

Technique
Tools

TECHNIQUE ELEVATOR OPERATING MANUAL



**TOOLS, EQUIPMENT & SUPPLIES FOR
THE BRICKLAYING & BUILDING TRADES**

www.techniquetools.com.au

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*Congratulations on your purchase or rental
of a Technique Brick/Block Elevator.*

*Technique Elevators have been carefully
designed and engineered to provide safe
and easy of operation, and many years of
excellent service.*

*Please follow the guidelines to ensure safe
operation and proper maintenance of your
Technique Elevator.*

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Safety First

Description

Belt Elevators consist of a series of three sections. That when unfolded, form a long moving bed with motor driven endless belt designed to transport masonry products.

The belt has cleats and a rough finish that enables an angle of incline up to 40°. Products are placed on the belt by an operator at the motor end and are transported along the belt and removed by a second operator.

Background and Purpose of Equipment

Elevators are intended for the carriage of masonry products and Technique Mortar Buckets only.

Safety Procedures and risk control

Incident reporting has highlighted the need for duty holders to review their risk control measures for managing the potential for objects to fall onto or hit parties, at the workplace, or adjoining areas including footpaths, roads and dwellings.

Risk Assessment

It is important to have a risk assessment plan including consultation with other users of the equipment or for operation within the vicinity.

There is no need to do a formal risk assessment- action can be taken without delay to eliminate or control the risk – and consultation can take place on site with the employees or Health and Safety Representatives (HSRs) doing the inspections, and with the people doing the work.

Note: The use of the Technique brick elevator should significantly reduce risks compared to manual handling methods.

Safety Warnings

- It is important to read, follow and understand these instructions first before setting up or operating this equipment
- Keep these instructions in a convenient location near the equipment for quick referral
- Before beginning work, all users should be familiar with their working environment
- Do not alter, modify or change the equipment
- If the equipment is damaged or performs unusually, turn the elevator off and isolate the equipment as described under Emergency Shutdown.
- Apply the wheels locks before use
- Ensure the equipment is secured to a structure capable of sustaining the equipment's weight to prevent slipping or falling.
- Do not operate the equipment if there is a risk of danger.
- Secure or barricade the area around the equipment to prevent people from walking underneath
- Observe National and State WorkCover and State Plant Regulations and Occupational Health and Safety Regulations (*Additional information is available on those relevant websites*)

Competency to Operate Equipment

The person with control or management of the workplace must ensure that:

- The Operator is required to be competent to operate the equipment
- The Operator is at least 18 years old Certification to operate the equipment is not required

Incident Notification

The employer, as defined by the Regulations referred to below, who has management or control of the workplace must be aware that they have an obligation to notify the WorkCover Authority of any incidents involving this equipment.

Refer to the Occupational Health and Safety Act and the Occupational Health and Safety (*Incident Notification*) Regulation(s) applicable in your State Territory or National jurisdiction.

Transport

- The Elevator may be transported on any vehicle with a tray long enough to take the folded Elevator
- Wheel locks must be applied on the Elevator and Elevator securely fastened to the vehicle
- Belt Elevators are not designed to be towed behind a vehicle

Pre-installation Checks

- Ensure that there is sufficient clear room for the unfolded length of the Elevator
- Ensure that there are no tripping hazards in the area required to unfold the Elevator
- Instruct all staff so they understand the process of working to raise the elevator to the required height

Emergency Shutdown

Elevator may be shutdown by:

- Depressing the red **EMERGENCY STOP** button
- Turning the Forward/Reverse switch to the **OFF** position
- Removing the extension lead from the power inlet socket
- Turning off power supply
- Remove products from the belt
- Erect a sign stating **"DO NOT USE - ELEVATOR UNDER REPAIR** and fix the equipment
- Inform Management or Management's Agent of the situation

Fault Finding

If the Elevator stops working, check:

- Power is still connected
- The power supply current device has not tripped
- The Forward/Reverse switch is in correct position
- The Emergency Stop switch has not been activated
- The Elevator may have been overloaded or worked heavily in a hot environment. A temperature sensitive cut-out is fitted as protection for the motor under these conditions. Turn off the power switch on the Elevator and allow the motor to cool down. Press the red switch at the side of the motor. If a **"click"** is heard, the switch has been reset. The Elevator should now restart when switched on.

Maintenance

Daily or at the start of each work period

- Inspect the equipment and extension lead, ensuring that there is no damage or evidence of tampering or moisture. Do not use the equipment if it is damaged or has been tampered with;
- Check that the wheel locks are applied
- Ensure that the belt is in good condition and is without obstructions blocking free belt movement
- Check that the hinge locking levers are turned to the locked position

After extended or heavy use

In addition to the above check points, inspect the following items:

- Check that the drive chain connecting the motor/gearbox to the drive roller is in good condition. Chain deflection should not be more than 15mm. Drive chains may be tensioned by loosening the four bolts holding the drive roller and moving the roller rearwards until correct chain deflection is achieved. Correct chain deflection is the chain width in each direction. Apply a light coating of oil.
- Check that the belt and belt joiner are in good condition. Excessive fraying at the belt edge indicates that the belt tracking is incorrect and one side of the belt is rubbing on a section edge. Belt tracking is adjusted by loosening the four bolts at the unloading end roller and moving one side of the roller forwards or backwards until correct tracking is achieved.
- The gearbox is a sealed unit and does not require maintenance

Hazard Assessment

Please note that this checklist is indicative only. Users must perform their own Hazard Assessment subject to the intended location and use of the equipment

Hazard	Risk	Control Measure
Crushing or striking by the equipment during INSTALLATION or REMOVAL	Probability: Remote to Occasional Consequence: Marginal to Fatal	<ul style="list-style-type: none"> Set up an exclusion zone or barricade the work area before installation or removal to prevent unauthorised personnel from entering the area. Fold or unfold the Elevator on firm level ground only, to reduce the risk of the sections toppling or collapsing during this process. When unfolding or folding-up an Elevator, ensure that the folding sections are firmly gripped and that the personnel can hold their grip comfortably. A minimum of two people should be used to install or remove an Elevator due to the section length and weight. Ensure that body parts are clear of the section joins when unfolding and clear of the section tops when folding up. Move the equipment by picking up the opposite end to the motor by the lowest handle provided. Do not wheel the equipment up or down severe slopes without securing or controlling the equipment movement. Ensure the elevator is evenly balanced and will not overturn.
Crushing, striking by the equipment collapsing or entangling during use.	Probability: Remote to Occasional Consequence: Marginal to Fatal	<ul style="list-style-type: none"> Ensure that the equipment discharge end is secured to the structure to prevent slippage or falling during use Apply the wheel locks before use Ensure section locks are turned and secured into the locked position Barricade the area around the equipment and prevent personnel from walking or working underneath Keep body parts and clothing clear of the moving belt Switch off the Elevator and remove power before attempting to clear any obstructions from the belt or sections
Crushing, or striking by materials falling from the equipment	Probability: Remote to Occasional Consequence: Marginal to Fatal	<ul style="list-style-type: none"> Do not put materials on the belt larger than the belt width or it may become dislodged during conveyance and fall from the Elevator. Do not load the belt with buckets or containers holding solids, liquid, or semi liquids unless they are specifically designed for use with this equipment. Do not load the Elevator without having a second person unload the belt before products reach the end of the belt. Ensure that the Elevator is level in cross-section. Do not exceed 50° inclined angle

Hazard	Risk	Control Measure
Falling from height during installation, use or removal	Probability: Remote Consequence: Critical to Fatal	<ul style="list-style-type: none"> Barricade the area at a height where equipment is installed Use height safety equipment if barricading is absent or ineffective
Musculoskeletal disorders (<i>strains and sprains</i>)	Probability: Remote to Occasional Consequence: Marginal to Critical	<ul style="list-style-type: none"> Ensure that good body posture and work practices are followed when unfolding, lifting, lowering or folding up the Elevator Avoid twisting when lifting or lowering sections or back strain may occur
Electrocution	Probability: Remote to Occasional Consequence: Marginal to Fatal	<ul style="list-style-type: none"> Do not use the equipment if there is damage to any electrical component Do not use the equipment in rainy or overly moist conditions Do not open any electrical equipment cover Extension leads must have a minimum IOA rating (20m max length) Do not use extension leads longer than 30m (20A rating) Ensure that the extension lead is free of moisture, securely connected to the equipment and is off the ground Ensure the Elevator is properly grounded and connected to a supply fitted with a current sensing device≠
Explosion	Probability: Remote Consequence: Critical to Fatal	<ul style="list-style-type: none"> Do not use the equipment in an environment where there may be explosive gases or liquids present

SETTING UP ELEVATOR

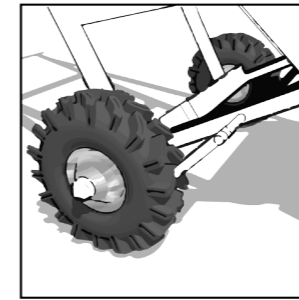
1. Ensure there is sufficient clear room for the length of an unfolded elevator
2. Lock the wheels by lifting up the lock lever and engaging locking collar *see fig 1*
3. Check all 4 Hinge locks are in the UNLOCKED position *see fig 2*
4. Lift up the top section to form an "A".
Three people are needed to unfold the Elevator. One person to firmly grip the tubular handle at the unloading end of the elevator and pull outward. While pulling outward, a person on each side of the Elevator assist in lifting the top section till the Elevator is fully unfolded *see fig 3*
5. Unfold the elevator into a flat position.
(Safety note: avoid finger jams) *see fig 4*
6. Unlock the Wheels and position on firm ground. Starting with the first segment, lock hinge locks to frame and ensure belt is level *see fig 5*
7. Ready to lift to working height. Ensure two people are available, one at the top position, and one at the base of the machine. Make sure all safety precautions are observed and that no one passes under the elevator *see fig 6*

Safeguard against personnel standing under Elevator during lift

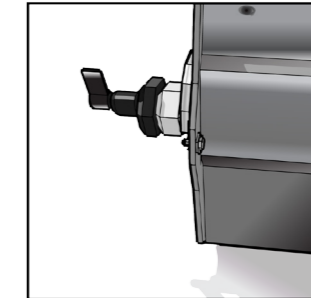
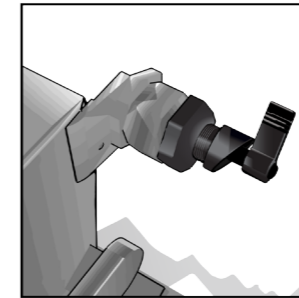
Using correct lifting method, raise the unloading end of the elevator to required height.

Immediately secure the Elevator to the required working height, guarding against slippage or movement

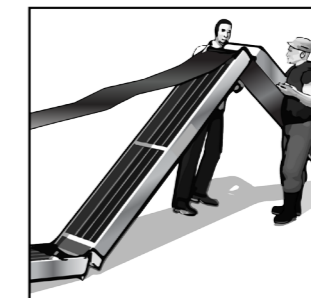
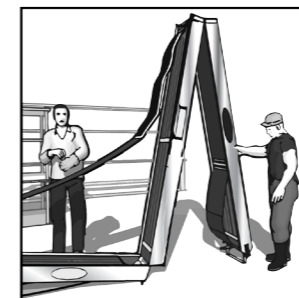
1
FIG



2
FIG



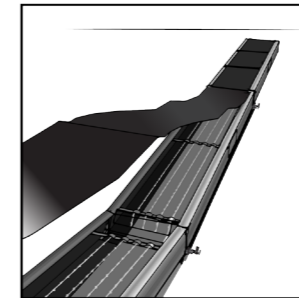
3
FIG



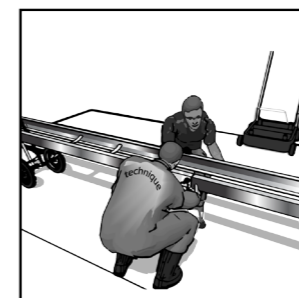
4
FIG



5
FIG



6
FIG



REMOVING ELEVATOR

1. Disconnect the power
2. Ensure there is sufficient clear room for the length of unfolded lowered Elevator
3. Using correct lowering method, disengage Wheel Brake and lower the elevator to found
4. Engage Wheel Brake
5. Disengage the Hinge Locking Pins to the **OUT** position
6. Two persons are to lift the sections and ensure belt is tucked in position, while the third grips the front tubular handle and lowers the sections to the folded position.
7. Engage the Hinge Locking Pins at unloading end of elevator for easy transport.
8. Release the Wheel Brake, and the elevator may be rolled away.

Specifications

Model	7 Metres	9 Metres
Length - folded	2.58 Metres	3.3 Metres
Length - unfolded	7.04 Metres	9.20 Metres
Belt width	250 mm	250 mm
Max Angle	40°	40°
Max Height	5 Metres	6.2 Metres
Motor	.55Kw	.55Kw
Belt Speed	28 m/min	28 m/min
Gearbox	15:1 Sealed	15:1 Sealed
Weight	136 kg	167 kg
Power Supply	240 V	240 V
SWL	150 Kg	150 Kg

Warranty

Conditions of Warranty

We warrant this machine against defective material and workmanship in manufacture for twenty-four (24) months from the date of sale to the "first end-user". The "first end-user" shall mean the person who has purchased the unit first for its intended use, not for resale.

In giving such warranty we undertake that we will within twenty-four months from the date of sale, supply free of charge to the first end-user such replacement parts which, upon examination by us, prove to be necessary owing to defective material or workmanship in manufacture. The machine must be returned to the "seller", or original place of purchase, at the end-users cost. The seller will then contact the manufacturer or manufacturer's representative in your state.

This warranty shall apply only where the machine is used in accordance with its stated purpose and description.

Our liability is strictly limited to supplying replacement parts as mentioned above and shall not in any event extend to any consequential loss or damage whatsoever, or any defect due to accidental misuse or any cause beyond our control.

Motors do not form part of this warranty and are covered by the motor manufacturer.