

East Coast Railway

**JOINT PROCEDURE ORDER FOR
MINIMIZING DETENTION OF TRAIN DUE TO SIGNAL INCIDENTS**

CSTE/ECOR/BBS'S JPO NO: 02/2015

Date: 21.07.2015

There are instances of train detaining badly due to non-utilisation of emergency facilities available in the Panel by the station staff during signal failures and waiting for S&T staff to put right the failure. Prompt action by the station staff to use the various emergency provisions available in the panel can go a long way in limiting detention to trains and ensuring that train traffic in the section does not get disrupted due to minor failures. Similarly, in case of point failure, cranking of points should be done by station staff rather than waiting for arrival of S&T staff to rectify the failure.

The actions that can be performed on a panel for train operation during failure conditions are listed below:

EMERGENCY FACILITIES GENERALLY AVAILABLE AT PANEL

S.N	OPERATION	WHEN TO BE DONE	HOW TO OPERATE
1.	Calling On (COGN)	In case the Main Signal is failed due to failure of Track circuits or Axle counter.	<p><u>For PI/EI:</u></p> <p>(a) Physical verification of the concerned route shall be done in case of failure of track circuits or axle counter.</p> <p>(b) Point should be set and locked in route by individual operation or by route initiation. In case point zone track circuits failed, then points should be set through emergency operation as at serial no. 4 below.</p> <p>(c) (COGN + Concerned Route Button) will be pressed when train has been brought to stop at the stop signal below which Calling ON Signal is provided. Calling "ON" will be taken off after prescribed time delay.</p> <p>(d) After reception / dispatch of train with Calling ON signal, the concerned Calling-On Signal will required to be cancelled.</p> <p><u>For RRI :</u></p> <p>(a) Physical verification of the concerned route shall be done in case of failure of track circuits or axle counter.</p> <p>(b) First set the point in the desired position by route initiation or by individual operation. In case point zone track circuits failed then points should be set through emergency operation as mentioned in serial no.4 below.</p>

COM

22/7/15

CSTE

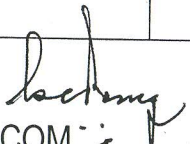
21.07.15

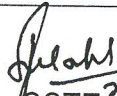
S.N	OPERATION	WHEN TO BE DONE	HOW TO OPERATE
			(c) When the train has occupied the approach track, press concern signal button (GN) and calling on button (COGGN) simultaneously. Release COGGN button keeping GN button pressed and press the concern route button (UN).
2.	Crank Handle	<p>(a) When operation of point to the desired position fails.</p> <p>(b) When crank handle is required to be released when route is locked/held up for concerned point.</p>	<p><u>For PI/EI :</u></p> <p>(a) (i) On duty SM shall depute Points man to the concerned crank handle location box for transmission of Crank handle. (ii) Then Transmit crank handle by pressing concerned CH button + Trans button. The Points man seeing the release indication at crank handle location will take out the crank handle by pressing release button and turning the key. (iii) After setting, clamping and pad locking the concerned point(s) the Pointsman shall replace the crank handle in the EKT / RKT. On duty SM will get it restored by pressing concerned CH + Release button.</p> <p>(b) The transmission procedure will be same as in (a)(i) above with the difference that after pressing CH & Trans buttons, Timer will start and after 120 seconds, Timer indication will be extinguished at panel and release indication will come at location box. Restore procedure same as (a)(ii). In case of station having crank handle in SM's office, it shall be possible to release the crank handle in an Emergency as soon as the signal is put back to 'ON' and crank handle release command is given.</p> <p><u>For RRI :</u></p> <p>(i) On duty SM shall depute Pointsman to the concerned crank handle location box for transmission of crank handle. (ii) Then transmit crank handle by pressing concerned CH button + Trans button (CHRB). The Points man, seeing the release indication at crank handle location, will take out crank handle by pressing release button and turning the key. (ii) After setting, clamping and pad locking the point, the Pointsman shall replace the crank handle in the EKT / RKT. On duty SM will get it restored by pressing concerned CH + Release button (CHNB).</p>

locking
COM $\frac{22}{21/7/15}$

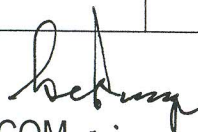
Release
CSTE $\frac{21.07-15}{21.07-15}$

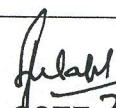
S.N	OPERATION	WHEN TO BE DONE	HOW TO OPERATE
3.	Emergency Route Cancellation	When a signal has been taken OFF for a movement and due to any reason it is required to cancel the movement.	<p><u>For PI/EI:</u></p> <p>(a) Press simultaneously concerned Signal button (GN) + Signal cancellation button = Signal will raise back to ON.</p> <p>(b) (i) If the route is not approach locked (Train not arrived): Press (GN) button of concerned Signal + Emergency Route Release Button (EUYN) = Route cancellation will be initialized & Route will released immediately.</p> <p>(ii) If the route is approach locked or Dead approach locked: (GN) button of concerned Signal+Emergency Route Release button (EUYN) = Route cancellation will be initialized. Concerned timer indication will start flashing & Route will release after 2 minutes.</p> <p>Note: However, route cannot be altered unless provision of GR.3.36 (2) and SR.3.36.02 is fulfilled.</p> <p><u>For RRI:</u></p> <p>(a) Press simultaneously concerned Signal button (GN) + Signal cancellation button (EGGN) = Signal will raise back to ON.</p> <p>(b) (i) If the route is not approach locked (Train not arrived): Press 'GN' button and emergency route release button (EUUYN) simultaneously. Release EUUYN button, keeping GN button pressed and press concern route button (UN).</p> <p>(ii) If the route is approach locked or Dead approach locked: Press 'GN' button and 'EUUYN' button simultaneously and release. Concerned timer indication will start flashing. After 2 minutes, timer indication become steady. Press 'GN' button and 'EUUYN' button Simultaneously. Release 'EUUYN' button keeping 'GN' button Pressed and Press concern route button 'UN'.</p> <p>Note: However, route cannot be altered unless provision of GR.3.36 (2) and SR.3.36.02 is fulfilled.</p>
4.	Emergency Point Operation (EWN)	In case of Failure of point zone track circuit and point operation is required.	<p><u>For PI / EI :</u></p> <p>(a) SM's Emergency point operation key to be inserted.</p> <p>(b) Emergency Point Operation button (EWWN) + Concerned Point button to be pressed.</p> <p>(c) Hold the concerned Point button in pressed condition, release the EWWN button and press common Point Normal / Reverse button for point operation.</p>

COM: 
24/7/15


CSTE 24.07.15

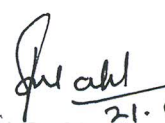
S.N	OPERATION	WHEN TO BE DONE	HOW TO OPERATE
			<p>If Emergency point operation is not possible due to route is held up, in such case, point can be operated using crank handle (as described in Item no. 2).</p> <p><u>For RRI :</u></p> <p>(a) SM's Emergency point operation key to be inserted.</p> <p>(b) Emergency Point Operation button (EWN) + Concerned Point button to be pressed.</p> <p>(c) Hold the concerned Point button in pressed condition, release the EWN button and press common Point Normal / Reverse button for point operation.</p>
5.	Emergency Route Release	If route gets locked and can't be released after passage of train	<p>(a) (GN) button of concerned Signal + Emergency Route Release button (EUUYN) = Route cancellation will be initialized & Route will be released after 2 minutes.</p> <p>(b) If route will not release after 2 minutes S&T maintainer should be informed.</p>
6.	Emergency Sub-Route Cancellation (RRI)	This Cancellation facility Should be made use of only when automatic Route release as well as Emergency Full route Cancellation has failed	<p>(a) S&T key should be inserted in Panel.</p> <p>(b) The individual sub-route cancellation has been effected by Pressing Sub route release button 'EUYN' and concerned point button WN.</p>
7.	Use of King button in automatic territory.	In the event failure of any track circuit in its route, especially of the first track circuit after Home signal (because in Automatic Signalling Territory Calling – ON Signal cannot be taken OFF when home signal controlling track circuit i.e. the first track circuit after the home signal, has failed.)	First Light the 'A' marker in station section of a station in automatic signaling territory, the 'A' marker stays lit even when signal above it is at ON. To light the 'A' Marker, first complete route on main line is to be taken for Advance starter, main line starter then followed by home signal. Thereafter king button is to be operated.
8.	Sliding Barrier	If the level crossing lifting barrier fails for any reason.	The sliding barrier available is slid across the road and closed against road traffic and locked through the key provided. Thereafter, the signal is lowered properly.

COM 
22/7/15


CSTE 21.07.15

S.N	OPERATION	WHEN TO BE DONE	HOW TO OPERATE
9.	Check functioning/ Position of SM key	Non working of Entire Panel.	Turn the position of SM Key and bring it back to 'IN' position. When SM key has been taken out by the Station Master all operation on the panel shall get locked except the operation of raising of signal.
10.	Check button remaining stuck up.	Non working of Entire Panel or some group of routes or Signals	When button remains stuck up or pressed for long duration, a buzzer sound along with visual indication on the pane will come. 1. Press the Acknowledgement button to stop the buzzer. 2. Press / check all buttons on Panel till visual indication goes off.
Common Mistakes to be kept in mind by SMs for Signal Lowering/Taking OFF			
1	Once the route has been taken, any route release / emergency cancellation / individual point operation is not possible, unless the signal is raised by Signal cancellation button and route is cancelled by Emergency Route Release button.		
2	Station Master should not carry out any operation on the panel when EUUYN seal is broken and ESM / S&T key is IN and turned. Any such operation can cause the other route to release in case of inadvertent touching of signal button / Point button.		
3	It is possible to take OFF 'A' marker in automatic signal territory when main line route is held up / track has failed.		
4	It is not possible to take OFF Calling – ON signal when any conflicting route is held up on the panel.		
5	No Signaled shunt movement is feasible on double line station towards BSLB side.		
6	In absolute block system, reception signal shall be at ON position before granting line clear to the station in rear.		
7	In case of failure of axle counter of berthing line, SM on duty should take assistance of authorized person for the purpose of resetting & line verification. But in all circumstances of resetting, line verification is to be ensured by SM on duty only.		
8	Station Master should ensure the continuous working of flasher indication on the panel. In the event of its failure SM should stop manual operation of points from the panel till it is rectified. He should immediately issue message to Signal Technician for its restoration.		


 (G.C.Ray) 22/7/15.
 COM


 (S.H.Safdar) 21.07.15
 CSTE