



Safe Work Instruction	Issue date: 03/06/10
Guard's Emergency Cock Lock-Out	Review date: 27/05/13

Document no.	Work description		
SMS-06-SW-1133	<p>Lock - Out Tag - Out (LOTO)</p> <p>Guard's Emergency Cock Lock-Out is a safety Lock-Out device which protects personnel from unauthorised train movement.</p> <p>This SWI describes the requirement to lock brakes in their engaged position (pressure vented) so cars cannot move during maintenance or other activities.</p> <p>This supersedes EI 504 Use of Guard's Emergency Cock Lock-Out Devices – which is to be withdrawn.</p> <p>Scope</p> <p>This SWI applies to all suburban and intercity double deck cars (including Tangara and Millennium trains and V Sets)</p>		
Review date	References		
27/05/13	<ul style="list-style-type: none"> • OHS Act 2000 • OHS Regulation 2001, Part 5.4 • Rail Safety Act 2008 • AS4024.1 Safeguarding of Machinery • 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-PR-0104 Workplace Risk Management. 		
Responsible supervisor	Personal Protective Equipment (PPE) and precautions	Competencies or qualifications	Licences or permits required
	<ul style="list-style-type: none"> • High visibility vest or clothing • Appropriate safety footwear 	<ul style="list-style-type: none"> • Competent in the use of this SWI • Rail Industry Safety Induction (RISI) 	
Tools and equipment required			
<ul style="list-style-type: none"> • Personal Red Lock • Locking Jaw / Multi-Lock Device • Multifunction Cable Lock-Out Device • Guard's Emergency Cock Lock-Out Device • Red Flag • RailCorp employee identification card 			
<p>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.</p>			
When to apply this Isolation	<p>The isolation of the Guard's Emergency Cock is required under various SWMS and SWI, in which case this SWI will be referenced. Examples of when train isolation may be required includes:</p>		
	<ul style="list-style-type: none"> • Overhauls • Running repairs • Servicing brakes • Routine inspection and maintenance when not in possession of a Road Key • Cleaning • Other times when an employee must safeguard against train movement 		
Place a Red Flag	<p>Place a red flag, in accordance with SMS-12-OI-0886 Red Flagging Trains in stabling yards, depots and Maintenance Centres</p>		

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Protection by Use of Brakes	<p>Application of the park brakes</p> <ul style="list-style-type: none"> • Apply the emergency brake with the brake valve and cut out the Drivers Brake Control Isolating Cock (DBCIC) • Fully open the Guard's Emergency Cock • Lock the cock in its OPEN position, using one of the two types of Lock-Out devices and a personal red lock. • Verify that the Brake Pipe is fully vented by checking that the Brake Pipe Gauge displays zero (0) Kilo Pascals (KPa) or pounds per square inch (psi).
	<p>Note</p> <ul style="list-style-type: none"> • There are two methods for locking the Guard's Emergency Cocks in the OPEN position depending on the train type which are: <ul style="list-style-type: none"> • Locking Jaw / Multi-lock Device • Multifunction Cable Lock-Out Device • On trains that MAY be divided, protection should be made on BOTH ends of train • Each person must place their lock through the locking Jaws or Multifunction Cable Lockout Device and when finished they must remove their own Lock. In this way each person is protected until they remove their own Lock • Keep your personnel lock key with you or in a secure location
	<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>To protect personnel from a train movement, the Guard Emergency Cock must be locked in the OPEN position</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 before working on trains and be alert to the sound of air recharging or signs of wheels or couplers moving</i> • <i>This SWI does not provide any protection from electrical energies. Refer to relevant electrical isolation SWIs and if required seek assistance from your Line Manager</i>
Apply Lock - Out Tag - Out (LOTO) Device	Double Deck Suburban cars L,R,S,C,K and Double Deck Interurban car V sets

Guard's Emergency Cock Lock-Out**Example 1 A****Guard's Emergency Cock Lock- Out
Locking Jaw/Multi- Lock Device**

As applied on Suburban cars L, R, S, C, K and Interurban V Sets utilizing the locking jaw.

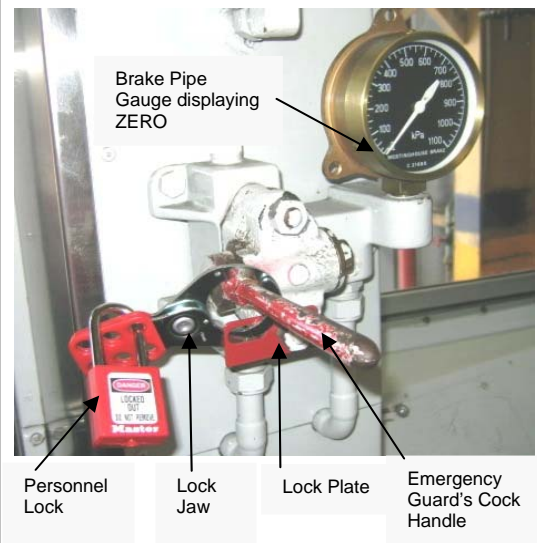
In this example there is one red lock in place and therefore one person is being protected by the OPENING of the Guard's Emergency Cock.

However, as there is a locking jaw in place, there is room for others to lock onto the protection when they arrive to commence work.

Note: The isolation can be verified in photo 1 by checking that the Brake Pipe Gauge display is zero (0) Kilo Pascals (KPa) or pounds per square inch (psi).

Application of a Locking Jaw

As pictured in photo 1 fit your lock jaw arm over the Emergency Guards Cock handle and through the hole of the locking plate. Place the shackle of your personnel lock through one of the holes of the lock device and close lock. The keys must be removed by the person who placed the lock and remain with the person whilst work is being carried out.

**Photo 1****Example 1 B****Alternative****Guard's Emergency Cock Lock- Out
Multifunction Cable Lock- Out Device**

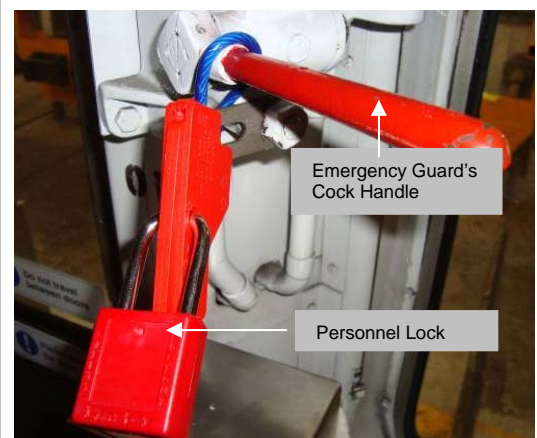
As applied on L, R, S, C, K and V Sets with locking jaw

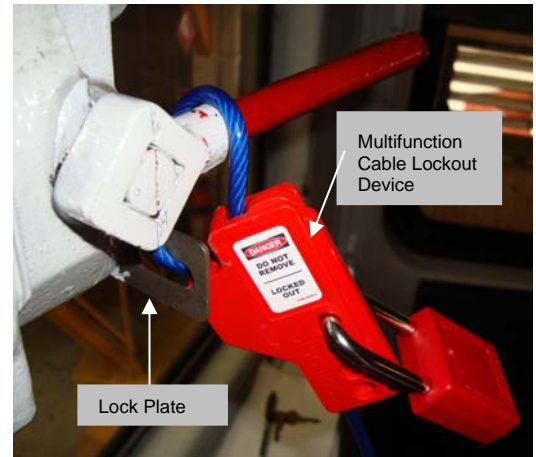
Where one red lock is applied, this suggests one person is being protected by the OPENING of the Guard's Emergency Cock.

However, there is room for others to lock onto the protection when they arrive to commence work.

Note: The isolation can be verified in the photo 1, example 1A by checking that the Brake Pipe Gauge displays zero (0) Kilo Pascals (KPa) or pounds per square inch (psi).

Fit your multifunction cable lock-Out device (photo 3) over the Emergency Guards Cock handle and through the hole of the locking plate as seen in photo 2. Place the shackle of your personnel lock through one of the holes of the multifunction cable lockout device and close the lock. The keys must be removed by the person who placed the lock and remain with the person whilst work is being carried out.

**Photo 2**

Guard's Emergency Cock Lock-Out**Photo 3****Photo 4****Tangara (T sets), Outer Suburban Tangara (G sets) and Millennium Trains****Example 2****Guard's Emergency Cock Lock- Out**

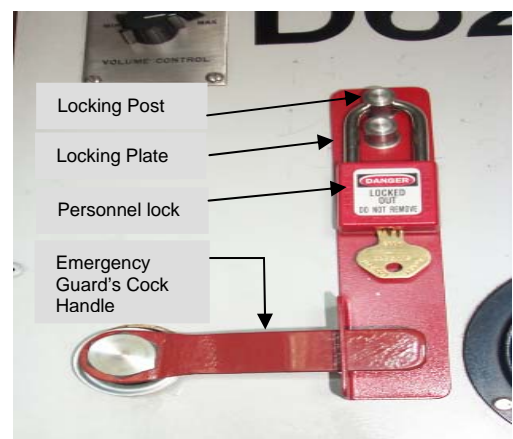
As applied on Tangara (T & G Sets) and Millennium trains with single lock.

In photo 5 a key remains in position. Keys must be removed by the person who placed the lock and remain with the person whilst work is being carried out.

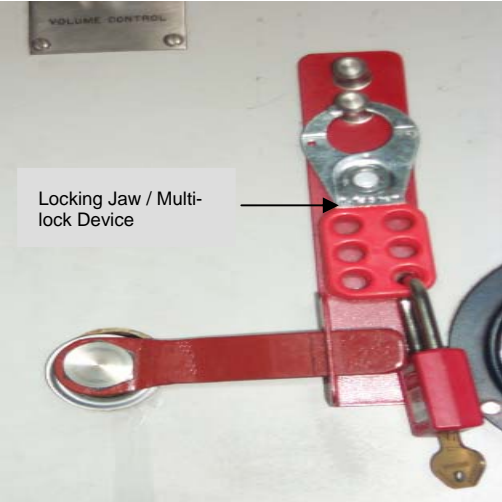


Note: The isolation can be verified by checking that the Brake Pipe Gauge displays zero (0) Kilo Pascals (KPa) or pounds per square inch (psi). Refer to photo 1

Now to fit locking device

Fit the rectangular locking plate over the Guard's Emergency Cock handle and locking post as seen in the adjacent photo. Place the shackle of your lock through the eye of the locking post on the car wall and close your personnel lock

**Photo 5**

Guard's Emergency Cock Lock-Out

<p>Example 3</p>	<p>Guard's Emergency Cock Lock- Out</p> <p>As applied on Tangara (T & G Sets) and Millennium Trains with single lock</p> <p>In this example there is one red lock in place and therefore a single person being protected by the OPENING of the Guard's Emergency Cock.</p> <p>However, as there is a locking jaw in place, there is room for others to lock onto the protection when they arrive to commence work.</p> <p>As pictured in photo 6, a key remains in position. Keys must be removed by the person who placed the lock and remain with the person whilst work is being carried out.</p> <p>Note: The isolation can be verified by checking that the Brake Pipe Gauge displays zero (0) Kilo Pascals (KPa) or pounds per square inch (psi). Refer to photo 1</p> <p>Now to fit locking device</p> <p>Fit the rectangular locking plate over the Guard's Emergency Cock handle and locking post on the car wall as pictured in photo 6. Place the Lock Jaw arms through the eye of the locking post.</p> <p>Place the shackle of your personnel lock through one of the holes of the lock device and close the lock.</p>	 <p>Photo 6</p>
	<p>Note</p> <ul style="list-style-type: none"> When you have finished your work, don't forget to remove your personal lock. Should a lock be left in place after someone has finished their work, every effort must be made to locate that person. If this is unsuccessful, the lock can only be removed by a Line Manager in accordance with <u>SMS-06-PR-0173 Plant and Equipment Lock-out Tag-out</u> 	
<p>Removal of Lock - Out Tag - Out (LOTO) Device</p>	<ul style="list-style-type: none"> Remove your Locking Jaw/Multi-lock Device or Multifunction Cable Lock- Out Device. Return the Guard's Emergency Cock back to its closed or operational position. Disengage the Emergency Brake with the brake valve and engage the Drivers Brake Control Isolating Cock (DBCIC) to operational order. Return or store your Locking Jaw / Multi-lock Device or Multifunction Cable Lockout Device in a safe place. If protection has been made on both ends of the train, ensure that the above procedure is undertaken for both ends, removal of Lock - Out Tag - Out (LOTO) device. 	
	<p>Warning</p> <ul style="list-style-type: none"> Look out for other red flags Prior to removal of isolation and your Lock - Out Tag - Out (LOTO) device, ensure that no body is still working in or around the train by walking around the train and visually checking for personnel in the area. Open train doors and make an announcement over the public speaker system. Check that Brake Pipe Gauge display has returned to the correct operational pressures. Check for and remove or report any obstructions in or around train. 	

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	<ul style="list-style-type: none"> Only remove your own protection. The removal of another persons lock may result in their injury or death. Offenders will be subject to strict disciplinary action and may be subject to prosecution by the regulator.
Remove Red Flag	If you no longer need to work on or about the train, remove your red flag, in accordance with <u>SMS-12-OI-0886 Red Flagging Trains in Stabling Yards, Depots and Maintenance Centres</u> before leaving the train.
Additional controls	
Additional controls may be required, depending upon the work being carried out. Refer to the relevant SWMS or SWI's and seek assistance from your Line Manager, if required	