



pecolift
by POWER TOWERS

Operating and Maintenance Manual

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INTRODUCTION

The Power Tower Pecolift is a simple, safe and efficient alternative to step-ladders, platform/podium steps and small scaffold towers. Pecolift is the first non-powered, powered access platform. It does not require batteries (or charging) or connection to an electricity supply. It works by a unique, patented stored power mechanism which enables the platform to be elevated with very little effort by the operator.

Pecolift is designed for working internally on flat, level surfaces, and as it has no batteries, electric motor, electrics or hydraulics it is very ecologically friendly. It is ideally suited to working in a very wide range of applications from the very 'clean' environments of hospitals, food and drinks production facilities, pharmaceuticals and retail, to facilities maintenance, shop-fitting and construction.

The Pecolift is suitable for any application provided it is used within its specified operating parameters. If used for applications such as sand blasting, welding, paint spraying or with any other hazardous materials, measures must be taken to ensure the Pecolift does not become damaged in any way which may impair safety, or reliability. Additional protection for the operator may be required in some cases, which is the responsibility of the operator and/or the operator's employer.

The purpose of this manual is to provide essential basic information required to operate and maintain the Pecolift.

OPERATING SPECIFICATIONS

Working Dimensions

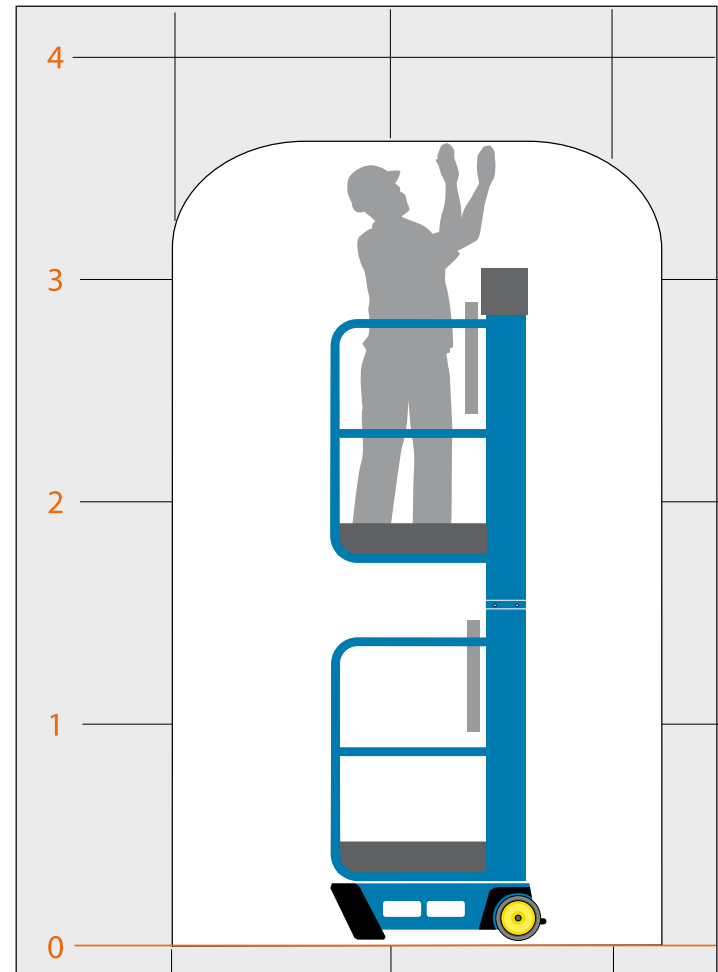
Maximum working height:	3.50 m
Maximum platform height:	1.50 m
Platform dimensions:	720 mm (L) x 600 mm (W)
Working footprint:	985 mm x 700 mm
Safe working load:	150 kg (1 person + tools)
Maximum manual force:	200 N
Maximum gradient for operation:	0 degrees
Maximum wind force:	Internal use only, 0 (zero) mph
Maximum wheel force:	125 kg
Maximum castor point load:	125 kg (123kN)
Sound pressure level:	Less than 70DbA

Closed Dimensions

Length:	985 mm
Width:	700 mm
Height:	1.550 m
Weight:	155 kg

Lift Cycles

Unlimited, subject to maintenance program being adhered to.



DO'S

1. Read and adhere to the instructions both on the machine and in the Instruction Guide or Operating Manual.
2. Ensure pre-operation checks & operations are carried out in the manner described.
3. Use only on hard, level surfaces able to support the weight of the machine.
4. Use the Pecolift internally only.
5. Ensure the operator is fit and does not suffer from a fear of heights.
6. Ensure guardrail gates are closed before elevation.
7. Ensure work area around the machine is cordoned off from pedestrians and other traffic.
8. Ensure operator is wearing the correct safety equipment.
9. Ensure the platform is correctly positioned so as not to come into contact with fixed or moving objects.
10. Ensure that the safe working load is evenly distributed on the platform.
11. Ensure the machine is being operated within the PUWER (Provision and Use of Workplace Equipment Regulations).

DON'TS

1. Never exceed the safe working load (1 person plus tools, 150kg).
2. Never use the Pecolift as a goods lift or crane.
3. Never exceed horizontal forces, (maximum horizontal force 200N).
4. Never use in the vicinity of live conductors.
5. Never try to move the Pecolift on its wheels when elevated.
6. Never extend the height of the platform by using boxes, steps, ladders etc.
7. Never modify the Pecolift in any way without the full written approval of the manufacturer.
8. Never attempt to enter or exit the platform unless it is fully lowered.
9. Never use the Pecolift on sloping or uneven ground.
10. Never operate the Pecolift outdoors, or anywhere it may be affected by wind.

PRIMARY COMPONENT LOCATIONS



OPERATING PROCEDURES

It is essential to be familiar with the correct operating procedures. The operator must have adequate training for this type of platform.

The Pecolift can be fitted with a safety harness point. If the operator chooses to wear a safety harness, an approved 'fall restraint' type harness should be worn with a very short lanyard.

Operating procedures are divided into three key areas:

1. **Pre-operation checks.**
What to do before operating the Pecolift.
2. **Normal operation.**
How to use the Pecolift safely.
3. **Emergency operation.**
How to lower the Pecolift in the event of operator incapacity.



PRE-OPERATION CHECKS

1. Visually inspect the Pecolift for any signs of damage to handrails, platform tray, chassis and mast lifting structure including mast fixing bolts.
2. Check castor and wheels rotate freely and are undamaged.
3. Check castor (pic 1) and wheel fixings (pic 2) are secure.
4. Check that the front rubber chassis feet (pads) are undamaged and fixings are secure (pic 3).
5. Check spirit level (pic 4) is intact and bubble is centred to ensure machine is level.
6. Check gates, gate hinges, hinge springs and hinge fixings are undamaged and that gates open and close correctly (pic 5).
7. Step into basket; check machine sinks down to rest on front rubber pads (feet) (pic 3a).
8. When standing in the basket: check 'fly-wheel' operating handle works correctly. Hold handle firmly and pull operating knob towards you, release, knob should spring back to lock wheel. Repeat but turn handle once clockwise with knob held pulled towards you. Wheel should turn freely. Turn once anti-clockwise to come down (pic 6).
9. Check emergency lowering tool is attached on the chassis.



NORMAL OPERATION

Only use the Pecolift internally, on hard level surfaces. Ensure a person is available at ground level to assist in case of emergency.

1. Position machine under application.
2. Check spirit level to ensure machine is level.
3. Step into platform through gates, ensure gates close behind you and check machine is sitting on its rubber pads (feet);
DO NOT ELEVATE IF NOT.
4. Check there are no overhead obstructions.
5. To elevate: pull operating knob towards you and turn clockwise.
To stop, stop turning the handle and release handle knob to lock.
6. To descend repeat but turn handle anti-clockwise.



The user shall obtain the guidance and approval of the manufacturer in the event of any special working methods or conditions outside those specified by the manufacturer.

EMERGENCY LOWERING OPERATION

Never attempt to recover the machine/operator if there is any possibility the machine is contacting any live wiring/cabling and is therefore potentially 'live'.

To lower the platform in the event of the operator being incapacitated (unable to operate the flywheel handle in the basket):

1. Locate emergency lowering tool on chassis (pic 2), remove from fixing.
2. Stand to side of machine, attach 'hook' end of emergency lowering tool to fly-wheel handle knob in basket, releasing handle knob, turn wheel **anti-clockwise** to bring platform down (pic 1).
3. Keep clear of structure as it descends.
4. Lower to a platform height of approximately 500mm or less to recover the operator safely.



Turn wheel **anti-clockwise** to bring platform down



Emergency lowering tool located on chassis

Please note that whilst the Pecolift is extremely simple to maintain, all work must be carried out by a competent person.

NOTE: PUWER (The Provision and Use of Workplace Equipment Regulations 1998) stipulates that suppliers such as hire companies must ensure their equipment is maintained correctly and fully serviced. Once on site, it is the hirer/ employer's responsibility to ensure the machine remains in serviceable condition. The hirer/employer must also ensure the operator is properly trained and familiarised with the machine in order to operate it correctly.

DAILY MAINTENANCE

Note: The telescopic mast is a sealed unit which contains a pressurised cylinder and can only be dismantled by a trained person authorised by the manufacturer.

The most important regular maintenance to be carried out by the operator is visual inspection, as per the pre-operation checks.

Daily Checks

The safety critical items to inspect each work session, daily as a minimum are:

1. Check there is no damage to the following: wheels and rubber pads (feet) and check that their fixings are secure. These are the components that connect the machine to the ground; if they are damaged then operating the machine could be dangerous and may result in serious injury.

2. Check that the guard rails are not damaged and all fixings are secure.
3. Check gates, gate hinges, hinge springs and fixings are secure and gates close freely. Ensure gates cannot open outwards.
4. Check chassis is not damaged and spirit level is intact and working.
5. Check mast fixings are all present and secure.
6. Check castor mounting allows machine to sink onto its rubber pads (feet) when stepping on front of platform. Check machine 'springs' back up again when weight is removed from platform and machine is pushed forward.
7. Check fly-wheel handle operates correctly: step into the platform to do this: (do not attempt to operate the handle from outside the basket). Pull flywheel handle knob towards you, release. Ensure handle springs back to lock wheel. Turn wheel one revolution clockwise then anti-clockwise; ensure handle moves freely in either direction.
8. Check automatic wheel-brake works by: repeat no. 7; when platform is elevated approximately 100mm, step out of the platform and attempt to push the machine, machine should not move, wheels should be braked.
9. Check emergency lowering tool is attached to chassis and not damaged.

Monthly Checks

As daily checks (items 1-9).

Six Monthly Checks - LOLER

1. Remove handle cover using suitable security screw tool and inspect and lubricate gearwheels. Use Omega 73 no.2 harsh environment grease or equivalent. Do not use standard gear grease because it will dry out prematurely and will lead to premature gear wear. Paint seal screws when refitted.
2. Inspect the drive belt for signs of wear. In order to do this, remove handle cover as in 1). Stand in the platform and raise and lower the platform in the normal manner described in the operating procedures. Whilst the platform is being raised and lowered, the belt and teeth can be observed through the inspection panel under the handle cover. Minor scuffing and wear is acceptable, but there should be no signs of the inner braided wire or Kevlar cords visible. Paint seal screws when refitted. If there are any signs of excessive wear, contact the manufacturer or authorised distributor.
3. The machine should be subjected to the test procedure below. Note, the dynamic test requirement is achieved by an excess static load test (190%) which replicates the loads seen during dynamic

movement with 125% SWL due to the necessity to achieve a safe method of conducting the test.

4. Check the mast interlock is undamaged. Check the casing for signs of damage and remove the end plate. Check the plunger is free to move by holding end with long nosed pliers and pulling outward and then releasing. Ensure plunger springs back freely. Refit cover and screw. Paint seal screw when refitted.
5. Inspect condition of automatic wheel lock. Look under brush strip at rear of chassis when platform is elevated so that mast outer is clear of chassis. Check brake cam plates are undamaged and that the two attaching screws are tight. With an assistant to lower the platform, observe the action of the cams and the movement of the brake pins. Ensure the movement is free and the pins clear the wheel discs. When the platform is elevated ensure the pins fully engage the brake discs. Ensure the pockets in the wheels are in good condition.
6. Check all instruction labels are present and clear. Refer to the key spare parts.

Test Procedure		
Place machine on test pad.		
	Fail	Pass
Dynamic Test EN280 2001 (E) 6.1.4.3 Place 190% SWL (285kg) in platform when elevated 100mm from rest.	<input type="checkbox"/>	<input type="checkbox"/>
Function Test to full height EN280 2001 (E) 6.1.4.4 with 110% SWL = 165kg. Whilst lowering release control handle and ensure lowering stops immediately.	<input type="checkbox"/>	<input type="checkbox"/>

When replacing components for any reason, only use OEM specification parts, either supplied from the manufacturer or authorised in writing by the manufacturer. Warranties and design approvals will be void if alternative components are fitted.

It is essential to obtain manufacturer's approval of any alteration which might affect stability, strength or performance in writing before proceeding.

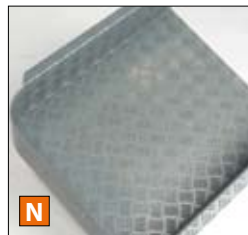
When refitting a rear wheel always use a new cotter pin (4mm diameter x 32mm A2 stainless steel). NEVER REFIT A USED COTTER PIN.

STORAGE

If the machine is due to be stored for periods in excess of one month, the following precautions should be taken: ensure the machine is fully lowered and ideally place a cover over the machine.

Upon removal from storage and prior to returning to use, ensure machine pre-operation checks are carried out thoroughly, check LOLER certificate is current.

		Part No.
A	Wheel/Brake Sprocket	PEL-M-400
B	Swivel Castor	PEL-M-401
C	Spirit Level	PT-M-106
D	Peco-lift gates (pair)	PEL-M-402
E	Corner Foot (Pad)	PEL-M-403
F	Mudguard	PEL-M-404
G	Tool Box	PEL-M-405
H	Peco-lift Decal Set 1	PEL-M-600
I	Peco-lift Decal Set 2	PEL-M-601
J	Peco-lift Decal Set 3	PEL-M-602
K	Chassis Cover	PEL-M-406
L	Emergency Lowering Tool	PEL-M-407
M	Flywheel	PEL-M-408
N	Platform Tray	PEL-M-800
O	Front Cone Rubber Buffer	PEL-M-409



WARRANTY

Your Pecolift is covered by an 18 month parts/components warranty.

The Manufacturer Power Towers Ltd (The Company), undertakes to replace or repair, free of charge, any defective part/component, which the Company considers to be due to faulty workmanship or material within 18 months of the sale date, except for:

The telescopic mast is a sealed unit. If the mast is opened in any way warranty may be invalid.

Defects arising from neglect, misuse or unauthorised modifications.

Damage caused by abuse, misuse, dropping or other similar damage caused by or as a result of failure to follow transportation, storage, installation, loading or operation instructions.

Alterations, additions or repairs carried out by persons other than the Manufacturer or their recognised distributors.

Transportation or shipment costs to and from the Manufacturer or their recognised agents, for repair or assessment against a warranty claim, on any Pecolift or component.

Materials and/or labour costs to renew, repair or replace components due to fair wear and tear.

Faults arising from the use of non-standard or additional parts, or any consequential damage or wear caused by the fitting or use of such parts.

Important

Warranty may, at the sole discretion of the Manufacturer, be voided if the scheduled service/inspections are not carried out in accordance with this manual.

The Manufacturer and/or their recognised agents, directors, employees or insurers will not be held liable for consequential or other damages, losses or expenses in connection with or by reason of or the inability to use the Pecolift for any purpose.

Modifications

If additional equipment or any third party work, modifications or alterations are to be carried out on the Pecolift which will involve any welding, drilling or any form of cutting or distortion of materials, full written approval must be obtained from the Manufacturer prior to the work being carried out.

