WHEELCHAIR LIFT Model ALS20/21-PW5

LARGE WALKING FRAME LIFT Model ALS19-PZ5

USER INSTRUCTIONS

AND

INSTALLATION / SERVICE HANDBOOK

(ORIGINAL TRANSLATION)

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ALS 1287 (04/11)

ALS

*POWER*STEP WHEELCHAIR LIFT

USER INSTRUCTIONS

INTRODUCTION

Please read the instructions before using your POWERSTEP and observe all warnings contained therein, for your own safety and peace of mind.

ALS are glad that we can play a part in enabling you to become more mobile with the minimum of pain and inconvenience. We would appreciate your continued association with us whether it is in form of constructive suggestions, criticism or even praise. We hope to be able to offer additional mobility products in future (we also make step lifts and wheelchair lifts for trailer caravans, mobile homes and buildings).

If our POWERSTEP is successful for you, please recommend us to others. Thank you.

The POWERSTEP is intended for domestic or caravan use where a wheelchair bound or ambulant user requires to negotiate steps of up to 450mm (or 600mm) .

The maximum rated load is 160 Kg / 350 lb (25 stones).

The lift must not be used for goods lifting.

Please ensure that the instructions have been read and fully understood by all who will use the POWERSTEP. This is for their own safety.

DO NOT ALLOW CHILDREN TO PLAY WITH THE POWERSTEP. As with all similar equipment, improper use can cause injury.

USE OF THE POWERSTEP

To ascend, make sure the platform is fully lowered. Operate the control buttons as indicated below.

Position the wheelchair or stand centrally on the platform. Apply the wheelchair brakes. Your feet must not overhang the platform, particularly on the step side, as this could cause them to become trapped under the step edge as the platform rises. The platform ramp forms an anti roll-off barrier when the lift rises by tipping upwards, do not prevent its action by obstructing it with feet or wheelchair.

Press the UP button (upper) until the platform reaches the upper level when the limit switch stops it automatically.

To descend reverse the procedure, pressing the DOWN button (lower) until the platform reaches the lower level.

The platform can be stopped at any position by releasing the control button but it is suggested that it is left in the lowered position when not in use to prevent overloading by ambulant persons and to allow them to cross the ramp.

In the lowered position, the platform can be manually folded upwards. In some installations the lift can then be swung away from the doorway to save space by detatching one end of the tie bar and releasing the clamping handles next to the wall. Beware of stepping off the upper level when the platform is folded!

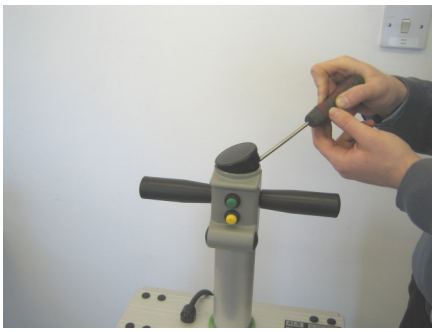
In the event of the lift failing to raise or lower due to an electrical failure, the platform can be raised or lowered manually. Refer to the illustration on the next page.First remove the cap above the top handles. Then lift out the special spanner within the top of the handle tube.Refit this spanner onto the inner rod with the handle horizontal. Rotate the spanner anti-clockwise to raise and clockwise to lower. Do NOT operate the electrical lift and lower buttons when the spanner is fitted for manual operation as it could rotate quickly and cause injury. Replace the spanner after use with its handle engaged in the hole inside the tube and the operating pin in its slot to prevent the inner rod from turning when the lift is used electrically. Replace the top cap.

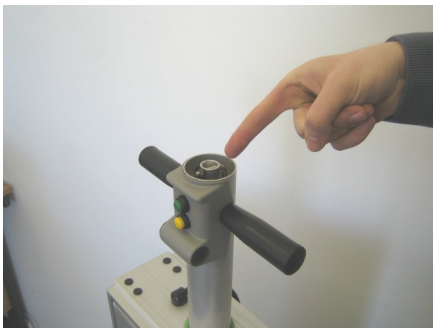
When powered by a mains transformer unit there are two fuses and a mains indicating lamp fitted to this unit. If the lift fails to operate check first that the mains light is illuminated and if not that other mains appliances on the same circuit still operate. The mains fuse in the transformer unit is accessed by unscrewing the circular black holder on the transformer. If blown it must be replaced by a 3.15 Amp slow blow fuse of the same type.
The 12 Volt circuit is protected by a thermal fuse that can be reset by pushing in the white button in the centre of the transformer box.

MAINTENANCE

No regular maintenance is required on this lift except to keep it in a clean condition and check that nothing can interfere with its safe operation. It is neccessary however to have the lift and its fixings inspected for safety of operation by a competent person at periods not exceeding 6 months and records kept of this examination, with reports retained by the owner and inspector. A summary sheet is provided at the end of this handbook.
Remove any accumulation of debris from around the lift and occasionally clean it with warm soapy water. See section 5 of the Installation and Service instructions.

Refitting manual operation spanner to inner rod



LIFT SPECIFICATION

Model	ALS 19-PZ5	ALS 20-PW5	ALS 21-PW5
Platform travel	560 mm	410 mm	560 mm
Max platform height	600 mm	450 mm	600 mm
Usable platform area	700 x 700 mm	1000 x 750 mm	1000 x 750
Main frame weight	24 Kg / 53 lb	22 Kg / 48 lb	24 Kg / 53 lb
Platform weight	8 Kg / 18 lb	14 Kg / 31 lb	14 Kg / 31 lb
Rated max platform load	160 Kg / 350 lb (25 stones)		
Maximum noise level	Less than 70 dB(A)		
Power to lift (max)	16 Amps @ 12 Volts d.c.		
Mains transformer input	< 1 Amp @ 230 Volts 50 Hz		

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ALS20/21-PW5 WHEELCHAIR LIFT

INSTALLATION INSTRUCTIONS

NOTE: These lifts are for light duty only and should not be used for public use. The maximum platform load is 160 Kg (350 lb / 25 stones) i.e. One person with manual wheelchair *or* one person standing.

Description of ALS20/21-PW5 or ALS19-PZ5 lift

1.1. The lift consists of two main assemblies which are the Main Frame and Platform. These parts are separable for transport.

1.2. The construction of the Main Frame is of aluminium extruded sections which are anodised where they are visible, except for the front and rear covers which have a grained finish plastic laminated to them.

1.3. The main frame also provides the rails on which the load of the platform is taken. Pre-lubricated ball bearing rollers are used and these should give many years of service without the need for oiling.

1.4. The Main Frame encloses the operating mechanism and provides support for the Platform. Lifting is done by a proprietary electrically driven screw actuator which is a sealed unit and requires no maintenance.

The actuator is rated to lift at a 10% duty cycle (i.e. no more than 6 minutes in one hour). It operates on a 12 Volt d.c. supply and is controlled by push buttons on the handle unit which operate two relays close to the motor. Sensitive edges are provided on the platform which will prevent the motor from lowering it if there is an obstruction below the free edges of the platform.

1.5. There are two limit switches inside the housing which are preset at the travel limits of the platform on assembly. The top switch operating point must be reset during fitting to the required height (see instructions for this).

1.6. A manual winding system is built into the lift. This is operated by removing the plastic cap at the top of the handle tube and pulling out the winding spanner. This is refitted with the swivelling handle outside the tube and turned anti-clockwise to raise the platform, clockwise to lower.
WARNING The spanner must be replaced with the swivelling handle engaged in its storage hole to lock the mechanism before using the lift under power. A diagram for operation is inside the top cap.

1.7. The Platform consists of a powder coated steel frame supporting an aluminium treadplate. On the wheelchair lift there is a tipping ramp at one end which reduces the possibility of a wheelchair rolling off when the platform is raised. The arms on which the platform fits are adjustable to enable it to be levelled after installation.

1.8. The main frame is supplied in two height of lift versions, the ALS20/21-PW5 or ALS19-PZ5 which will reach a platform height of 450 mm (18”) and the ALS20/21-PW5 or ALS19-PZ5 which will reach 600 mm (24”). The platforms for each are identical. We recommend that the platform is fitted with at least one handrail, especially when it travels higher than 300 mm (12”) or the user is standing.

1.9. A mains transformer is supplied for domestic use which must be fitted indoors (and supplied directly by a dedicated mains fuse). When operated by a 12 Volt battery on a caravan, motor home etc. the lift is supplied directly via a 25 Amp fuse. An optional switch box with an extendable cable is available, as is an isolating switch.

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INSTRUCTIONS FOR FITTING POWERSTEP WALKING FRAME OR WHEELCHAIR LIFTS

Introduction

2.1 It is important to fit the lift rigidly with regard to the place of use and other restrictions. **The ideal arrangement is to support the main frame at its four corners by attaching it to substantial surfaces with suitable brackets and fixings.**

2.2 The sides of the frame surrounding the mechanism have slots on front and rear faces to enable M8 single threaded slot nuts to be slid in from the bottom and used to secure the fixing brackets and tie rod. The feet are also fitted in the bottom of the slots with similar double threaded nuts.

2.3 The suggested method of fitting a ALS20/21-PW5 or ALS19-PZ5 lift is shown below. If this is not possible consult ALS Powerstep for further advice or alternative fittings. The lift is supplied with two feet that can be screwed to the floor or concrete pathway.

Site survey, preparation and fixing

3.1 Powerstep lifts are not available at present with bridging steps and it may be neccessary to remove any existing steps or provide a platform at the higher level.

3.2 The lower ground surface should be flat and level, either a concrete or wooden floor or pathway. Secure concrete paving slabs are also acceptable though often difficult to drill for plugged screw fixings.

3.3 The wall to which the lift main frame and the tie rod are fixed should be of solid construction, preferably brick or concrete. However a substantial wooden framed wall could be suitable following expert advice.

3.4 The face below the upper floor level against which the lift will rise must be smooth and vertical without any ledge at the top so that feet or other parts cannot become trapped as the the platform rises.

3.5 To assemble the lift, position the main frame at the side of the doorway where it will be used.

3.6 Fit the platform frame tubes over the main frame arms so that it is fully engaged (this is easier if the arms are pointing upwards at about 20° to vertical). Plug the safety switch wire from the main frame into the free socket on the platform frame.

3.7 Position the lift where it will be used and check that it will not catch on anything when the platform rises. It can be raised and lowered using the manual wind lever under the top cap or by connecting it to a 12 Volt dc power source, such as a car battery or its own transformer unit if supplied.

3.8 When satisfied with the position, mark the fixing hole positions and using either M8 bolts, M8 wall fixings (i.e. Rawlbolts / Sleeve anchors) or equivalent strength fixings, fix the wall bracket/s as far apart as possible (min 400mm) or use one bracket near the top and fix both feet to the ground.

3.9 The tie bar must be fixed at least 600mm from the back of the lift body using a similar rigid fixture to the wall. The bar length is adjustable in 50mm increments by a bolt through it and finely adjusted by the screwed end fitting.

3.10 The wall brackets and tie bar are fixed to the lift using the screws supplied and the sliding nuts in the slots of the main frame surround. These nuts are retained by small springs which can easily dissappear if the nuts are removed. For fixed installations this does not matter but catch them if you can!

3.11 The plastic or metal ground fixing plates, if used, should be screwed to the ground with 5mm woodscrews and plastic wall plugs (i.e. Rawlplugs).

3.12 Make sure that all the fixings are rigid when weight is on the lift and will remain secure through the life of the lift. If there is any doubt it is possible to drill the mounting brackets for additional wall fixings. Old walls may cause problems and may need extra long anchors or reinforcement. If there is any doubt about the safety of the installation take expert advice.

3.13 See the test requirements to verify the stability of the installed lift.

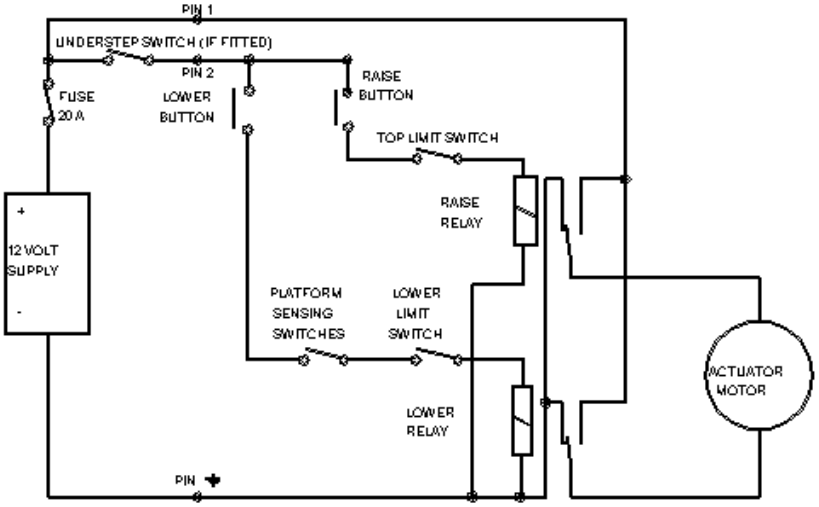
Electrical supply

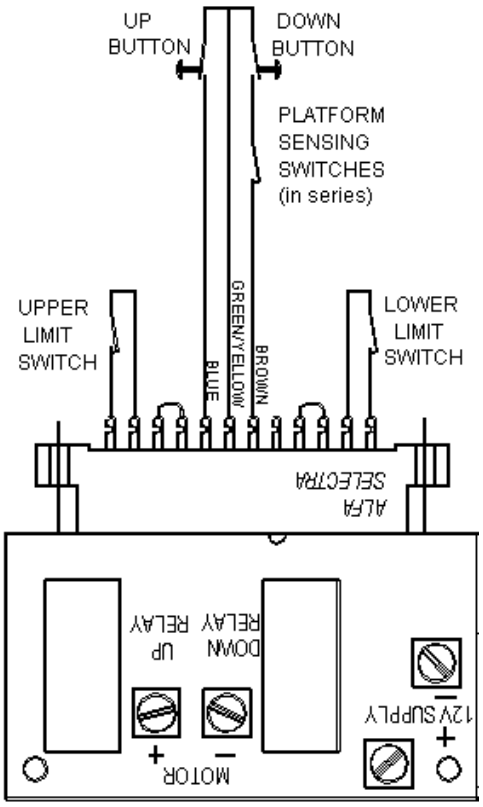
4.1 When the mains transformer is used, site this unit indoors close to the lift and wire direct to a dedicated fuse at the supply. The cable from the lift is routed to the transformer and plugged into it. A fuse of 5 Amp rating should be fitted in the fuse box.
The transformer unit has a 3.15A slow blow fuse in the mains input and a thermal circuit breaker in the 12Volt output. The neon lamp on the transformer will glow when power is on.

4.2 Where a 12 Volt supply is already available such as in caravans the lift can be powered from that via a 25Amp automotive fuse and an isolating switch (which must be capabale of carrying 20 Amps.

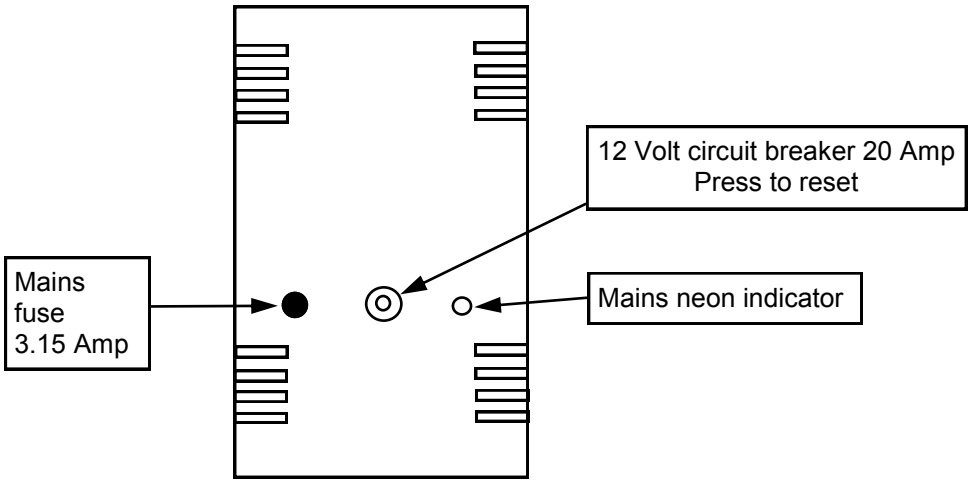
CIRCUIT DIAGRAM AND LAYOUT

CONTROL WIRING CONVENTIONS:
COMMON: GREEN/YELLOW
BLACK + YELLOW
RAISE: BLUE
LOWER: BROWN
RED





MAINS TRANSFORMER UNIT



Setting up

4.3 To adjust the top limit switching point remove the front cover screws and the panel. Locate the vertical switch rod (the right hand white rod) and slacken the screw of the upper clamp. Slide to the required position, tighten it and test the operation before replacing the front cover.

WARNING Beware of trapping fingers etc when the cover is removed.

4.4 The lower switch should not require adjustment, as the feet can be adjusted to alter the ground clearance of the platform when fully lowered. If necessary the switch can be adjusted in the same way as the top one.

4.5 **WARNING** As mentioned in the Handbook the manual winding handle locks its shaft when not in use. When it is being used the electric lift buttons should not be operated as it is possible that the handle could rotate quickly and cause injury.

4.6 The platform may require levelling using the two adjusting bolts below the piviting arms on which it fits. When this has been done tighten the lock nuts to retain the adjusting bolts.

Commissioning

4.6 ALS carries out a test on the lift before dispatch when mounted on their test fixture. This allows them to issue a Declaration of Incorporation in order to comply with the Machinery Directive.
After final fixing at the user's site the lift must be inspected and tested and a Certificate of Installation completed. When this is done a Declaration of Conformity must be issued to the purchaser that the lift complies with the Essential Requirements for safety.
A blank certificate form and the Declaration of Conformity form are included for completion by the installer.
The lift must be tested in situ with a static load of 1.25 times the rated load, to prove the integrity of the fixings to the building or caravan.

Declararation of Incorporation
BS EN 292
BS EN 1050

This is a declaration that the Powerstep Model ALS20/21-PW5 Wheelchair Lift or ALS19-PZ5, Large Walking frame lift, has been tested by ALS, Unit 3, Jefferson Way, Thame, Oxon OXC3SZ

The lift must not be put into service until it has been fitted and tested in accordance with the instructions provided and approved in accordance with the Supply of Machinery (Safety) Regulations 1992 and all ammendments thereof and an EC Declaration of Conformity issued.

Signed:.....

Maintenance

5.1 The lift requires little maintenance as the lifting actuator is a proprietary sealed and pre lubricated unit. The rollers incorporate shielded ball bearings which are pre lubricated and there are some Nylon rubbing buttons which are lubricated with a PTFE based oil on assembly to prevent squeaking.

5.2 The electrical circuit uses sealed relays, platform microswitches and push buttons. External connectors are either sealed or filled with silicone grease to reduce corrosion of terminals and exposed solder joints are sprayed with a protecting lacquer or covered by heat shrunk sleeving.

5.3 The external surfaces of the lift should be cleaned with a non abrasive household cleaner and debris should be removed from around the lift.

5.4 The Machinery Directive which applies to this lift and the recognised British Standards for lifts recommend that the lift must be inspected every 6 months for safety, stability and correct operation by a technically competent person. A record must be kept of these inspections and any work undertaken or needed. A form for this is included.

5.5 The main items to check are:-

1. Security of the fixing of the main frame to the wall and floor
2. The mounting surfaces are not cracked or subject to subsidence.
3. Operation of the upper and lower limit switches
4. Operation of the sensitive edge and its switches.
5. Ensure that all hazard, warning and information displays are intact and legible.
6. Check that the wiring and controls are in good working order.
7. The mains transformer unit (when fitted) should be checked for safety and adequate ventilation.
8. All covers and other fixings are secure.
9. The manual raising and lowering mechanism is complete and serviceable.
10. The lift surroundings are clear of obstructions that could prevent its safe operation.
11. The anti-roll-off mechanism works properly.
12. The lift operates when loaded through its full range without restriction, noise or vibration.

Dimensions of Lifts

Code:	ASL19-PZ5	ALS20-PW5	ALS21-PW5
Lift type	Large Walking Frame	Domestic Wheelchair	Domestic Wheelchair
Platform Size	700 x 700mm	750 x 1000mm	750 x 1000mm
Platform Weight	8Kg	14.5Kg	14.5Kg
Mainframe Weight	24Kg	22Kg	24Kg
Max Sill Height	600mm	450mm	600mm
Max Load Weight	160Kg	160Kg	160Kg
Overall Dimensions:			
Width	700mm	1200mm	1200mm
Depth	930mm	965mm	965mm
Height Closed	1170mm	1170mm	1170mm
Height Open	1770mm	1620mm	1770mm

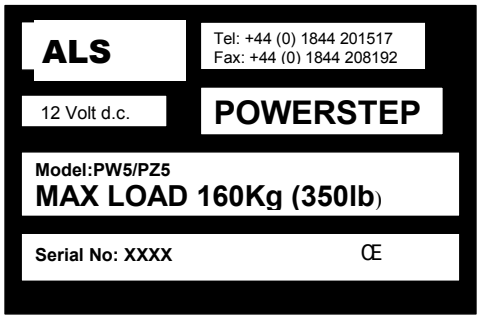
Log of safety inspections and remedial work done or needed

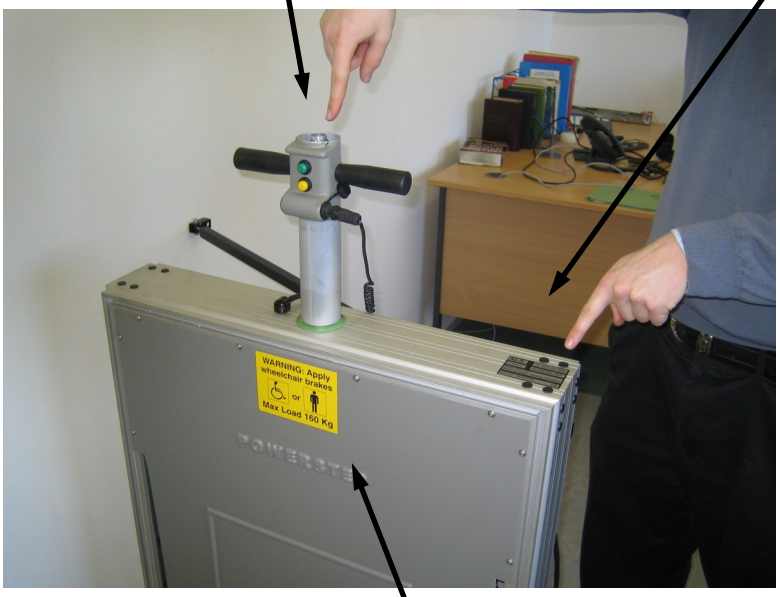
MODEL:.....ALS..... SERIAL NUMBER.....

Date	Mechanical operation	Electrical systems	Fixings integrity	Work done or needed	Sign.

POSITIONS FOR FIXING NAME PLATES AND WARNINGS

SERIAL NUMBER STAMPED UNDER TOP CAP





ALS 1 YEAR WARRANTY

IF ANY PART IS FOUND TO BE DEFECTIVE DUE TO FAULTY MANUFACTURE WITHIN ONE YEAR OF ORIGINAL PURCHASE, ALS, THROUGH ITS AUTHORISED DISTRIBUTORS WILL EFFECT THE REPAIR OR REPLACEMENT TO THE CUSTOMER FREE OF CHARGE PROVIDING:

(1) THE FAULT IS REPORTED DIRECT TO THE SUPPLING DISTRIBUTOR.
(2) THE MACHINE IS RETURNED TO THE SUPPLYING DISTRIBUTOR'S ADDRESS OR THAT THEY AGREE TO AN ON SITE VISIT.
(3) THE MAXIMUM GROSS WORKING LOADS OF 125 Kg (20 STONE) FOR THE STAND-ON AND 160 Kg (25 STONE) FOR THE WHEELCHAIR LIFTS HAS NOT BEEN EXCEEDED.
(4) THE LOAD OF NO MORE THAN ONE PERSON PLUS WHEELCHAIR HAS BEEN CARRIED ON THE WHEELCHAIR MODELS.
(5) MISUSE, NEGLECT OR FAULTY ADJUSTMENT HAS NOT CAUSED THE FAULT BY THE USER.
(6) THE FAILURE HAS NOT OCCURRED THROUGH FAIR WEAR AND TEAR.
(7) THE MACHINE HAS NOT BEEN REPAIRED OR TAKEN APART BY ANYONE WHO IS NOT AN AUTHORISED DISTRIBUTOR.
(8) THE MACHINE HAS NOT BEEN USED FOR HIRE OR FOR OTHER THAN DOMESTIC / PERSONAL USE.
(9) THE MACHINE IS STILL OWNED BY THE ORIGINAL OWNER.

POWERSTEP STAND-ON AND WHEELCHAIR LIFTS ARE SUPPLIED AND FITTED TO TOURING CARAVANS, MOTOR-CARAVANS AS WELL AS FIXED SITES ON HOUSES AND BUILDINGS. IT IS THEREFORE THE RESPONSIBILITY OF THE PURCHASER TO ARRANGE AND BEAR THE COST OF RETURNING A MACHINE TO THE SUPPLYING DISTRIBUTOR TO ALLOW COMPLETION OF REPAIRS FREE OF CHARGE. HOWEVER WHEN FITTED TO HOUSES AND BUILDINGS AND THERE HAS NOT BEEN A CHANGE OF ADDRESS OUT OF THE AREA, THE SUPPLYING DISTRIBUTOR WILL SUPPLY FREE LABOUR AND ON SITE SERVICE SUBJECT TO THE PROBLEM BEING COVERED BY THE WARRANTY.

THIS GUARANTEE IS ADDITIONAL TO, AND IN NO WAY DIMINISHES THE CUSTOMERS STATUTORY RIGHTS

FAILURES NOT COVERED BY THE GUARANTEE
NB IT IS IMPORTANT THAT YOU READ AND ADHERE TO THE INSTRUCTIONS CONTAINED IN THE USER INSTRUCTION AND SERVICE HANDBOOK.

FAILURES DUE TO THE FOLLOWING ARE NOT COVERED:

1. FAULTS CAUSED BY MISUSE, NEGLECT, OVERLOADING OR FAULTY ADJUSTMENT BY THE USER.
2. FAILURE THROUGH FAIR WEAR AND TEAR.
3. WHERE THE LIFT HAS NOT BEEN SERVICED OR REPAIRED BY THE SUPPLYING DISTRIBUTOR OR WHERE IT HAS BEEN INTERFERED WITH BY ANY PERSON NOT AUTHORISED TO DO SO BY THE SUPPLYING DISTRIBUTOR.
4. IF THE MACHINE HAS BEEN USED COMMERCIALLY.
5. FAILURE AS A RESULT OF NOT REPORTING AN INITIAL FAULT.
6. FAILURE IS AS A RESULT OF NOT USING THE MACHINE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS CONTAINED IN THE USER INSTRUCTION, INSTALLATION AND SERVICE HANDBOOK.
7. THE LIFT HAS BEEN USED FOR HIRE.
8. ANIMALS, FLOODS OR ACT OF GOD HAS DAMAGED THE LIFT.
9. FAILURE HAS BEEN CAUSED BY VANDALISM, ACCIDENTAL OR MALICIOUS DAMAGE.

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