STAIRISER CR USER HANDBOOK

IMPORTANT

Before using your Stannah Stairiser platform stairlift, please ensure that you read and familiarise yourself with these instructions.



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NOTE

Whilst every has been made to ensure the clarity and accuracy of this hand-book, we cannot be held responsible for any damage or injury resulting in negligence or misuse of this platform stairlift.

INTRODUCTION

This user handbook is to help provide an understanding of correct and safe use of the lift.

Your lift has been manufactured and installed in accordance with the Supply of Machinery (Safety) Regulations 2008 (2008 No. 1597).

It is important that you arrange for the lift to receive regular inspection and servicing by a competent person at intervals of at least every six months, after the guarantee period has expired. A Service Log Card supplied by the Service Branch will be completed after each service visit. Failure to ensure servicing is carried out could lead to unreliable or unsafe operation.

For all enquiries regarding servicing, please contact your local Stannah Service Branch.

For your records:		

INTRODUCTION

LIFT SAFETY—YOUR RESPONSIBILITIES

Am I legally obliged to have my lift maintained?

Yes. The general duties imposed by The Health and Safety at Work etc Act 1974 supported by Provision and Use of Work Equipment Regulations 1998 (PUWER) regulations 5&10) mean that you are obliged to keep your lift in safe working order. This means you must arrange for regular maintenance of your lift.

Am I legally obliged to have my lift Thoroughly Examined?

Yes. Regulation 9 of the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) requires that a lift undergoes an inspection/thorough examination by a competent person at regular intervals (twice a year for passenger lifts, once for goods lifts or according to the lifts' situation) and applies to all lifts and lifting equipment used at work.

I have a lift in my building. What do I need to do?

You should arrange for the lift to be maintained (regularly serviced and kept in good repair) and, if the lift is in a place of work, thoroughly examined at intervals in line with legislation.

What is the difference between 'Maintenance' and 'Thorough Examination'?

Maintenance is the regular servicing of the lift, encompassing the routine adjustment to components, replacement of worn or damaged parts, topping up of fluids and so on, and should be carried out by an experienced and competent lift company, such as Stannah Lift Services. Maintenance is carried out to ensure the lift runs efficiently and safely.

Thorough Examination is the systematic and detailed visual inspection of the lift and all its associated equipment and would usually be carried out by a third party, or an appointed 'competent person'. Thorough Examination provides a good check that maintenance is being carried out properly. It focuses entirely on the safety of the equipment.

Authoritative guidance on Thorough Examination as required by Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) can be found in The Guidelines for Supplementary Testing of In-Service Lifts published by SAFed. Thorough Examination may also be referred to as Form 54 or F54 inspection – the code given to the form prescribed by repealed Factories Acts. Although no longer prescribed, the term remains in use. Other common terms used are: periodic inspection, statutory inspection (because it is required by law) or insurance inspection (inspections are often on behalf of insurance companies).

Do I have a responsibility for trapped passengers?

Advice on this can be sought from your local Stannah Service Branch.

INTRODUCTION

PRODUCT LIFE EXPECTANCY

Product life expectancy depends largely on the environment, usage and the undertaking of proper scheduled maintenance. Our lift products are designed and life tested for a full life cycle of 10 years without major intervention. In most cases, we would expect our lifts to last far beyond this, providing they are properly cared for and maintained.

We have a number of platform lifts on our service portfolio that were installed from the late 1990s. The earliest platform lifts installations are approaching 20 years in service.

Actual life expectancy of a lift depends on a number of factors, including:

- The load the lift actually carries on each journey
- The actual lift travel, as this determines the journey time and hence wear on the drive system
- The level of usage of the lift and whether this changes over time
- The environmental conditions that it operates within
- The quality of the servicing and maintenance

We ensure that spare components are available for at least 10 years following the installation of any lift but many will be available far beyond this. There are a number of component parts that may require replacement during its life cycle and you will be advised of this as part of your lift servicing schedule.

SAFETY INSTRUCTIONS

 The lift must not be overloaded. The maximum capacity of the lift is indicated on the front face of the carriage.

Safe working load: 250kg (for the wheelchair platform).

100 kg (for fold down seat).

- The emission sound pressure level for lift users is not expected to exceed 60dB(A).
- This platform lift must only be used for the transport of persons in wheelchairs or sitting
 on the optional fold down seat. Never use the lift in a standing position.
- This lift is designed to carry the majority of Type A and B wheelchairs, but not Type C wheelchairs or electric scooters due to their weight and size.
- This lift is not designed for carrying goods or animals of any kind. The exceptional use by trained guide dogs is permitted.
- Do not exceed the maximum platform load or maximum wheelchair size.
- Remove key switch from both the lift and the platform after use.
- Children should not be allowed to tamper or play with the lift.
- Keep hands and fingers away from the back of the carriage.
- Passengers must remain in the wheelchair or seat while the lift is operating.

Persons walking up or down the stairs while the lift is being operated must avoid contact with the platform. Platform users should take into consideration that the platform needs more space in a bend than on a straight railway. Therefore, before moving, look to see if anyone is using the stairs or if there are obstacles.

Emergency stop

An emergency stop is fitted on the carriage. In case of emergency press the red STOP-switch and the lift will stop immediately. To release the STOP-switch, it will be necessary to press it once more or to turn it clockwise.

We recommend preventive checks are carried out on the lift. Regular servicing of your stairlift will ensure safe operation for a long time. Any abnormal operation of the lift should be reported to the service office. In the case of irregularities such as vibrations or abnormal noise emissions, do not use the lift; call your Service Office.



Pay attention to all paragraphs marked with this sign. These paragraphs contain important hints that will ensure smooth operation of the lift.



WARNING! Important safety advice! Observing these instructions greatly reduces the possibility of hazardous situations.



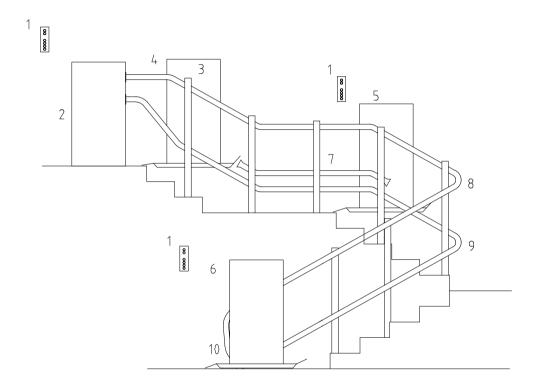
Pay attention! Do not execute the actions marked with this sign!

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GENERAL LAYOUT



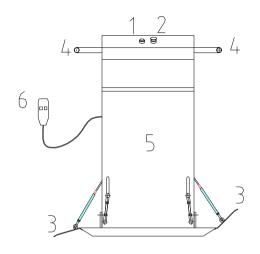
WARNING - Before using your lift, please read and familiarise yourself with these instructions

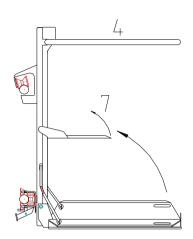


- 1. Wall control
- 2. Drive box (small or big)
- 3. Carriage
- 4. Upper stop position
- 5. Intermediate stop position
- 6. Lower stop position

- 7. Horizontal railway
- 8. Upper railway tube
- 9. Lower railway tube
- 10. Overspeed governor

GENERAL LAYOUT



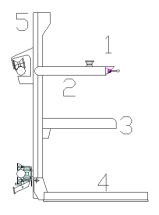


Carriage with platform for wheelchairs

- 1. Handset with direction buttons, audio alarm and stop switch (key switch optional)
- 2. Display
- 3. Access ramps
- 4. Barrier arms
- 5. Sidewall covers
- 6. Directional control (joystick)
- 7. Folding seat

Carriage with seat performance

- 1. Directional control
- 2. Armrest
- 3. Seat
- 4. Footrest
- 5. Carriage, sidewall

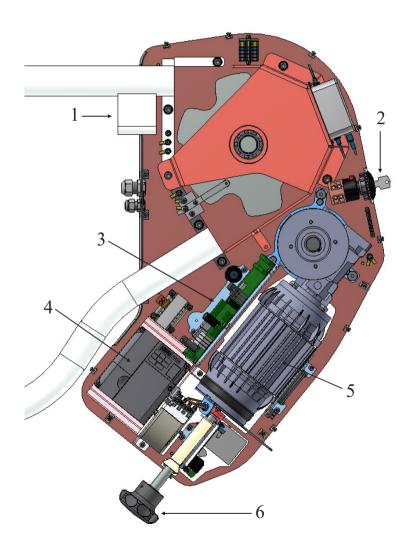


Horizontal railway

If the gradient is less than 20 degrees a third pipe is required to stabilise the platform. Horizontal sections may be necessary at half-landings or stop positions.

COMPACT MOTOR BOX

- 1. Upper ultimate limit switch
- 2. Main power switch
- 3. Drive unit control board
- 4. Frequency inverter
- 5. Motor
- 6. Emergency hand wheel



CALL STATIONS

All Stairiser CR installations are equipped with calling stations, with which you can call and send the lift. Call stations are located in the area of the upper and lower landing position.

Each landing call station needs to be activated with a key switch before use.

The call stations are needed to call and send the lift with closed platform and to open and close the platform in the landing stations.



Key switch









Drive up button

The platform will drive up when in closed (unfolded) position.

Drive down button

The platform will drive down when in closed (unfolded) position.

Platform open button

The platform will open (unfold). This button works only when the platform is in the landing station.

Platform close button

The platform will close (fold). The platform should be closed when in the landing station.

OPERATION

Main power switch

The main power switch connects the lift to the power supply system. For use of the lift, first turn on the main power switch. By switching off the main power switch, the stairlift can be isolated from the circuit.

It is necessary to switch off the main power switch while repairs are done to the lift, especially in the drive box. The main power switch can be locked in both the "on" and "off" position with a padlock.

The main power switch is located either on the side of the drive box (drive type K) or on the external control box (drive type S).

Turn on the landing control station (using the key). Lock the landing control station after use.

Bring the carriage to the desired position using one of the landing stations control. First, unlock the landing control station with the key, then press the "up" or "down" button. Keep it pressed until the carriage automatically stops in the desired landing position. Release the button and lock the landing control station again. The lift is now ready for use.

Driving/Moving onto the platform



WARNING - Before operating the lift, ensure the platform area is clear

The platform is folded down by pressing the "open" button. Keep it pressed and the barrier will automatically fold up. Simultaneously the ramps fold down to the correct position enabling safe driving/moving onto the platform.

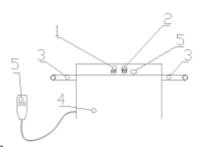
Always face the direction of travel and apply the wheelchair brake for safety.

OPERATION

Travelling

- 1. Key switch
- 2. Emergency stop button
- 3. Barriers
- 4. Carriage
- 5. Directional controls (on device and hand held)

When the passenger has moved onto the platform in accordance with the "Driving/Moving onto the platform" instructions, the carriage can be set in motion by pressing the "up" or "down" control.



By pressing the directional control, the barrier and ramps will automatically fold into the correct position. The lift will start travelling after the barrier is folded down and locked.

The carriage stops at any intermediate stop(s) then final landing automatically. If the directional control is kept pressed at a stop position the barrier will open. To continue travel from an intermediate landing, release the control button for a few seconds after the carriage has stopped. Press it again and hold it down to continue travelling.

Keep the directional control pressed until reaching the desired stop position. If the directional control is released, the carriage will stop immediately.

As a safety measure, the lift is equipped with an emergency stop (red button on the control). In the unlikely event that the stairlift does not stop when the directional control button is released, press the self-locking emergency stop button. The lift will then stop immediately.

To unlock the emergency stop button, press it once more or turn clockwise.

Leaving the platform

The lift has been designed to stop in the correct position at each landing.

Keep the directional control button pressed until the barrier has folded up and the ramp has folded down to the correct position. When the barrier is fully opened (and the ramps are fully down), release the directional control.

After leaving the platform use the landing control for folding down the barrier and for folding up the platform.

By folding up the platform the wall controls (landing controls) will be re-activated. The carriage can then be sent to the desired parking position.



WARNING - After leaving the stairlift, fold down the barriers and fold up the platform. To avoid unauthorised use always switch it off with the key when not in use.

EMERGENCY RELEASE

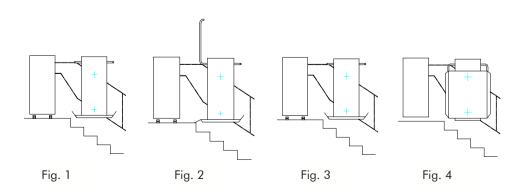
If it necessary to evacuate a user from the lift due to either lift or power failure, the procedures described here should be followed. A different process is needed, dependant on where the platform has stopped:

Case 1

The occupied platform is near a stop position.

The position of the main power switch, the hand lever for brake release and the hand wheel is indicated on page 10.

- 1. Turn the main power switch to off.
- 2. Take the hand wheel and insert it into the hole located at the back of the motor.
- Press the hand lever for brake release and turn the hand wheel until the next station has been reached. The direction for moving the lift up is indicated on the hand wheel (fig. 1 shows the platform at the stop position)).
- 4. When the platform is positioned at a landing as illustrated in fig. 1, the barrier arm only on the side of the lift from which the platform is to be exited, may be forced upwards by hand. Refer to fig. 2.
- 5. Now the wheelchair user can leave the platform.on the barriers.
- With the user evacuated push down hard on the barriers. As the barriers fold down
 the platform will fold up (see fig. 4). The platform must now be locked with the
 padlock on the carriage.
- 7. Call your service office.



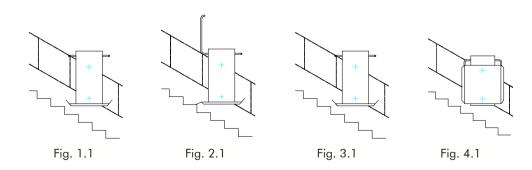
EMERGENCY RELEASE

Case 2

The occupied platform is not close to a stop position.

The position of the main power switch, the hand lever for brake release and the hand wheel is indicated on page 10. Please note for the rescue of the passenger with the carriage in such position two people are needed! If there is only one person available, it will be necessary to wind the carriage into the next station (see case 1).

- 1. Turn the main power switch to off.
- Take the hand wheel and insert it into the hole located at the back of the motor.
- Press the hand lever for the brake release and turn the hand wheel until reaching the next half-landing or straight part of the staircase (see fig 1.1). Do not stop at a curved area of the rail.
- 4. Unlock the barrier arm by following the procedure described on page 16. Note that this process is only applicable when the carriage is not positioned at a landing station. The barrier arm on the stair-side only of the lift should be raised; raising the arm to the open side of the carriage would expose the user to toppling off the platform and falling down the stairs. Refer to fig 2.1.
- 5. The wheelchair user can now be lifted down from the platform.
- 6. With the user evacuated, push down hard on the barriers (fig 3.1). As the barriers fold down the platform will fold up (see fig. 4.1). The platform must now be locked with the padlock on the carriage.
- 7. Call your service office.



EMERGENCY RELEASE

Emergency unclamping of barriers

For unclamping a barrier somewhere out of a station, press the lever located at the back of the carriage.

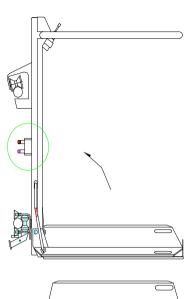
The position of this lever is shown in detail in Illustrations right.

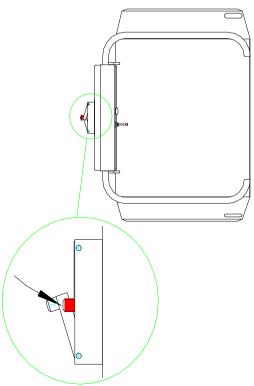


The red, marked lever must be pressed for unlocking the barrier up to the stairs.



Do not press the unmarked lever.





MAINTENANCE

A service contract Stannah Lifts Services is recommended to ensure the lift is regularly serviced.

Check-up and care

Check the following points at regular intervals:

- 1. The carriage must not start travelling until the barrier is folded down and the ramp is turned down to the appropriate position.
- 2. It should be impossible to fold up the barriers while travelling. This should be tested between two stop positions.
- 3. Check operation of the safety switches mounted on the platform end ramps: with the carriage in motion, press downwards on the one of the platform ramp edges the carriage should stop immediately. Be sure to stand clear while undertaking this operation in case the carriage does not stop as expected. Repeat this test pressing upwards on the ramp and also perform checks on the second platform ramp (if fitted).
- 4. Check the operation of the safety tray on the underside of the platform. The purpose of this device is to detect the presence of objects which could interfere with the lift travel, and would be crushed by the platform underside. While standing clear and with the platform in motion, press the undertray of the carriage the carriage should stop immediately.
- 5. The carriage must stop when the directional control is released.
- 6. The emergency stop button must put the whole lift out of operation.
- 7. If an emergency call system is in place, ensure that it works.
- 8. Remove dust and dirt from the rail tubes at regular intervals.
- 9. Keep the access free to the drive and to the main power switch.

Note: Dust or other materials should not be allowed to accumulate inside the slot of the upper tube of the railway. When cleaning the stairlift use a soft cloth and soapy water.



WARNING - DISMANTLING/REMOVAL

You should not attempt to dismantle any parts of the lift. Such work should be entrusted only to competent personnel with relevant expert knowledge and training.

Advise all lift operation malfunctions to the Stannah Service Office or to our service personnel when they are next in attendance.

Troubleshooting

For safety reasons, the Stairiser CR is equipped with several electrical and mechanical locking devices. The Stairiser CR will not work if any of these devices are tripped or if the order of events is incorrect.

By following the instructions provided in the ensuing paragraphs, the user will be able to determine the reason for breakdown. Contact our service team! You must not manipulate, modify or remove any safety feature of the stairlift.

Work through the following instructions paragraph by paragraph - do not skip any stepst! Be sure that the landing controls are deactivated whenever the platform is folded down.

Before troubleshooting, pay attention to the following:



When a landing control is activated, it automatically deactivates all other wall controls, i.e., the complete lift can only be controlled by one control at a time.



Please check if the main power switch, located either at the side of the drive box is on and check if the stop switch on the platform control is pressed.



Please check if the fuses in the distribution box of your house are working and turned on.

Possible Errors

If during the operation of the lift an error is occurring, it will be displayed as an error code on the 7 segment display on the control boards as well as on the LCD display.

If a safety switch is pressed or the platform is used in a wrong way the following status report could be shown on the display – "Issue reason":

- S11p platform is not fully opened
- \$110 platform is not fully closed
- Contact down (downward ramp or lateral bar is pressed)
- Contact up (upward ramp or lateral bar is pressed)
- Safety bottom: contact plate under the platform is pressed
- S. circuit p emergency stop button or lever for barrier arm unblocking are pressed
- S. circuit d ultimate stop switch at upper end of rail is pressed
- S. circuit br ultimate stop switch at lower rail end or overspeed governor switch is pressed

If the unit does not work, check on the display (illustrated below) to see what error code is shown and then refer to the list above to find out what this error means. When talking to the service technician, please tell him the error code so the correct action for fixing the lift can be taken.



Error table

In the following table all error codes are listed. The error code is shown on the LCD display. An error can be acknowledged by the Display menu, via the button S1 on the platform control or by switching the main power supply on and off.

Error	Number	Device reaction	Possible reason
No error	O (-)	-	-
Impulse Timeout	1 (1)	Running slower than normal	Timeout Impulse. During driving no impulses have been counted. Reasons: Encoder defect, cable not connected, FI does not start
Wrong Impulse during stand-still	2 (2)	Running slower than normal	Impulses are counted although the lift should not have moved. Reasons: Defect motor brake; lift has moved without a drive command
Drive way too long	3 (3)	Running slower than normal	During teach-in mode a too long drive way was driven. The maximal length depends on the transmission of the motor.
Too many points	4 (4)	Running slower than normal	During teach-in mode too many points have been saved. A maximum of 40 points is possible.
Wrong impulses in intermediate landing station	5 (5)	Running slower than normal	If the counted impulses in the landing stations differ too much from the saved impulses.
Wrong impulses in landing station area	6 (6)	Running slower than normal	If the counted impulses in the landing stations differ too much from the saved impulses. A possible reason can be that the stop assembly in the landing stations has been moved after the teach-in mode.
Wrong impulses in intermediate landing station area	7 (7)	Running slower than normal	If the counted impulses in the landing stations differ too much from the saved impulses. A possible reason can be that the stop assembly in the intermediate landing stations has been moved after the teach-in mode.

Name	Number	Device reaction	Possible reason
Wrong impulse on limit switch	8 (8)	Running slower than normal	If too many impulses are counted while a limit switch is still pressed. This can be a signal that a limit switch contact did not close after the unit left the landing station.
Power cut off on runway	9 (9)	Running slower than normal	If the platform is on the runway (outside of landing stations) and a power cut occurs then the unit cannot detect its position on the rail. The platform then has to be driven in slow drive mode into the next landing station where the failure will automat- ically reset.
Wrong rotation direction of motor	10 (A)	Running slower than normal	If the encoder detects a different rotation direction than the inverter produces. Solution: Interchange contacts IMP1 and IMP2 on drive unit control board
Brake is weak	11 (b)	Running slower than normal	If the drive is stopped and the encoder still detects a certain amount of impulses it is an indication that the brake does not stop the lift correctly.
Overload	12 (C)	Platform will travel to the next landing, then stop	If the platform is overloaded and the overload switch SU gives a signal to the controller.
Motor tempera- ture	13 (d)	Platform will travel to the next landing, then stop	The thermostat relay in the motor was activated.
Short circuit be- tween the tension rope and the rail	14 (E)	Platform will travel to the next landing, then stop	If there is a short circuit between the tension rope and the rail

Name	Number	Device reaction	Possible reason
Short circuit be- tween the support rope and the rail	15 (F)	Platform will travel to the next landing station, then stop	If there is a short circuit between the support rope and the rail
SPI Timeout on drive unit	16 (1.)	Platform will not move	The communication between the PIC microcontroller and the Echelon Powerline module was defunct or not correctly adjusted.
Safety circuit	17 (2.)	Platform will not move	Safety circuit relays (KAUF, KAB) on the platform are not released.
FI- communication	18 (3.)	Running slower than normal	The communication with the frequency inverter via the RS485 Modbus interface did not work.
Communication with EEPROM on drive unit	19 (4.)		The communication between the micro controller and the EEPROM on the drive unit did not work.
Feedback from main contactors	20 (5.)	Platform will travel to the next landing station, then stop	One of the main drive contactors or the safety circuit relay KSK has not been released after the platform stopped driving.
Data transfer between the drive unit and the plat- form control	21 (6.)	Platform will not move	The communication via the tension rope did not work correctly. This failure is detected on the drive unit.
Power cut for short time	24 (9.)	Platform will still move	Reset error in landing station.
SPI Timeout Plat- form	112 (-)	Platform will not move	The communication between the PIC micro controller and the Echelon Powerline module was not correct. The Powerline module is defect or not correctly plugged.
Data transfer between the drive unit and the plat- form control	113 (-)	Platform will not move	The communication via the tension rope did not work.
Communication with EEPROM on platform	115 (-)	Platform will not move	The communication of the micro controller with the EEPROM on the platform control did not work.

WARRANTY PROMISE

Our Guarantee

Stannah Lifts Ltd are pleased to guarantee our materials and workmanship, and provide a maintenance and breakdown service, supplied by our sister company Stannah Lift services, for a period of 12 months from completion of installation and handover of the lift, as follows:

- We will provide regular planned maintenance visits at the frequency agreed in the contract, subject to suitable access to the lift within normal working hours.
- We will provide a full breakdown service within normal working hours, unless
 caused by misuse, abuse, accidental damage or other matters outside of our
 control, in which case it will be chargeable. Normal working hours are Monday to
 Thursday 8.00am to 4.45pm, Friday 8.00am to 3.45pm. Evening and weekend
 breakdowns will be charged at a premium rate, unless included within the contract.
- Should any defect in workmanship or material become evident within such period
 or in any part delivered under this contract, we undertake to repair or replace the
 defective part, as soon as possible during normal working hours.
- Our Guarantee does not cover repairs, replacements or adjustment which may be required as a result of ordinary wear and tear, wilful or accidental damage, misuse, neglect or any other cause beyond our control.
- The address and telephone number of your nearest Service Branch is on the 'Completion Notice' and a full list of all service branches is included on our website www.stannahlifts.co.uk.

The Warranty Promise is subject to the following conditions:

- The lift has been formally handed over and the 'Completion Notice' is signed.
- All outstanding monies have been paid to us.
- No other lift company has worked on the lift, e.g. carrying out a maintenance visit, attending a breakdown or attempting a repair.
- Stannah are not prevented from carrying out planned maintenance for any reason outside of our control, including but not limited to, the safety of our employees engaged in activities under this warranty.
- The lift well and machine room or machine space must be freely accessible, free
 from damp, properly ventilated and maintained in line with any requirements
 detailed within the user manual.

Stannah reserve the right to change the terms of any warranty provided subject to any such change being notified to the beneficiary in writing.

NOTE

Whilst every effort has been used to ensure the clarity and accuracy of this Handbook, we cannot be held responsible for damage or injury resulting from negligence or misuse of this lift equipment.

We are continually developing and improving the Stairiser range and we therefore reserve the right to alter or amend the specification without prior notice.



Stannah Lifts Ltd

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