

Maintenance Work Instruction

0102227

TASK DESCRIPTION Removal Level Crossings (Concrete)



SAFETY

**Before commencing work, complete a TAKE 5 every time to check that no abnormal conditions exist. Complete JHA if prompted by TAKE 5 (Risk \geq H11).
If an unsafe condition is identified, Tag & Make Safe and inform supervisor immediately.**

1. This equipment should be treated as live until fully isolated.
2. On arrival at site contact the Network Operations Centre to advise them of your location, the type of work you are undertaking and who specifically is in your group.







Risk Assessment (As per Take 5 Risk Assessment)

MATERIAL RISKS AND MAJOR HAZARDS

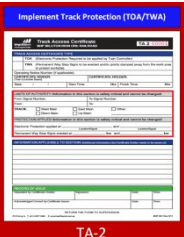


Risk	Description of Risk	Critical Controls
 Rolling Stock	There is a risk of personnel interaction with trains.	Follow the TPO's instructions and safe working processes, and make sure appropriate level of track protection is in place.
 SME	Risk of interaction between people and small mobile equipment when lifting and placing panels.	Assess the risks of injury or harm and implement control measures such as using a spotter, reverse alarm for SME and exclusion control among others.
 Stored Energy	Hydraulic systems.	Make sure prestart checks are completed on all equipment and defects rectified and reported, or equipment is tagged Out of Service and reported. Do not overload hydraulic systems on machinery.
 Dropped Objects	Suspended loads.	Assess the risks and implement controls to ensure a safe system of work that prevents injury/damage from suspended loads. Stay out of the line of fire. Prestart equipment checks (inc' rigging)
 Noise	There is a risk of exposure to high noise levels.	Assess the risks of injury or harm and implement control measures.

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 Beware of Snakes	Beware of snakes.	If a snake is sighted always remain at a safe distance and slowly walk away while continuing to watch the snake. Do not leave doors open when a vehicle is unattended. Snakes are frequently encountered when moving/lifting crossing panels.
 Hot Conditions	Consider the local site conditions and assess the risk of heat stress and dehydration.	Follow the prescribed procedure, assess the risks associated with working in hot conditions and implement control measures plus any rescue or first aid measures.
 Pinch Points	Risk of limbs trapped when aligning panels.	Use of a spotter and tag line when lifting/dropping panels, stay clear of line of fire.
 Trip	Uneven surfaces.	Keep eyes on path at all times when moving around the worksite.

ISOLATIONS, PERMITS AND SPECIAL CONTROLS REQUIRED

Control	Control Application	Reason for Control Requirements
 TA-2	Track Occupation Authority/Track Working Authority (TOA/TWA)	Personnel safety, sighting distance, position of safety, lookout protection for adjacent track, method of protection, communication.
 Vehicle Radio	Journey management plan.	Safety while travelling. Location and estimated arrival time, passenger names and contact person.
 Job Hazard Analysis	A job hazard analysis is required to be performed as part of this procedure.	This requirement has been identified due to previous risk rating.

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There has been exclusive control activities identified within this procedure.

There are lifting operations occurring during this procedure.

PPE REQUIRED (Over and above Standard PPE)

Standard PPE



Hearing Protection

SPECIFIC COMPETENCIES, KNOWLEDGE AND SKILLS REQUIRED

Machine Operator with relevant current and valid ticket and VoC, Supervisor (Section 22), Dogman with current and valid ticket and VoC, Track Protection Officer (TPO), Track Occupancy Authority/Track Work Authority Training (TOA/TWA), BHP Rail Infrastructure Card (min Track Access)

TOOLING AND EQUIPMENT REQUIRED

- | | |
|--------------------------------------|------------------------------------|
| 1. Hiab/crane (min 2.5 tonne rating) | 2. Chains (tagged) |
| 3. Shovels | 4. Crow bars |
| 5. Spanners | 6. Grease (anti-seize recommended) |
| 7. Hammers | 8. Rattle gun |
| 9. Wire Brush | 10. Set square |

REFERENCE DOCUMENTATION

Document Reference Number	Document Description	Attached
ON 11-21	Protection of Adjacent Track	No
SPR-RHS-SAF-004	Safeworking Safety Procedures	No
SPR-RHS-SAF-003	Infrastructure Trackside Safety Procedures	No
FRM-HIS-SAF-001	Job Hazard Analysis	No
SPR-IHS-SAF-006	PPE	No
WIN-IHS-SAF-002	Job Hazard Analysis Work Instruction	No
WIN-RTS-RTM-082	Emergency Procedures for Track Personnel	No
WIN-RTS-RTM-132	Working With Crane HIAB	No
WIN-RTS-RTM-095	Hiab (Operation Of)	No
WIN-RTS-RTM-116	Shovelling Ballast	No
WIN-RTS-RTM-131	Working on Track (General)	No
WIN-RTS-RTM-176	Application & Removal of Clips & Fastenings	No
0078027	Excavator, Operation of	No
0107569	Lifting and Cranage Operations – Pre-Lift Checklist	No

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TASK ACTIVITIES



- Tick off (✓) completed activities where required.
- Capture additional work as per the **Additional Work Identified** section and raise Notifications and enter the M1 number.
- Provide applicable feedback (**WIN Feedback** section) to support WIN improvement.

No.	Task Steps	Photo or Diagram	Notes	✓
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Pre-Isolation Tasks Steps

a. Contact Train Control and obtain a TOA/TWA



1. Prepare the work area

1.1 Complete a JHA for any additional hazards not already covered in this Work Instruction.

Take into account weather conditions, working embankments, etc.



1.2 Conduct thorough prestart equipment checks on all machinery, tools and equipment to be used during this task.



Ensure all lifting equipment is tagged and rated for the panel's weight.



1.3 Conduct a pre-lift inspection using the pre-lift checklist.

Refer to form 0107569, Lifting and Cranage Operations – Pre-Lift Checklist.



1.4 Have a lifting plan to know the order the panels are going to be removed.


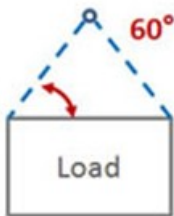
Numbering the panels in a sketch will facilitate the installation at a later stage.
Number individual panels with a paint pen as well.



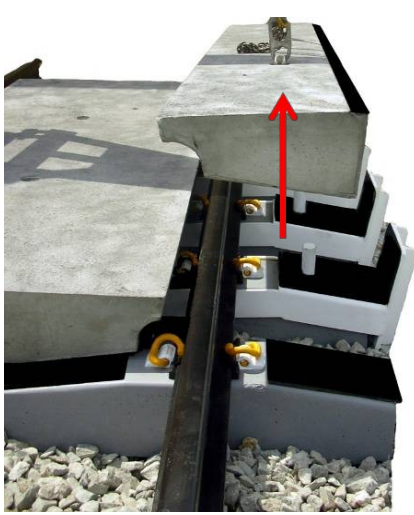
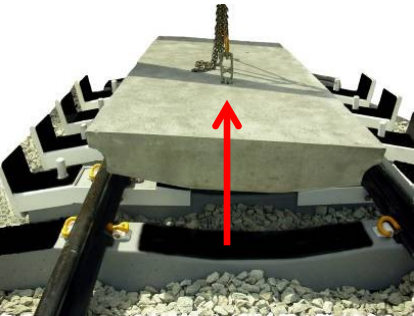


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No.	Task Steps	Photo or Diagram	Notes	✓
1.5	Have the Manufacturers Instruction Manual on hand.		Detailed instruction manual backs up this Work Instruction.	<input type="checkbox"/>
1.6	Keep all pins, clips and washers and store them safely for reuse.		Modular panels are designed so they can be removed and reassembled without damage.	<input type="checkbox"/>
1.7	Remove any debris/rubbish located on the gap between rail and panels.		Wear correct PPE	<input type="checkbox"/>


Task Steps to be done under isolation**2. Removal**

2.1	Remove R clip and washers from side panels.		Store clips and washers in a safe place for later reuse.	<input type="checkbox"/>
2.2	Remove locking pins away from the rail.		Locking pins will be required when installing panels back.	<input type="checkbox"/>
2.3	Fit the lift clutch into the lift points on top of the side and centre panels.		Ensure the lift points are clear of ballast and debris and inspect for corrosion and damage. Double check all crossing fastenings are removed before commencing lift.	<input type="checkbox"/>
2.4	Attach the lifting gear.		Ensure the lifting gear is adjusted so an even lift is maintained throughout. 60° is the optimum angle for the chain sling.	<input type="checkbox"/>

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No.	Task Steps	Photo or Diagram	Notes	✓
2.5	Remove side panels.		Lift the panels slowly and steadily to prevent damage to panels, locating pins and/or lifting equipment. Rubber insulator should stay glued to the sleepers. Always use a tag line during lifting operations.	<input type="checkbox"/>
2.6	Relocate the outer panels away from the work area.		Leave clear access to these outer panels so they can be retrieved again in a later step.	<input type="checkbox"/>
2.7	Remove the centre panels from the saddles.		Rubber insulator should stay glued to the sleepers.	<input type="checkbox"/>
2.8	Relocate the centre panel away from the work area.		The 150 crossing panels cannot be used on the 250 crossing as the panels will not fit.	<input type="checkbox"/>
2.9	Pins and washers should remain attached to the panels.		Washers that fall during removal shall be kept safe for later reinstall.	<input type="checkbox"/>

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No.	Task Steps	Photo or Diagram	Notes	✓
2.10	Jigs sitting on top of saddles can be removed if required.		Store them safely for later reuse.	<input type="checkbox"/>
2.11	Rubber insulators and saddles shall remain on the sleepers.		Verify saddle and rubber insulator alignment.	<input type="checkbox"/>

3. Post Task Checks

3.1	Place all of the outer panels across the approaches to the crossing.		The outer panels are placed there to prevent road traffic from attempting to cross whilst the crossing is out of service.	<input type="checkbox"/>
3.2	Remove all tools and unwanted equipment.			<input type="checkbox"/>
3.3	Cancel Track Protection with train control.			<input type="checkbox"/>
3.4	Leave the site.			<input type="checkbox"/>

De-Isolation, Testing and Commissioning Tasks Steps

a.	Contact Train Control and cancel TOA/TWA as applicable.	<input type="checkbox"/>
b.	Ensure Journey Management is advised when you depart site (if applicable).	<input type="checkbox"/>

4. Close out

4.1	Upload Maintenance Record as an attachment to the work order in SAP, and or raise a notification for any deficiencies to be corrected.	<input type="checkbox"/>
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No. Task Description**Initial****HANDOVER**

a.	Contact the area supervisor and inform that the equipment maintenance is complete and ready to be returned to duty.	<input type="checkbox"/>
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HOUSEKEEPING

a.	Ensure all tools, equipment and materials are removed from worksite and stored correctly at the end of the job.	<input type="checkbox"/>
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ATTACHED PICTURES, DRAWINGS OR DIAGRAMS

Maintenance Work Instruction**0102227****ADDITIONAL WORK IDENTIFIED**

Maintainable Item	Details and comments on Work Required	Notification #

WIN FEEDBACK (To support content improvement)

Were the task instructions complete and clear?	Yes / No
Where applicable, was Isolation and Permit information correct and complete?	Yes / No
Were the materials, tools and equipment lists complete?	Yes / No
General Feedback:	

SIGN – OFF WORK COMPLETED (Person(s) Who Completed Work)

Name:	Initial:	Sign:	Date:
Name:	Initial:	Sign:	Date:
Name:	Initial:	Sign:	Date:
Name:	Initial:	Sign:	Date:

Supervisor

Name:	Initial:	Sign:	Date:
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