

TK ELEVATOR AUSTRALIA PTY LTD

SHAFT SAFETY KIT

KIT CONTENT LIST & INSTRUCTION GUIDE

**(Equipment used for the Prevention of
Objects Falling from Height)**

V1 – 21 November 2023

TK ELEVATOR AUSTRALIA PTY LTD ABN: 12 073 056 149
Shed 73, 2/4E Huntley Street, Alexandria, NSW, 2015

Shaft Safety Kit – Content List & Instruction Guide

BACKGROUND

On 19 May 2020, an Employee of TK Elevator Aust Pty Ltd (TKE) was undertaking work in the bottom of an elevator shaft at a Modernisation site in Victoria when he was struck on the back of his leg by a Test Meter device (2kg). The Test Meter had fallen from the top of an elevator car that was located at an upper level in the same shaft on the 13th floor. The Test Meter was dropped by a Sub-Contractor engaged by TKE to attend site and conduct testing and tagging of portable electrical equipment. The Sub-Contractor had first attended and tested equipment in the Lift Motor Room. He was then taken by another TKE employee to test equipment that was located and secured (by cable ties) on the top of the elevator car. During testing, the Contractor dropped the Test Meter over the side of the elevator car and it fell down the shaft to the pit area. At the same time, another TKE employee had accessed some scaffolding that was installed in the pit. The TKE employee in the pit narrowly avoided a fatality or serious injury as a result of the falling object.

In response to this incident TKE has entered into an Enforceable Undertaking (EU) with Worksafe Victoria. The Enforceable Undertaking commenced on 14 August 2023.

INTRODUCTION & PURPOSE

Within 6 months of the EU coming into operation, TKE will distribute Shaft Safety Kits across its New Installation and Modernisation Teams. The aim of these kits is to reduce the chance of:

- TKE Technicians working above and below each other in elevator shafts through improved signage and communication; and
- Objects falling from height through the use of mesh netting and tool lanyards.

While this type of equipment has generally been provided by TKE when requested or required, the Shaft Safety Kit is designed as a one stop kit and a more convenient solution to the management of object fall from height risks when working in lift shafts. The equipment contained in these kits is to be available at all times. To enable this, all kits and equipment contained in them are to be returned in full at the end of their use. Contents are to be replaced if missing or damaged when kits are returned at their end of their use to ensure that they are fully stocked when needing to be used again. All kits are to be checked prior to use, to ensure that they are fully stocked with all contents and that all equipment is on hand and available.




KIT CONTENTS



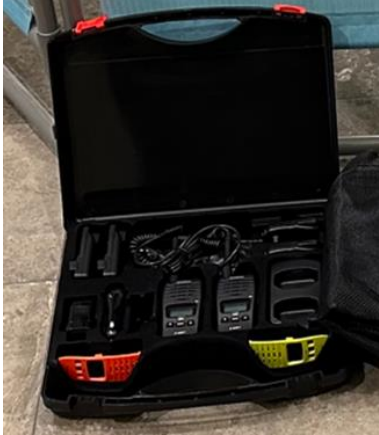
The Shaft Safety Kits are to be in a TKE labelled “Shaft Safety Kit” bag and contain the following:

- Lanyards and bungee cords to be able to attach to tools and equipment and secure them to the top of an elevator car guardrail or other structure to stop them from falling.
- Mesh / netting for the top of car guardrail to prevent objects falling under or through the top and mid rails.
- Shaft safety and exclusion signage for the top floor and lower floor landing access to warn when working is taking place above or below in the lift shaft.
- Walkie Talkies to teams to use on site as an additional communication device.

EQUIPMENT SPECIFICATIONS & DESCRIPTION

Each Shaft Safety Kit will be supplied with:

ITEM	DESCRIPTION	NUMBER (Per Kit)	PHOTO
1.	Urban Utility Caribee Barrel Type Bag (76mmx32mmx32mm) – Black colour with “TKE” logo and “Shaft Safety Kit” label.	1	
2.	Aluminium Whiteboard signage 210mmx297mm “DANGER - DO NOT ACCESS THIS PIT” (lower landing level) with “TKE” logo	2	
3.	Aluminium Whiteboard signage 210mmx297mm “DANGER - DO NOT ACCESS THIS CAR TOP” (upper landing level) with “TKE” logo.	2	

ITEM	DESCRIPTION	NUMBER (Per Kit)	PHOTO
4.	Anti-Tangle Mesh Cargo Netting (LA150BB) 2.0m x 2.5m with hook attachments.	4	
5.	Gripps Riggers Trade Kit (Lanyards and Bungee Cords) – Code H01410 – 17 piece set (2 x Bungee Tether Dual Action; 10 x Tool Catch; 1 x Slip-On Wrist Anchor; 1 x V Gripp Tape; 1 x Webbing Wrist Tether Single Action; and 2 x Belt Loop Anchor).	1 Set	
6.	Uniden UHF 2-Way Radio 2-Watt 80 Channel Twin Tradies Pack (2 devices in each set).	1 set	

INSTRUCTIONS FOR USE

The following information outlines how each of the Shaft Safety Kit contents and equipment is to be used.

1. SHAFT SAFETY KIT BAG

The Shaft Safety Kit Bag is designed as a one stop kit to hold and store all equipment designed to minimise the risk of TKE Technicians working above and below each other in elevator shafts and objects being used on the car top from falling from height.

- The equipment contained in these kits is to be available at all times.
- Equipment not used on site is to be stored in the Kit Bags.
- All equipment contained in the Kit Bag is to be returned in full at the end of its use.
- Shaft Safety Kits are to be stored at the Branch Warehouses when not being used.
- Contents are to be replaced if missing or damaged when kits are returned at their end of their use to ensure that they are fully stocked when needing to be used again.
- All kits are to be checked prior to use, to ensure that they are fully stocked with all contents and that all equipment is on hand and available.
- The Kits are marked with the “TKE” logo and labelled as “Shaft Safety Kit”.



Shaft Safety Kit Bag and Contents

2. DANGER – DO NOT ACCESS SIGNAGE

The “Danger – Do Not Access” signage is to be used to warn others when work is taking place above on the elevator car top or in the upper level of the shaft or below in the elevator pit or in the lower level of the shaft. The Kit contains two different types of signs based on the work location and there are two of each of these signs if multiple shafts are being worked on.

“Danger – Do Not Access this Pit” Signage

- The “**Danger – Do Not Access this Pit**” signage is to be used to restrict access to the elevator pit or lower levels in the shaft.
- This is to be used when work is taking place above on the car top or in the upper levels of the shaft.
- The signage is to be positioned in a highly visible area on the lower-level access point to warn others that work is taking place above this area.
- The signage should be secured with cable ties or fixed to either the barricading, shaft hoarding or landing doors on the lower landing level.



Lower Level / Pit Danger Signage

“Danger – Do Not Access this Car Top” Signage

- The “**Danger – Do Not Access this Car Top**” signage is to be used to restrict access to the top of the elevator car or upper levels of the shaft.
- This is to be used when work is taking place below in the elevator pit or lower levels of the shaft.
- The signage is to be positioned in a highly visible area on the upper-level access point to warn others that work is taking place below this area.
- The signage should be secured with cable ties or fixed to either the barricading, shaft hoarding or landing doors on the upper landing level.



Upper Level / Car Top Danger Signage

3. TOP OF CAR GUARDRAIL MESH NETTING

The Mesh Netting is to be used to cover existing guardrails to stop objects that are stored or being used on the car top from falling through, above or underneath the top and mid-rails and toe-guard and over the edge of the car top to the open shaft below.

- 4 x mesh nets are provided with each kit and can be used to secure the spaces between the horizontal guardrails on four sides of each elevator car. Note most top of cars do not have guardrails on all four sides given they are required only when there is a greater than 300mm clearance between the shaft wall and the perimeter edge of the car top.
- Each piece of mesh is sized 2.5m x 2.0m (length x width).
- The length (2.5m) is sufficient to accommodate all elevator car length sizes.
- The width (2.0m) is sufficient to enable the mesh netting to be hung and folded over the guardrail (doubled over) with the height of the guardrails being <1.1m. This width ensures that all gaps between the top rail, mid rail and toe guard are covered.
- The mesh netting is fitted with plastic clips / fasteners around the outer edge to enable the mesh netting to be clipped or secured back onto itself or onto the guardrails directly.



Mesh Netting hung / doubled over the guardrails.



Mesh Netting hung / doubled over the guardrails.

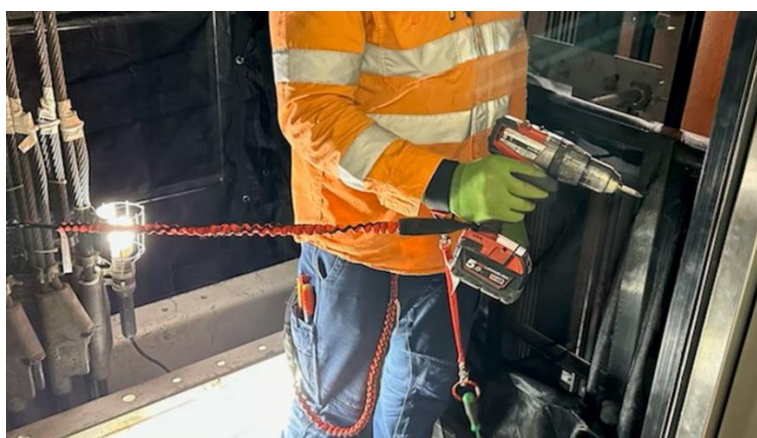
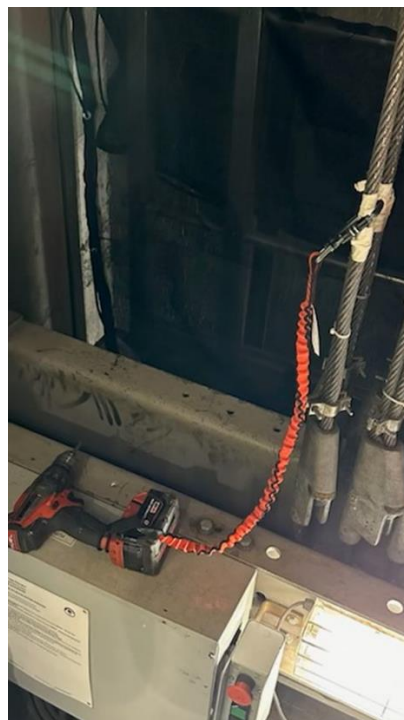
4. GRIPPS RIGGERS TRADE KIT (LANYARDS & BUNGIE CORDS)

The Gripps Riggers Trade Kit is a 17-piece set of lanyards and bungee cords and is to be used to secure tools and items being used on the car top to stop them from falling over the side car top down the shaft and pit below.

- The bungee cords and lanyards are secured to the tool or item and then anchored to either the Technician (to their belt or wrist) or to the car top structure or guard rail to arrest their fall in the event they are dropped or knocked over the side of the car top.
- Examples of items secured with these lanyards and bungee cords include hand and power tools such as spanners, shifters, screw drivers, drills etc.

The Gripps Riggers Trade Kit includes:

- 2 x Bungee Tethers (Dual Action);
- 10 x Tool Catch;
- 1 x Slip-On Wrist Anchor;
- 1 x V Gripp Tape;
- 1 x Webbing Wrist Tether (Single Action); and
- 2 x Belt Loop Anchors.

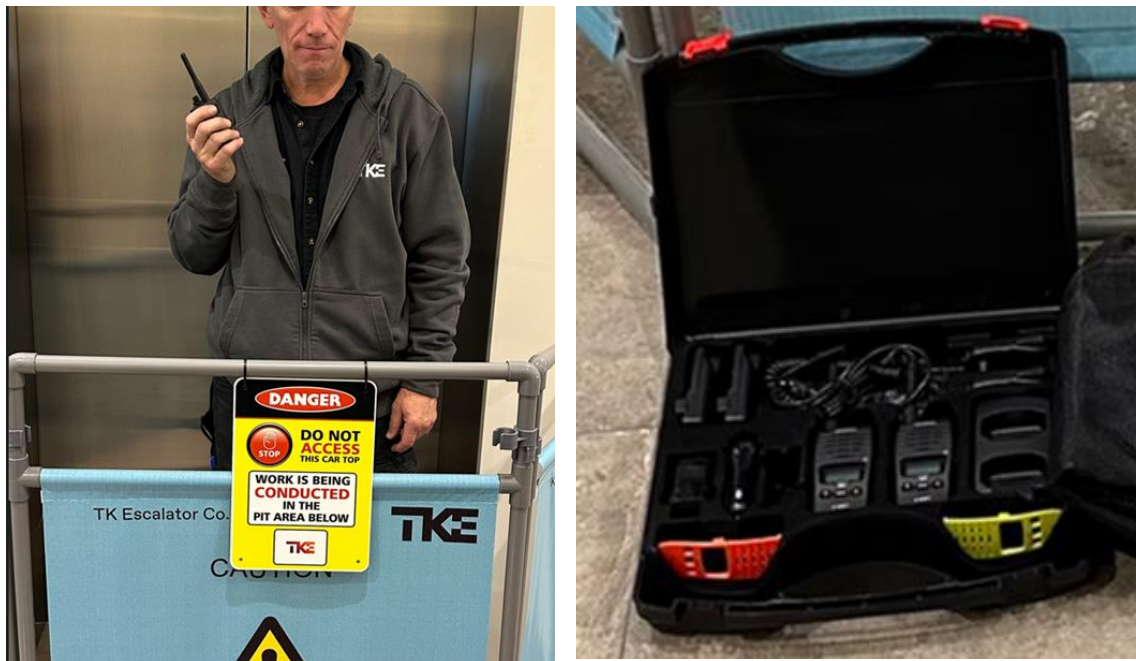


Tool Lanyards and Bungee Cords used to secure hand and power tools to the Technician or Car Top

5. TWO-WAY RADIO (WALKIE TALKIES)

The Two-Way Radios are to provide Technicians on Modernisation and New Installation sites with an additional communication device and as an alternative to mobile phones which sometimes may not work due to poor reception which is often a characteristic in elevator shafts and pits.

- The Two-Way Radios should be used to allow Technicians to communicate with each other when not in audible or direct visual contact with each other.
- The Two-Way Radios should be used to enable the Technicians to communicate with other critical information including their whereabouts and location on site and to coordinate sequencing and activities of work including the movement and energisation of elevator equipment.



Two-Way Radios

SUPPLIER DETAILS & ORDERING ADDITIONAL / REPLACEMENT EQUIPMENT

The equipment contained in the Shaft Safety Kit is supplied by:

BLACKWOODS (J. Blackwood & Son Pty Ltd)

ABN: 43 000 010 300

15 DALMORE DRIVE

SCORESBY VIC 3179

AUSTRALIA

PH: 13 73 23

<https://www.blackwoods.com.au/>

Equipment can be ordered from Blackwoods quoting the following part numbers below:

ITEM	DESCRIPTION	PART NO:
1.	Urban Utility Caribee Barrel Type Bag (76mmx32mmx32mm) – Black colour with “TKE” logo and “Shaft Safety Kit” label.	01523208
2.	Aluminium Whiteboard signage 210mmx297mm “DANGER - DO NOT ACCESS THIS PIT” (lower landing level) with “TKE” logo.	B-00148953
3.	Aluminium Whiteboard signage 210mmx297mm “DANGER - DO NOT ACCESS THIS CAR TOP” (upper landing level) with “TKE” logo.	B-00149065
4.	Anti-Tangle Mesh Cargo Netting (LA150BB) 2.0m x 2.5m with hook attachments	03335323
5.	Gripps Riggers Trade Kit (Lanyards and Bungie Cords) – Code H01410 – 17 piece set	03373654
6.	Uniden UHF 2-Way Radio 2-Watt 80 Channel Twin Tradies Pack	04159041