

Network Safeworking Rules and Procedures

Indicators

Rule Number: 6009



Brookfield
Rail

Indicators

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Glossary for this Rule

<i>Active Control Level Crossing</i>	A road or pedestrian level crossing where warning equipment warns road users and pedestrians about approaching rail traffic by devices such as flashing lights or barriers.
<i>Adjacent</i>	Near to, close to, parallel to.
<i>Authorised Speed</i>	The maximum permissible speed as laid down by Brookfield Rail, subject to any lesser speed shown in a Special Notice (SN), authorised electronic management system or imposed by warning and caution boards or a permanent speed board.
<i>Authority</i>	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
<i>Brookfield Rail</i>	Brookfield Rail Pty. Ltd.
<i>Catch Points</i>	Single or double bladed points used to derail rail traffic that might enter or foul an adjacent running line.
<i>Controlled Absolute Signal</i>	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
<i>Cross</i>	To cross or pass other rail traffic.
<i>Facing Points</i>	Points with the switch blades facing approaching rail traffic where the track diverges.
<i>Fixed Signal</i>	A signal that is located permanently near the line.
<i>Handsignal</i>	A signal given by hand or lights movements, hand signals may be with or without flags.
<i>Issue</i>	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
<i>Level Crossing</i>	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
<i>Location</i>	A place in the Network with a designated name, identification number, or signalling reference.
<i>Main Line</i>	The running line (not including Loops) normally used for running rail traffic through and between locations
<i>Points</i>	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
<i>Points Indicator</i>	An indicator showing the position of points.
<i>Protection</i>	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.

<i>Rail Traffic</i>	Trains and track vehicle or vehicles travelling on the network.
<i>Rail Traffic Crew</i>	Competent Workers responsible for the operation of the Motive Power Unit.
<i>Route</i>	The rail traffic path from one limit of authority to the next in the direction of travel.
<i>Secure</i>	To safeguard against accidental or unauthorised access or movement.
<i>Self-Restoring Points (SRP)</i>	Points which can be operated remotely or by push button that automatically restores to their normal position following the movement of rail traffic. (refer to Points)
<i>Shunt</i>	To move rail traffic, rakes of vehicles, or vehicles on lines for purposes other than through movement.
<i>Station</i>	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
<i>Trailing Points</i>	Points with the switch blades facing away from approaching rail traffic where the track converges.
<i>Train</i>	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
<i>Train Order</i>	An authority issued by the Network Controller for the movement of rail traffic or issue of LPA track work authorities.

1. Purpose

The function of this Rule is to describe the protocols for using indicators. They are provided to give *Rail Traffic Crew* information on the *Route* setting of *Points* and may be used in conjunction with *Fixed Signals*.

2. General



WARNING: Indicators do not indicate the line ahead is *clear*.

When used in conjunction with signals, the Indicator when illuminated does not authorise the *Rail Traffic Crew* to pass a signal at Stop. The signal must show PROCEED for authority to pass.

Where a *Fixed Signal* is not provided to govern the movement, *Rail Traffic Crews* must not proceed through the *Points* until verbally or *Handsignalled* to do so.

Indicators work in conjunction with the *Points* to which they apply, solely to indicate the way the *Points* are set.

Points Indicators take several forms:

- Junction indicators;
- Electrically Illuminated *Points Indicators*; and
- mechanical *Points Indicators*.

The different forms of indicators may be used in combination with each other.

2.1 Driver's Proceed Indicators

Driver's Proceed indicators are provided on the approach to some *Active Controlled Level Crossings* to indicate to *Rail Traffic Crews* that the *Level Crossing Protection* is active.

3. Junction Indicators

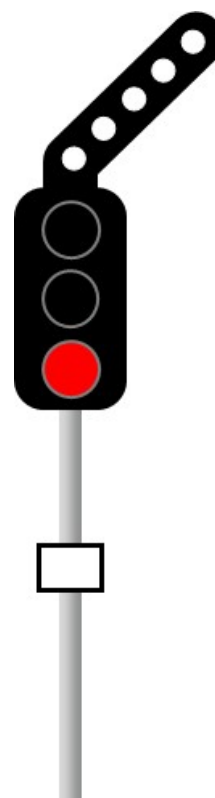
A Junction Indicator is mounted above the *Controlled Absolute Signal* with which it is associated and exhibits an indicator for each diverging *Route* in conjunction with a PROCEED indication on the signal.

A Junction Indicator may be provided with up to six arms fixed at 45 degree intervals. Diverging roads only are indicated. No indication is provided for the non-diverging line.

Each arm of the Junction Indicator contains five white lights. A minimum of three white lights must be illuminated before a PROCEED Indication can be displayed on the signal.

A Junction Indicator, when illuminated, does not authorise *Rail Traffic Crew* to pass a signal at STOP. The signal must show a PROCEED indication for authority to pass it.

Signals with Junction Indicators attached can only be passed at STOP in accordance with Rule 6013 Passing Fixed Signals at STOP.



4. Electrically Illuminated Points Indicator

An electrically illuminated *Points Indicator* is located *Adjacent* to and works in conjunction with, the electric point motor attached to *Self-Restoring Points*.

The operations of *Self-Restoring Points* are detailed in Procedure 9022 Operation of Self Restoring Points.

The indicator:-

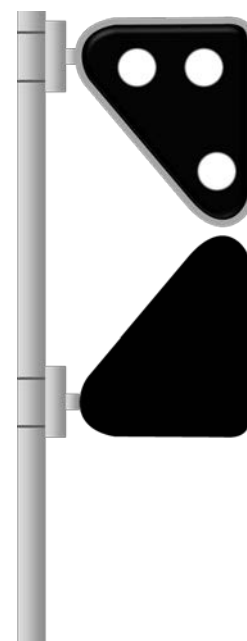
- consists of two triangular shaped indicators mounted one above the other on a single mast:
 - the upper indicator applies to *Rail Traffic* approaching in the *Facing* direction; and
 - the lower indicator applies to *Rail Traffic* approaching in the *Trailing* direction.
- has a matt black finish on both sides with a strip of white reflectorised tape surrounding the outline of the indicator and contains three lights as an indication to approaching *Rail Traffic*.

4.1 White Light Type

Only two white lights will be visible at any one time on each indicator and, for an approaching *Rail Traffic Crew*, will indicate that:

- when there are two lights in a vertical position, that the *Points* are set and locked for the normal setting.
- when there are two lights at a 45°, the *Points* are set and locked for the reverse setting.
- if only one light or no lights are visible *Rail Traffic* must not pass over the *Points* until they have been examined by the *Rail Traffic Crew*. The *Rail Traffic Crew* in this instance must ensure the *Points* are correctly set for the safe passage of the *Rail Traffic*.

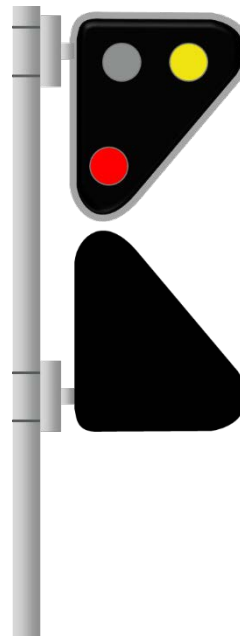
The indicator lights may be approach lit when a *Train* is within approximately 400 metres of the *Station*.



4.2 Coloured Light Type

Only one light will be visible at any one time on each indicator and, for an approaching *Rail Traffic Crew*, will indicate:

- when there is a white light, that the *Points* are set and locked for the normal setting.
- when there is a yellow light, that the *Points* are set and locked for the reverse setting.
- when there is a red light, that the *Points* are out of correspondence and not set, *Rail Traffic* must not pass over the *Points* until they have been examined by the *Rail Traffic Crew*. The *Rail Traffic Crew* in this instance must ensure the *Points* are correctly set for the safe passage of the *Rail Traffic*.



5. Mechanical Points Indicator

5.1 Round Type Points Indicator

Round type *Point Indicators*, attached to *Main Line Points* in *Train Order Territory*, have a round reflectorised green target when set in the normal *Main Line* position and a round reflectorised red target when set in the reverse position.

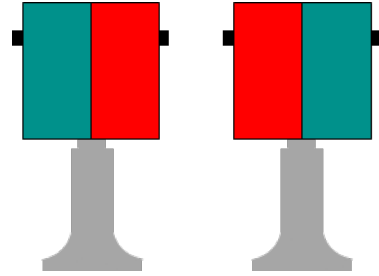


5.2 Square Type Points Indicator

Square type *Point Indicators* have a square half red and half green reflectorised target.

The green is exhibited in the direction for which the *Points* are set.

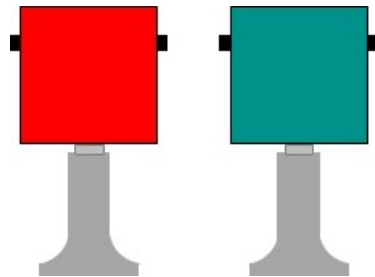
These indicators are usually found in *Station* yards and at *Junctions*.



5.3 Catch Points Indicator

Catch Point Indicators have a square red reflectorised target when in the normal derail position and a square green reflectorised target when reversed to the running position.

These indicators are found in *Station* yards attached to *Catch Points*.



5.4 Cheese Knob Points

Cheese knob *Points* are painted:

- white on one side to indicate *Points* are set to the right; and
- black on the other side to indicate the *Points* are set to the left.



6. Driver's Proceed Indicators (DPI)

Operations of DPIs are included in the Local Instructions for the *Location* concerned, Local instructions are detailed in *Brookfield Rail's*:

- Rail Access Management System;
- Intranet site "The Depot"; and
- Internet site www.brookfieldrail.com.

Driver's Proceed indicators use white, yellow and red lights to indicate the status of *Active Control Level Crossing Protection* equipment



7. Passing Indicators at Unattended Train Order Crossing Stations

Rail Traffic Crews must not proceed through the *Points* until verbally or hand signalled to do so.

If no *Crossing*, passing or *Shunting* is to take place, the *Rail Traffic* shall enter the *Station* on the *Main Line*, or as directed on the *Train Order*, and a verbal or hand signal is not required.

Where the *Rail Traffic* is not required to stop for the *Issue* of a further *Train Order* or for any other reason, the *Rail Traffic Crew* shall proceed at *Authorised Speed*.

8. Passing Defective Indicators

Rail Traffic Crews must not pass mechanical or Electrically Illuminated *Points Indicators* that display no indication or display an illegal indication until:

- the *Points* have been checked and set for the *Route*; and
- if necessary, the *Points* have been *Secured*.

If the DPIs are not working correctly, *Rail Traffic Crews* must act in accordance with Rule 2015 Active Control Level Crossing Management.

9. References

2015 Active Control Level Crossing Management.

6013 Passing Fixed Signals at STOP.

9022 Operation of Self Restoring Points.

10. Effective Date

4 May 2016