- 6.0 Resetting of Axle Counter by Station Master on duty:** The receiving end Station Master of the train shall inform the Station Master of the train dispatching end under exchange of private number about the complete arrival of train after passage of which the axle counter has failed. The Station Master of the train dispatching end shall then insert the **Reset key**, turn right and press the key along with **reset button** of the **reset box**. There after the Station Master at the train receiving end shall insert the **reset key** turn right and press the key along with **reset button** with this action, the miniature **green** along with **red** indication (Preparatory reset indication) will appear on the **reset boxes** provided at both receiving and dispatching station.
- 6.1** The first train shall be dispatched as per the extant rules by issue of T/369-(3b). After the train is received at the receiving end station and cleared the portion monitored by axle counter, the green indication will appear in the **Reset box** at both the ends and the normal working of axle counter gets restored.
- 7.0 Action to be taken when the axle counter can not be reset:** After complete arrival of the train according to para 6.1 above, even then, if the green indication does not appear on the **Reset Box** the matter shall be reported to ESM of the station through telephonically and a written memo.
- 7.1** ESM shall rectify the failure of the axle counter after submission and acceptance of the disconnection memo.
- 7.2** During the failure of the axle counter the trains shall continue to be dispatched on T/369-(3b) and no cognizance of the indication of the **Reset Box** shall be taken.
- 7.3** After rectification of the axle counter failure the ESM shall inform the Station Master on duty by giving a written message. Than the Station Master on duty shall inform to the Station Master on duty of other end station they shall reset the axle counter as per the procedure given above at Para 6.0. Then the normal working shall be resumed.

(2) Delete the existing para 3105 and substitute as under.

3105. WORKING OF DIGITAL AXLE COUNTER WITH CONVENTIONAL SINGLE LINE BLOCK INSTRUMENTS.

1.0 Brief Description of working:-

This is a means of working wherein Block Instruments are provided for Block working and Digital Axle Counters are used for proving the clearance of the Block Section. Definition of Axle counter is given in GR 1.02/7 & at Para 11004 of Block Working Manual. In addition to conventional type block instrument, Reset boxes are kept in Station Master's office with the following indications:

- | | | |
|----|---|--|
| a) | Red - | for occupation of Block Section |
| b) | Green - | for clearance of Block Section |
| c) | Miniature Green along with red - | indicates axle counter is in Preparatory Reset condition |
| d) | Yellow - | for Power On |

2.0 Line clear working :

2.1 The types of block instruments used on single line sections are given at Para 3001 and method of working trains from one Block station to another Block station are given in Para 3014 for Neale's Ball Token and Neale's tablet token type block instrument, in Para 3031 for Token less Kyosan type Block instrument and in Para 3057 for Token less Push Button Podanur Block Instrument.

2.2 **At train receiving station:** On receipt of line clear enquiry for an approaching train, the station master on duty shall ensure that the **Reset box** is showing green indication which will mean that the block section over which the train has to pass is clear and free from obstruction. He shall then grant line clear by following the method of working laid down in different paras of Block Working Manual chapter III. He shall turn the operating handle of the block instrument to "**Train Coming From**" position. As soon as the train enters the block section, the **Reset box** will show red indication and the station master on duty shall acknowledge the train entering block section signal to train sending end station master. On complete arrival of the train the **Reset box** will show green indication indicating clearance of the block section and the Station Master on duty shall turn the operating handle of the block instrument to "**Line Closed**" position. For ensuring the complete arrival of train the GR 4.17 and SRs their under shall be followed,

2.3 **At train dispatching station:** When it is intended to dispatch a train, the Station Master on duty after ensuring that the **Reset box** indication is showing green, shall obtain Line Clear from the Station Master on duty at the block station in advance by following the method of signaling procedure laid down in chapter III of Block Working Manual. After getting Line Clear from the block station in advance, the Station Master shall turn the operating handle to "**Train Going To**" position and shall take "**off**" departure signals for the train to start. After the train enters block section, the **reset box** shall show red indication and the station master on duty send the train entering block section signal to Station Master in advance and shall put back the departure signals to "**On**" Position when the train has passed the last stop signal.

3.0 **Cancellation of line clear:** For cancellation of line clear, the method as described in chapter III of BWM shall be followed.

4.0 **Working of Axle Counter:** Whenever any train enters the block section and passes over the detection point kept at the entry of the block section, the axle counter equipment will start counting the number of axles which have entered the block section. This is recorded as IN - COUNT. Similarly, when the train reaches the destination station and passes over the detection point kept at the exit of the block section the axle counter equipment will count the number of axles which have passed over the detection point at the exit end. This is recorded as OUT-COUNT.

4.1 When OUT-COUNT is same as IN-COUNT the **Reset box** shows green indication. When the block section is occupied, the OUT-COUNT is less than the IN-COUNT and the **Reset box** will show **RED** indication which will mean that the block section is occupied and it is not clear. There for, when the **reset box** is showing Red /No indication it can have two implications. It would mean either a train portion is left behind in the block section or the axle counter is defective due to any technical fault.

In such a case, the ASM on duty shall ensure complete arrival of a train according to GR, 4.17 and SRs their of. In case he is unable to ensure the complete arrival of a "run through" train, he shall ensure complete arrival of the train through exchange of private number from the station in advance and also the section controller. When the **Reset box** is showing RED/No Indication after complete arrival of train, it means axle counter system has failed and resetting procedure given below shall be adopted.

5.0 Failure of axle counter: When the axle counter used for clearance of block section fails and **Reset box** shows occupied a **Reset button** is provided on the **Reset box** to set the axle counter back to normal. Once the axle counter has failed and the concerned block instrument is deemed to be failed and last stop signal cannot be taken "off", the sending station shall verify the clearance of the block section by exchange of private number with the station in advance. After ensuring that the block section is clear, the axle counter shall be reset by the Station Masters on duty of the sending end and the receiving stations. The counter reading on the **reset box** shall increased by one on every operation of the reset button.

5.1 Register for recording Reset operations: A register with the following proforma is to be maintained for this purpose at all stations by Station Master on duty. The Station Master on duty at both sending and receiving end shall ensure that each and every operation of the reset button is properly recorded in the register indicating the movement before and after the operation of the reset button. Each axle counter shall have individual proforma

S. No.	Date	Train No. after which axle counter failed	Train No. piloted after failure of axle counter	Counter reading		Resetting time	First Train passed after normalization of axle counter	Sign of SM on duty	Remarks
				Before Resetting	After Resetting				
1	2	3	4	5	6	7	8	9	10

6.0 Resetting of Axle Counter by Station Master on duty: The receiving end Station Master of the train shall inform the Station Master of the train dispatching end under exchange of private number about the complete arrival of train after passage of which the axle counter has failed. The Station Master of the train dispatching end shall then insert the **Reset key**, turn right and press the key along with reset button of the **reset box**. There after the Station Master at the train receiving end shall insert the reset key turn right and press the key along with reset button, with this action, the miniature green along with red indication (Preparatory reset indication) will appear on the **reset boxes** provided at both receiving and dispatching stations.

6.1 The first train shall be dispatched as per the extant rules by issue of Paper Line Clear Ticket. After the train is received at the receiving end station and cleared the portion monitored by axle counter, the green indication will appear in the **Reset box** at both the ends and the normal working of axle counter gets restored.

- 6 **Action to be taken when the axle counter can not be reset:** After complete arrival of the train according to para 6.1 above, even then, if the green indication does not appear on the **Reset Box** the matter shall be reported to ESM of the station through telephonically and a written memo.
- 7.1 ESM shall rectify the failure of the axle counter after submission and acceptance of the disconnection memo.
- 7.2 During the failure of the axle counter the trains shall continue to be dispatched on paper line clear ticket and no cognizance of the indication of the **Reset Box** shall be taken.
- 7.3 After rectification of the axle counter failure the ESM shall inform the Station Master on duty by giving a written message. The Station Master on duty along with the Station Master on duty of the train receiving station shall reset the axle counter as per the procedure given above at Para 6.0. After proper normalization of axle counter normal working shall be resumed.


S.R. THAKUR

CHIEF OPERATIONS MANAGER