

Trip Stop Device-Safe Operation

| Document no. | Work description |
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| SMS-06-SW-1134 | <p>The safe and correct use of a Trip Stop Device fitted to tracks to enable braking system tests on trains.</p> <p>Scope</p> <p>This SWI applies to the use of a Trip Stop Device by Rollingstock Division employees or RSD engaged contractors to undertake testing on trains - within depots.</p> |
| Review date | References |
| 18/02/2013 | <ul style="list-style-type: none"> • OHS Act 2000 • OHS Regulation 2001 • NSW Rail Safety Act 2008 • ASCC National Code of Practice Manual Handling • SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out • SMS-12-OI-0886 Red Flagging Trains in stabling yards, depots and Maintenance Centres • SMS-06-SW-0264 Portable Ladders, Stepladders and Step Platforms • SMS-06-GD-0001 Guide to Manual Handling • SMS-06-SW-1133 Guards Emergency Cock Lock-Out • SMS-06-SW-0487 Entering Trains from Ballast • SMS-06-SW-0488 Climbing out of Trains onto Ballast • NWT300 Planning Work in the Rail Corridor • NWT308 Control Signal Blocking • SMS-06-PR-0104 Workplace Risk Management. |

| Responsible supervisor | PPE and precautions | Competencies or qualifications | Licences or permits required |
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| Line Manager | <ul style="list-style-type: none"> • High Visibility Clothing or Vest • Safety Footwear | <ul style="list-style-type: none"> • Competent in the use of this SWI • Network RollingStock Maintainer (NRM) as a minimum • Manual Handling Training | |

Tools and equipment required

Trip Stop Device (refer Fig1). Opposite Hand Tools
Trolley
Personal Red Lock
Locking Jaw/Multi-lock Device
Guard's Emergency Cock Lock-Out Device
Red Flag



Fig.1 Trip Stop Device

IF CONTROL MEASURES ARE NOT SUITABLE AND MAJOR CHANGES ARE NEEDED, CONDUCT A RISK ASSESSMENT AND DEVELOP NEW CONTROLS ACCORDING TO [SMS-06-PR-0104 Workplace Risk Management](#).

| Note |
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|  <p>Pre work brief and task risk assessment Ensure a pre-work brief and task risk assessment is undertaken with all team members involved in the work activity. If any new/additional team members arrive any time later they must be briefed before they commence work.</p> |

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|  | <p>Warning</p> <ul style="list-style-type: none"> This task requires considerable manual handling. Where possible use manual handling aids and seek assistance. Whenever manually handling is required always apply your manual handling training and where necessary use a team lift. Refer to: SMS-06-GD-0001 Guide to Manual Handling <i>Plan your escape and ensure that there is a safe place to retreat to before working on trains and be alert to the sound of air recharging or signs of wheels or couplers moving.</i> <i>Never place any part of your body in a position that could result in injury should the train move.</i> <i>Failure to strictly follow your safe working training Certificate of Competency (CoC) and to immobilise the train fully before entering, leaving or working around the trains in the corridor could lead to serious injury or death.</i> <i>Always comply with Work on Track Network Rules (NWT300) when working in the corridor.</i> |
| Prepare Test Equipment | <ul style="list-style-type: none"> Follow all worksite procedures, e.g. Inductions and pre-work briefings. Determine necessary protection in accordance with NWT300 Planning Work in the Rail Corridor. Determine whether you need to work in accordance with the following:- <ul style="list-style-type: none"> NWT308 Control Signal Blocking. Transport the Trip Stop Device to the train using a trolley. Always consider the load if you need to move or adjust the load whilst transporting using the trolley and ensure a team lift approach is undertaken where required. Refer to: SMS-06-GD-0001 Guide to Manual Handling Inspect the device for damage or missing components before use. Ensure all tools and equipment required are on the train and in good condition. Ensure you have the correct Guards Emergency Cock isolation locking devices for the train set you are travelling on, refer to: SMS-06-SW-1133 Guards Emergency Cock Lock-Out, and SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out Position the device so it does not create a trip hazard. |
| Prepare the train for testing | <ul style="list-style-type: none"> On arrival at the test site and before exiting the train carry out the following. Brief the driver with regard to the test location and procedure. Assign a qualified lookout person (Network RollingStock Maintainer NRM) as a minimum. Lookout must also be qualified in hand signalling. Place a red flag in accordance with SMS-12-OI-0886 Red Flagging Trains in Stabling Yards, Depots and Maintenance Centres. Apply the park brakes. For lock-out tag-out procedure refer to: SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out Apply the emergency brake with the brake valve and cut out (isolate) the Drivers Brake Control Isolating Cock (DBCIC). Fully open the Guard's Emergency Cock. Lock the Guard's Emergency Cock in its OPEN position, using lock out devices and a personal red lock in accordance with SMS-06-SW-1133 Guards Emergency Cock Lock-Out. Verify that the Brake Pipe is fully vented and check that the Brake Pipe Gauge displays zero (0) Kilo Pascals (kPa), or Pounds per Square Inch (psi). |
|  | <p>Note</p> <p>The steps above describe the requirements that lock the brakes in their applied position (brake pipe pressure vented) so cars cannot move during fitting of the device to the track.</p> |
|  | <p>Warning</p> <ul style="list-style-type: none"> <i>Failure to correctly isolate the guard's emergency cock could result in injury or death. Always verify isolation has been achieved before proceeding with work.</i> <i>The Guard's Emergency Cock must not be partially opened then closed while a brake valve is charging the Brake Pipe as this may cause an undesired release of the brakes.</i> <i>Plan your escape to a safe place before working on trains and be alert to the sound of air recharging or signs of wheels or couplers moving.</i> <i>Never place any part of your body in a position that could result in injury should the train move.</i> |

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| Remove Trip Stop from Train | <ul style="list-style-type: none"> For references to manual handling. Refer to: SMS-06-GD-0001 Guide to Manual Handling Where possible alight at a platform nearest to the test site. Carry the device from the train to the platform using a team lift approach and assess the number of personnel required for the lift. Should it be necessary to remove the device onto ballast carry out the following: <ul style="list-style-type: none"> Alight from the train in accordance with SMS-06-SW-0487 Entering Trains from Ballast and SMS-06-SW-0488 Climbing out of Trains onto Ballast. Assess the load you are moving from the train and consider the number of people that are required for the “team lift”. Split your lifting team up and allocate personnel to stay on the train to whom will pass the load to the personnel on the ballast. The device is then to be carried by team lift to the test site. |
|  | <p>Warning</p> <ul style="list-style-type: none"> <i>This task requires considerable manual handling. Where possible use manual handling aids and seek assistance. Whenever manually handling is required always apply your manual handling training and where necessary use a team lift. Refer to: SMS-06-GD-0001 Guide to Manual Handling</i> <i>Failure to use the above technique to remove the device from the train could lead to a significant injury.</i> In general if steps and step platforms etc are required during task refer to: SMS-06-SW-0264 Portable Ladders, Stepladders and Step Platforms |
|  | <p>Note</p> <p>For the following steps apply your manual handling training, lifting techniques and practical knowledge whilst undertaking heavy lifting activities as shown below. Refer to: SMS-06-GD-0001 Guide to Manual Handling</p> |
| Position Trip Stop | <p>Placement</p> <ul style="list-style-type: none"> Place the device on the ground and remove the removable rail clamps. Clear away ballast from underneath the rail, if required. With assistance, slide the device underneath the rail. <p>(Refer Fig.2). Opposite.</p> <div data-bbox="806 932 1405 1410">  </div> <p style="text-align: center;">Fig. 2 Position under the Rail</p> |
| Attach the Trip Stop | <p>Attach the Fixed Clamps</p> <p>Hook the fixed clamps onto the inner side of the rail (Refer Fig.3). Opposite.</p> <p></p> <p>Note</p> <p>The “inner side” is also known as the (gauge side) or the 4ft.</p> <div data-bbox="806 1504 1405 1965">  </div> <p style="text-align: center;">Fig. 3 Attach the fixed clamps</p> |

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| | Attach the Removable Clamps <ul style="list-style-type: none"> Attach the 2 removable clamps onto the outer side and tighten bolts by hand (Refer Fig.4). Opposite. Confirm the device is positioned as required and tighten all bolts fully. |  |
|  | Note The "outer" is also known as the (field side) or the 6ft. |  |
|  | Note <ul style="list-style-type: none"> When you have finished the installation ensure all personnel are in a safe place before any brake testing commences. |  |
| Device Removal and Clean Up | <p>On completion of tests and before retrieving the device from tracks carry out the following:</p> <ul style="list-style-type: none"> Determine necessary protection in accordance with NWT300 Planning Work in the Rail Corridor <p>Determine whether you need to work in accordance with the following:-</p> <ul style="list-style-type: none"> NWT308 Control Signal Blocking. Approach the test site and before exiting the train carry out the following: Assign a qualified lookout person (Network RollingStock Maintainer NRM) as a minimum. Lookout must also be qualified in hand signalling. Brief the Driver on your intended procedure. Place a red flag in accordance with SMS-12-OI-0886 Red Flagging Trains in Stabling Yards, Depots and Maintenance Centres. Apply the park brakes. For lock-out tag-out procedure refer to: SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out Apply the emergency brake with the brake valve and cut out (isolate) the Drivers Brake Control Isolating Cock (DBCIC). Fully open the Guard's Emergency Cock. Lock the Guard's Emergency Cock in its OPEN position, using lock out devices and a personal red lock in accordance with SMS-06-SW-1133 Guards Emergency Cock Lock-Out. Verify that the Brake Pipe is fully vented and check that the Brake Pipe Gauge displays zero (0) Kilo Pascals (kPa), or Pounds per Square Inch (psi). Check the test site area is free of all tools and any other equipment. Remove the device using a team lift approach and carry the device to the train. Refer to: SMS-06-GD-0001 Guide to Manual Handling Position the device so it does not create a trip hazard on the train walkways. Confirm all personnel are in a safe place or on board the train and brief the driver before removing isolations. Remove the red flag in accordance with SMS-12-OI-0886 Red Flagging Trains in Stabling Yards, Depots and Maintenance Centres. | |
| Additional controls | | Additional controls may be required, depending on site specific conditions. Always refer to relevant SWMS and seek advice from the relevant site Manager, if required. |