



Inclined Platform Lift Operation and Maintenance Manual

USO-IPL-EN-04

2015

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Model:

RPSP (Internal product configurator: starting from SP06)

SUPRA (Internal product configurator: starting from TP14)

Manufacturer:

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1 General Information

1.1 Key and definitions



ATTENTION! Potentially hazardous situation / essential information for the proper operation of the platform lift.



Note: tips for working procedure / optimum working



Skilled personnel required / Contact maintenance service.



Instructions: "instructions" are intended as all information provided by the manufacturer for the safe use of the machine in compliance with the requirements of Machinery Directive 2006/42/EC, including arrangements for works, installation, use and proper maintenance and do not exclude warnings regarding how to avoid improper actions.

Original text: The user manual in the Italian language is the ORIGINAL VERSION to which every translated version must make reference.



User

The User is intended as the person who, having received the user manual and read and understood its contents, is suitable for operating and using the machine safely.



Trained person

Educated person/s who have received information from the authorised installer/maintenance worker regarding the execution of emergency manoeuvres as shown below in this manual.



Skilled Personnel

Person (or entity) in possession of the legal requirements and any necessary authorisations for the installation and/or maintenance of the machine described in this manual.

Such personnel must have received formal appointment by entitled parties and must operate in accordance with the manufacturer's specifications and in accordance with applicable requirements and/or laws for the assembly, maintenance and periodic testing by a notified body or other third parties.

1.2 Warnings



ATTENTION!

Read carefully safety and operation instruction



ATTENTION!

- We strongly recommend not allowing the inclined platform lift to be used by minors and/or those who cannot operate it safely. In this case, the inclined platform lift must be used under the supervision by another person, duly trained in its safe, adequate use.
- While in use, maintain a correct position according to the inclined platform lift set-up, and always look in the direction of travel.
- Once aboard with the wheelchair, you must remain in correct position, not setting the wheels down on the movable straps and ensuring that you have acquired stability on the platform after operating the two stationing brakes with which the chair is equipped.
- If the folding seat (optional) is used the belts must be latched ensuring correct closing of the buckles. Tension the belts adequately and maintain an erect position with the back resting against the stairlift housing.
- Make sure that the weight of the load does not exceed the maximum indicated capacity and that the load is correctly positioned and secured to the platform in a central and well-distributed position.
- Check that nothing can be introduced between the inclined platform lift and the guide (in particular, pay attention to clothing, umbrellas or canes).
- During travel, especially if the machine is commanded with calls from the floors, the user must pay particular attention that no persons or things are in the path of the inclined platform lift.



ATTENTION!

- Safety devices are installed to neutralize any dangerous situations: do not create fictitious danger situations to test them, abusing their utilization, and do not tamper with them for any reason. Testing the correct operation of these devices is done solely by the maintenance service.
- The maximum capacity of the inclined platform lift is indicated on the serial number tag, bearing the CE marking; never exceed this value for any reason whatsoever.
- The inclined platform lift is intended for the transport of one person only. Make sure that the weight of the load does not exceed the maximum indicated capacity and that the load is correctly positioned and secured to the platform in a central and well-distributed position.
- For the inclined platform lift to work well over time, the machine must be maintained correctly. Encasa recommends stipulating a planned maintenance contract with an authorized firm.



ATTENTION!

- If the inclined platform lift is installed in front of railings accessible from the rear, it is necessary to plug the segments that would allow to touch the rear of the moving inclined platform lift.



- The documents, manuals and emergency manoeuvring equipment must be kept in a safe place known by the owner and/or the trained personnel and people in charge of carrying out the emergency manoeuvres illustrated below.
- Their location must be known to all those who are authorized to use the inclined platform lift, or appointed to help others use it, safely and in accordance with the provisions of this manual.



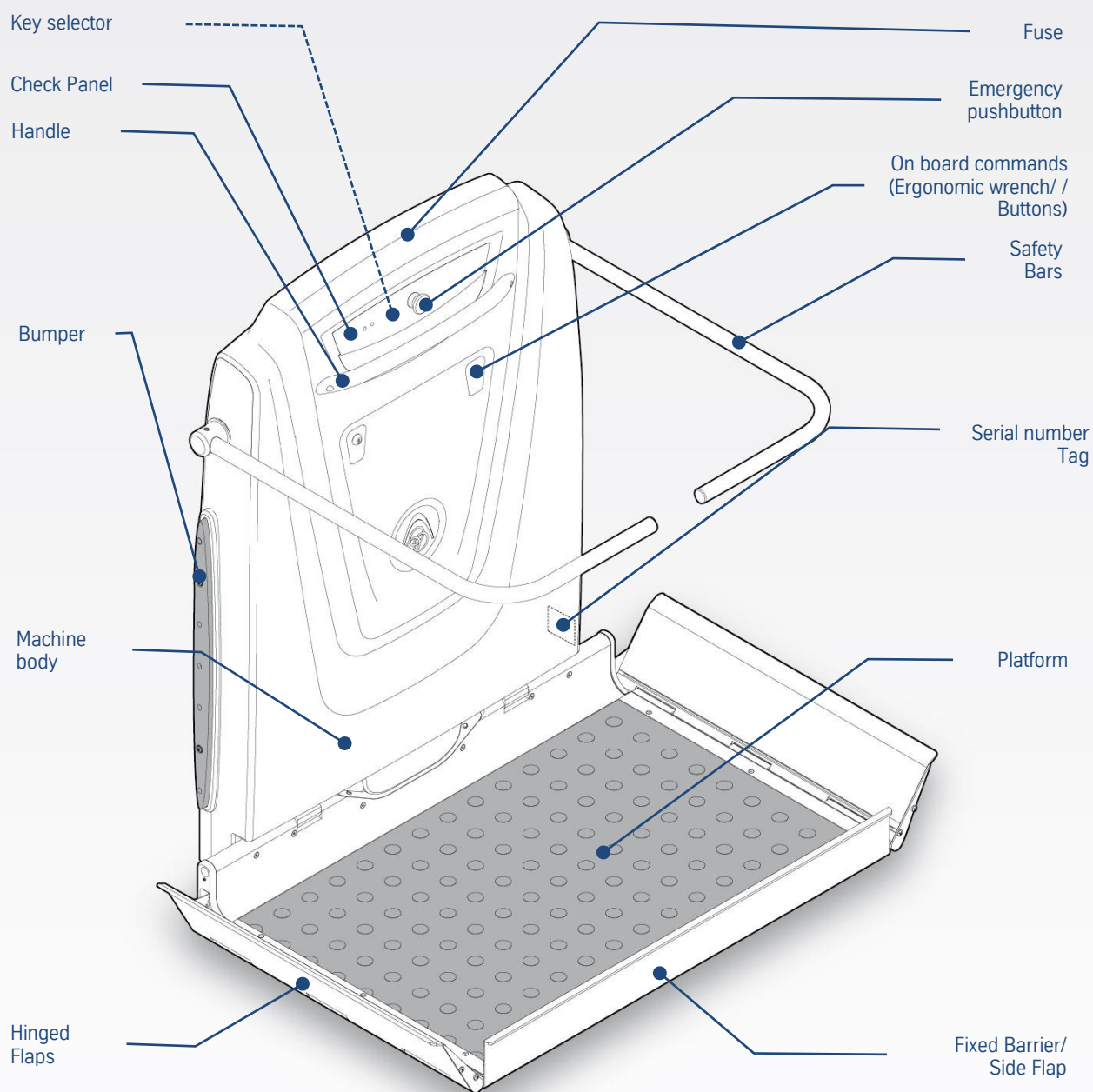
- The range of ambient temperatures for which the inclined platform lift will operate properly is between 0°C and +40°C; for storage, ambient temperature ranges between -5°C and + 55°C (IP55 version: between -25°C and +55°C)
- The inclined platform lift is not designed to operate with ice formations and/or snow accumulations either upon the body of the machine or the guide.
- The customer shall provide with an adequate staircase lighting (minimum 50 LUX) and with a light socket to be available to the mechanics for maintenance and inspections requirements.



- The guide of the inclined platform lift is not “intentionally connected to ground”.
For applications where the building’s owner deems it necessary to implement protection against the effects of lightning during use, direct contacts need to be made with the manufacturer to define the type of protection required.

1.3 Illustration of the Inclined Platform Lift

Fig. 1 – View of the Inclined Platform Lift



The presence of some components may vary based on the intended market and on current standards

1.4 Illustration of the applications

Fig. 2 – Straight staircases (RPsp)

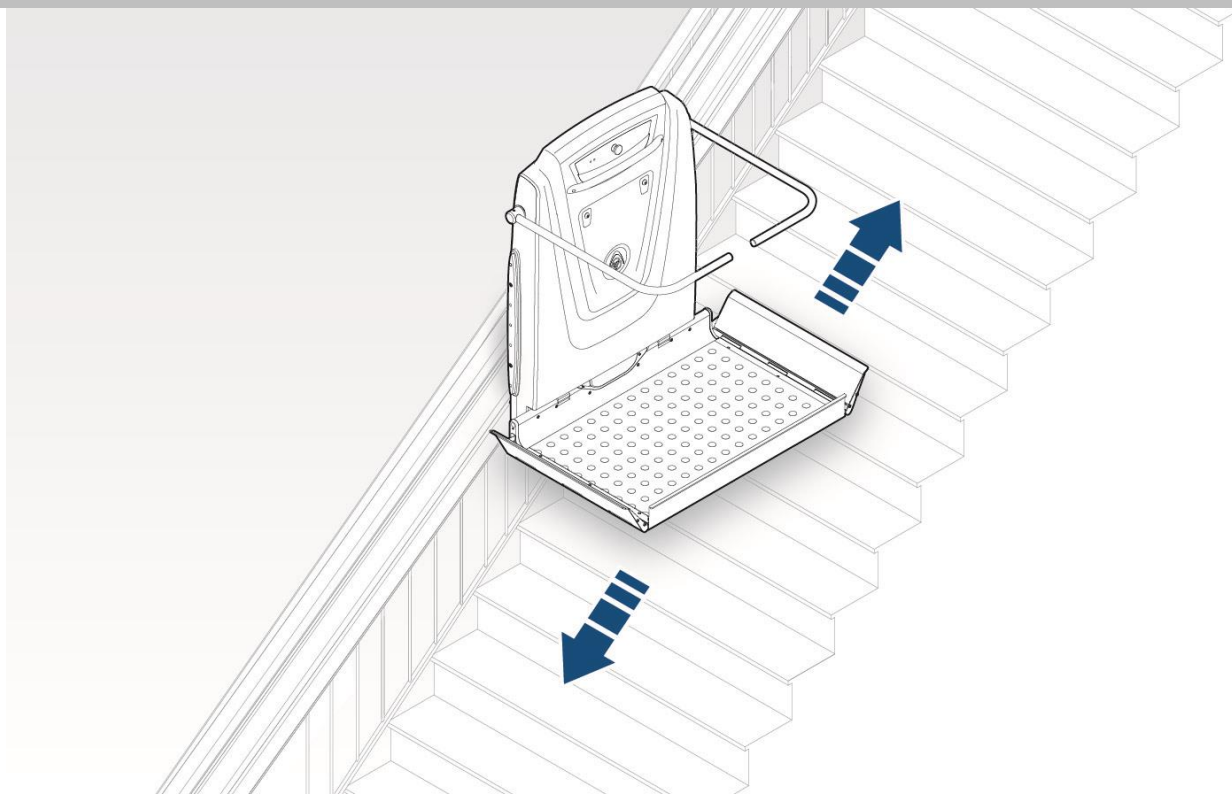
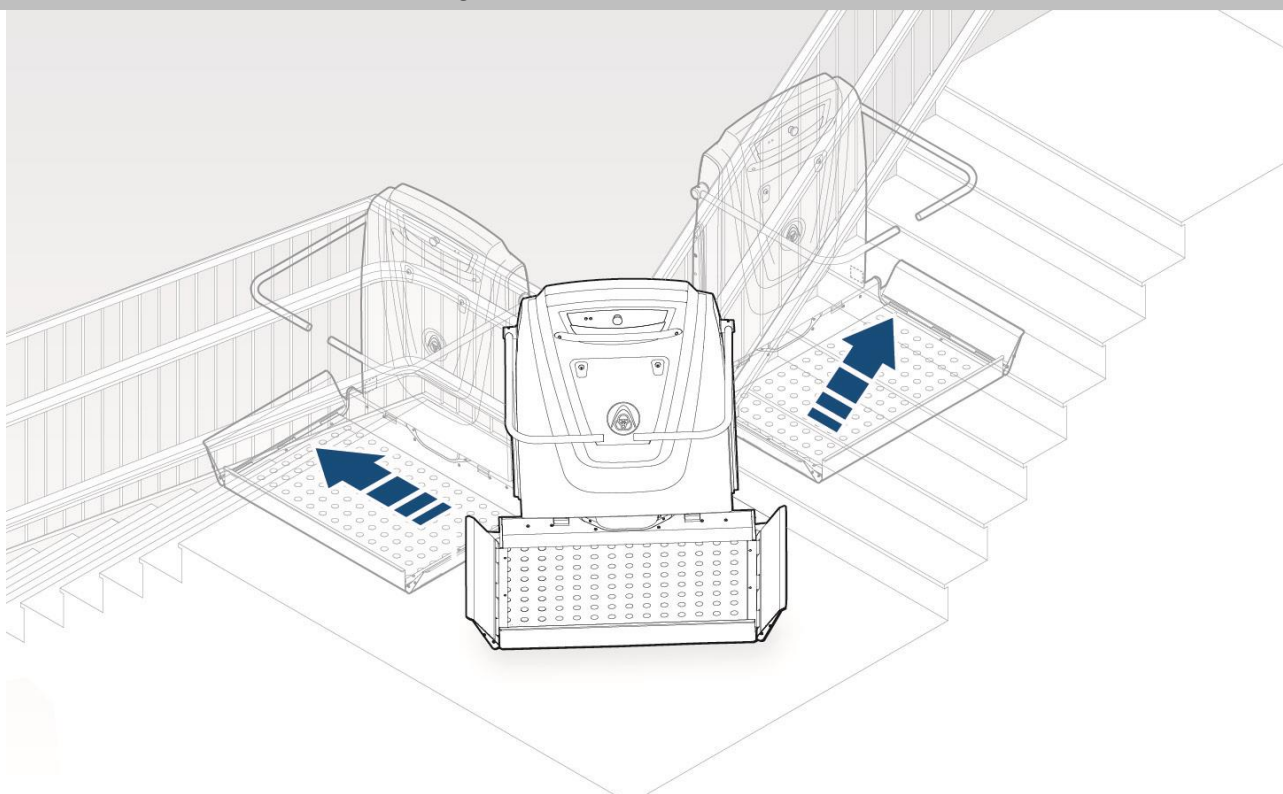


Fig. 3 – Curved staircases (Supra)



1.5 Declaration of Conformity

ThyssenKrupp Encasa



ThyssenKrupp Encasa Srl • Via Cannizzaro 2 • 56121 Pisa • Italy

RPSP-Dich.Conf.EN - Rev.03

CE DECLARATION OF CONFORMITY

The company THYSSENKRUPP ENCASA S.r.l. operates in the engineering sector and is based in Pisa - Zona Artigianale Est di Ospedaletto - Via S. Cannizzaro no. 2, Tel. 050.955.111, Taxpayer ID and VAT code 00449190503, is registered at the Pisa Chamber of Commerce under no. 73618, is registered at the Pisa Enterprise Registry under no. 00449190503 and is the manufacturer of the stair lift machine. A technical dossier has been issued for the machine specified below. The technical dossier is kept at our headquarters and will be at the disposal of the competent authorities for a period of 10 years starting from the date upon which the final unit of this machine is manufactured.

Eng. Fabio Sbrana, acting as the Technical Director of ThyssenKrupp Encasa, is the person who has been authorized to compose the technical dossier.

The stair lift is a machine which is essentially comprised of a motorized undercarriage and a platform; it is intended for transporting people with limited motor skills, either on a wheelchair or standing; it can be equipped with a seat in order to allow the occupant to sit while the machine is in motion. It is employed for transporting people between two vertical levels; it provides access to predefined floors; it travels the same path in both directions; it moves along a guide which follows the path of either a staircase or an inclined plane.

For the Inclined Platform Lift which is commercially known as the **RPSP** model **RPSP** serial number _____

Commissioned by _____

THYSSENKRUPP ENCASA DECLARES

- 1) That the stair lift complies with the essential health and safety requirements of the following Directives:
 - a) The 2006/42/EC Machinery Directive;
 - b) The EMC 2004/108/EC Electromagnetic Compatibility Directive;
 - c) The Low Voltage Directive, 2006/95/EC
- 2) That the following Standards have been respected:
 - d) Harmonized Standard: EN 81-40 (February 2009 edition)
- 3) To have obtained Certificate no. TUV-IT 12 MAC 0025 Rev.002 dated 20/12/2012 from TUV Italia, with headquarters at Via Carducci no. 125 - building 23 in Sesto San Giovanni (MI), certifying the machine's compliance with the 2006/42/EC Directive.

THYSSENKRUPP ENCASA REFUSES

any responsibility for damages to people or property deriving from:

- non-compliance with the instructions which are furnished with the machine;
- lack of maintenance or repair;
- third party tampering;

Pisa, _____

Sincerely
THYSSENKRUPP ENCASA Srl
 Technical Director
 Ing. Fabio Sbrana

1.6 General Conditions of Operation

To use the Thyssenkrupp Encasa inclined platform lift correctly, some fundamental concepts are listed below:

The movement of the flaps and bars automatically takes place at the floor stops in a synchronized fashion.

The on-board controls move the inclined platform lift (ascent/descent) with the platform opened, safety bars in horizontal position and the flaps lifted.

The platform can only be opened and closed at the floor stops, using the relative controls (or the remote control).

All stair lift controls are protected via the presence of a key selector against UNAUTHORISED use.

All the controls of the inclined platform lift are of the "DEAD MAN" type; releasing the controls stops any ongoing movement.

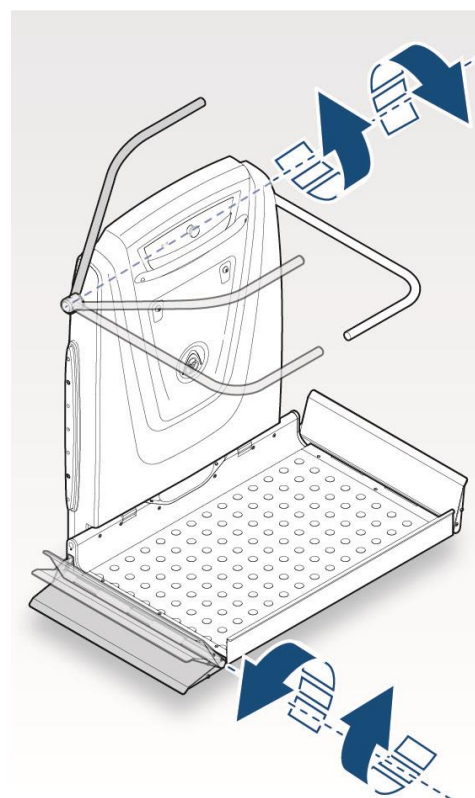


Fig. 4 – Movement of the safety bars and flaps

1.6.1 Parking and boarding/exiting

After having used the inclined platform lift to go up/ down to a floor, once having arrived at the floor desired, the inclined platform lift is automatically activated to enable exit from the platform: flap lowered and safety bar raised.

In order to **close / park** the stairlift you must act on the call box on the floor, turning the selector switch toward the desired function or pressing the corresponding button.

PARKING. The safety bar lowers and once it has reached the horizontal position the closing phase begins in synchronism with the stairlift.

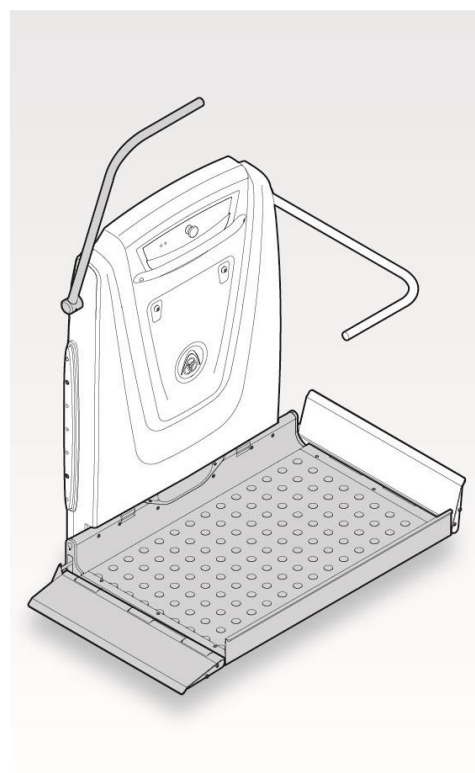


Fig. 5 – Ready for boarding/exiting condition

1.6.2 Move (ascent/descent) the inclined platform lift when it is “Parked”

The “parking condition” of the inclined platform lift, corresponds to the position shown in Fig. 6 where the platform is closed and the safety bars are enclosed between the Platform and the machine body.

In this condition the stairlift can be **called by another floor using the call box** or moved using the wireless remote control (optional).

In order to **open / prepare boarding the stairlift** you must act on the call box on the floor, turning the selector switch toward the desired function or pressing the corresponding button.

BOARDING. The platform opens until reaching the horizontal position. The safety bar and the hinges move in synchronism with the platform until reaching the "embark-ready" condition on the served side.

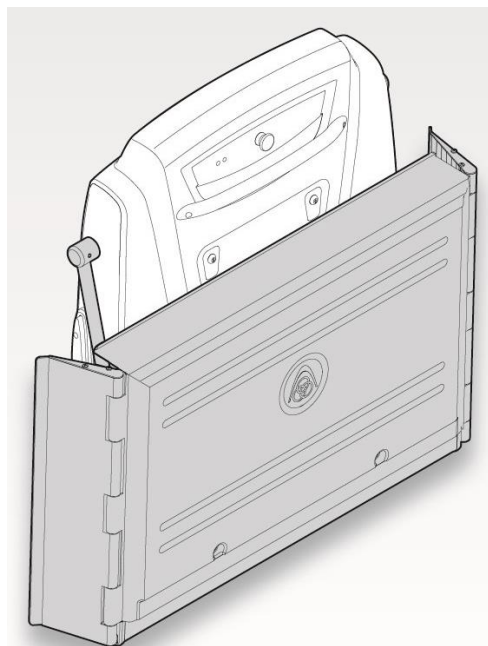


Fig. 6 – “Parking” Condition

1.6.3 Closing/opening the platform

The platform is opened and closed by a motorised system, acting on the **call box on the corresponding floor** or the wireless remote control (optional).

In the event of an intermediate stop there may be an additional selector switch located on board the machine.

TO OPEN THE STAIRLIFT	
	Wireless remote control / Call box with Joystick or buttons / Additional device on board the machine
	Standard call box. If you are on the upper floor activate the ascent control to open the stairlift
	Standard call box. If you are on the lower floor activate the descent control to open the stairlift
TO CLOSE THE STAIRLIFT	
	Wireless remote control / Call box with Joystick or buttons / Additional device on board the machine
	Standard call box. If you are on the upper floor activate the descent control to close the stairlift
	Standard call box. If you are on the lower floor activate the ascent control to close the stairlift

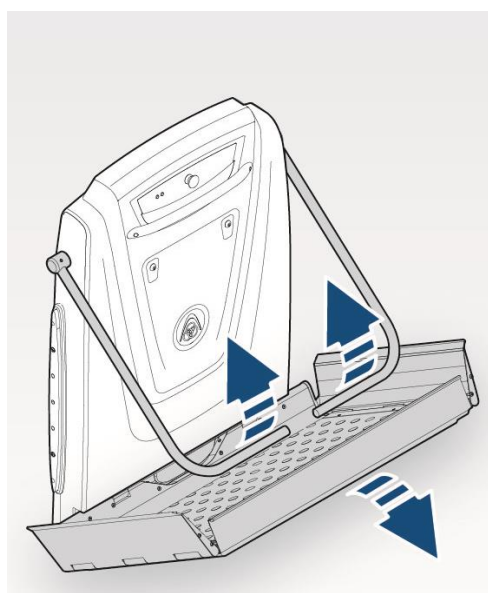


Fig. 7 – Stairlift opening and closing



ATTENTION!

Never leave the inclined platform lift with the platform open and the safety bars lifted. After use, close the platform, making sure that the bars are closed between the body of the lift and the platform and therefore that it is in PARKING CONDITION.

1.7 Electrical Connection

The electrical hook up, upline of the stairlift, must be carried out by certified personnel and in observance of the prevailing electrical regulations.

The customer is responsible for guaranteeing a dedicated electrical line to power the machine with a phase, neutral and earth wire, at least 2.5 mm² gauge, which can be cut off with a differential breaker switch positioned as close as possible to the stairlift.

For sizing of the line and the selection of the differential breaker switch please refer to the table below:

Model	Power Supply Voltage	Absorption (in steady state conditions)	Circuite Breaker / RCD
RPSP	230 V \pm 10% 50/60 Hz.	5 A	Rated Capacity 16 A curve C / Type AC Sensitivity 0.03 A
RPSP (high speed version)		8 A	Rated Capacity 16 A curve C / Type A Sensitivity 0.03 A
SUPRA		3 A	Rated Capacity 10 A curve C
SUPRA (high speed version)		4.5 A	Rated Capacity 10 A curve C



WARNING!

The customer is responsible for guaranteeing an electrical line in compliance and certified in accordance with the prevailing regulations and the stairlift manufacturer's specifications.



The electrical hook up, upline of the stairlift, must be carried out by certified personnel

1.8 Keys and Emergency Tools

The user receives, together with the inclined platform lift, the following components:

- no. 2 keys to enable and operate the inclined platform lift both from onboard and from the wall mounted call boxes..
- no. 1 kit of tools to be used solely under emergency conditions .

It is advisable to position the emergency equipment in a safe place known by the owner and/or the *trained personnel* and people in charge of carrying out these manoeuvres.

After any use of the same we strongly recommend immediately returning them to their original location in order to prevent losing them. The emergency manoeuvres must be carried out by a *trained person* capable of carrying them out in safe conditions.



Fig. 8 – Handwheel

2 Description of the Inclined Platform Lift

2.1 Controls



The presence of some components may vary based on the intended market and on current standards



All the controls of the inclined platform lift are of the “DEAD MAN” type; releasing the controls stops any ongoing movement.



ATTENTION!

Every time the inclined platform lift is in operation, follow the inclined platform lift with your eyes and be ready to stop it immediately in case of danger due to collision against any obstacles.

The inclined platform lift may be activated by way of the call stations at the floor, using the on board controls or by way of the remote control (optional).

When the movement is commanded from onboard, the safety bars are blocked in horizontal position.

When the floor is reached, only the safety bar corresponding to the floor is raised automatically, the other one remains locked in horizontal position.

In particular cases, and only for arrival to the lower floor, both safety bars can be raised.

In emergency conditions, it is in any case always possible to unlock the bars using the appropriate tools.

2.1.1 Stop

The machine is equipped with a red stop button, which can be used to stop the machine in the event of an emergency.

The stop buttons associated with the floor stop controls will only interrupt the movement of the control in question.

To resume operation, reset the pushbutton by rotating clockwise as shown by the arrow on the pushbutton.

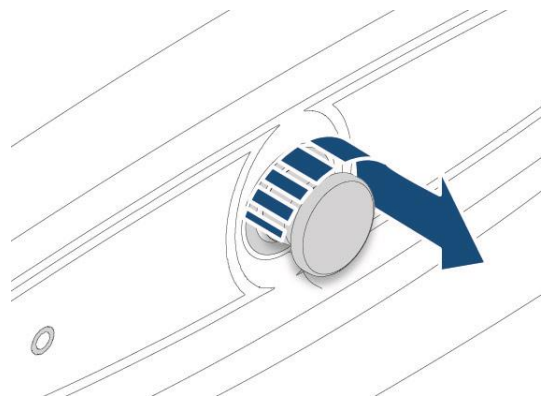


Fig. 9 Emergency Pushbutton

2.1.2 On Board Controls

In order to control the stair lift, simply use one of the ergonomic wrenches supplied by ThyssenKrupp Encasa.

These keys are designed specifically to make the machine very user-friendly.

The direction of travel will be determined by the direction of rotation imparted using the key.

In the case of buttons, enable controls using the key selector on-board the machine, then activate the button and keep pressed.

The drive direction and the button to be used are determined by the desired side of the stair in accordance with the pictograms shown on the device.

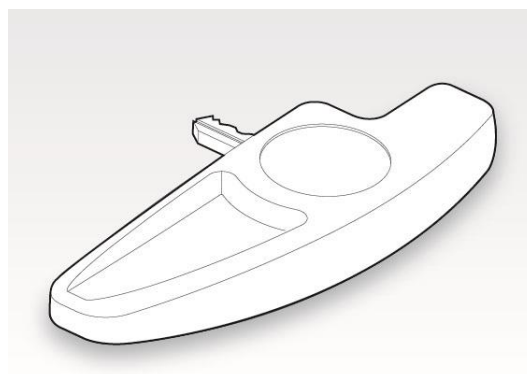


Fig. 10 – Joystick key

2.1.3 Cord control

In order to control the inclined platform lift using the cord control, just move the joystick in the desired direction, based on the symbols shown upon the device.

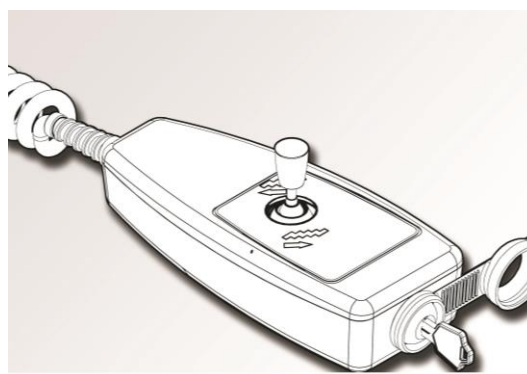


Fig. 11 – Cord control

2.1.4 Floor Call Stations



The inclined platform lift can be moved along the guide of the floor call boxes, only in conditions of closed platform

The following are on the floor call box:

1 key selector switch and some indicator LEDs.

All machine movement controls sent are signalled by three consecutive “beeps” and by the flashing green LED on the machine control panel.

“Movement” of the Stairlift

Insert the key in the selector switch, turn it in the pre-selected drive direction and hold it turned until the stairlift arrives.

Boarding Preparation

With the **stairlift closed on the floor**, turn the special key in the direction indicated on the table to allow motorised opening of the platform, bars and hinges.

TO OPEN THE STAIRLIFT	
	If you are on the upper floor activate the ascent control to open the stairlift
	If you are on the lower floor activate the descent control to open the stairlift

Parking Function

With the **stairlift open on the floor**, turn the special key in the direction indicated on the table to allow motorised closing of the platform, bars and hinges.

TO CLOSE THE STAIRLIFT	
	If you are on the upper floor activate the descent control to close the stairlift
	If you are on the lower floor activate the ascent control to close the stairlift

The floor call station contains 2 LEDs:



“Low Battery” LED:

The LED lights up to indicate that the battery is low and that it needs to be replaced



Command execution LED:

The LED lights up when a control is activated and it turns off as soon as the control is no longer active; the commands sent by the call boxes are indicated by a flashing light.



The start and the stop of the inclined platform lift are slightly delayed relative to the operation of the key selector switch, to assure that the manoeuvre is voluntary.

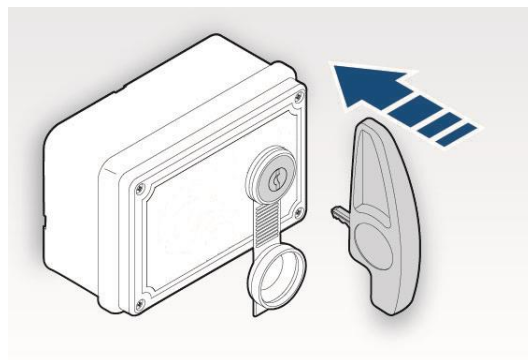


Fig. 12 – Floor Call Station

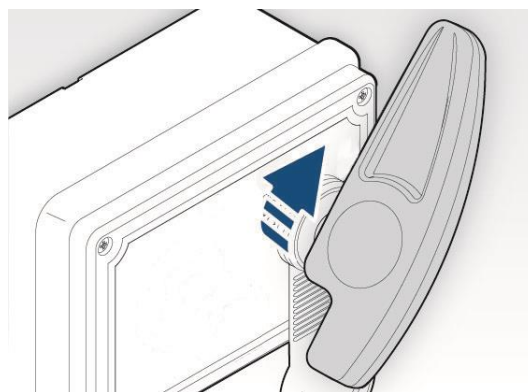


Fig. 13 – Boarding Preparation

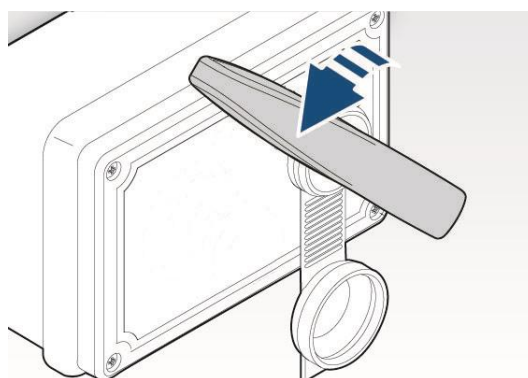


Fig. 14 – Parking Function

2.1.5 Call stations with joystick / with buttons



The presence of certain components may vary depending on the destination market and the regulations in force.



The inclined platform lift can be moved along the guide of the floor call boxes, only in conditions of closed platform.

The following are on the floor call box with joystick:
1 joystick, 1 key selector switch and some indicator LEDs.

The following are on the floor call box with buttons:

4 push buttons 1 key selector switch and some indicator LEDs.

The key switch has the simple function to enable / disable the control device

Some versions may also include 1 stop button

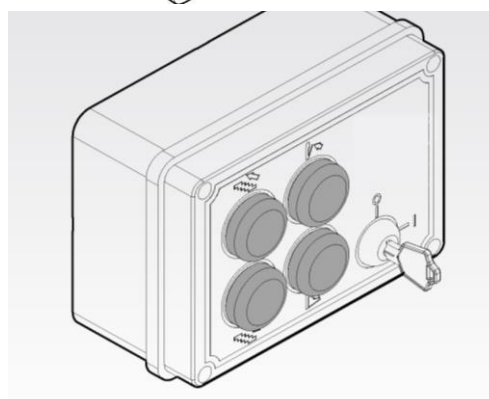
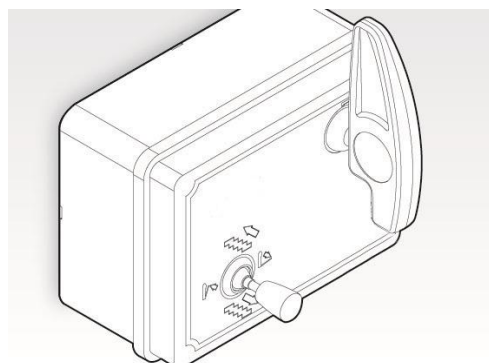


Fig. 15 – Call station with joystick / with buttons

The following controls (with indication in illustrations to the right) can be activated via lever movement or pressing buttons:

	Ascent. This command activates movement of the stairlift both with the platform open and with the platform closed.
	Descent. This command activates movement of the stairlift both with the platform open and with the platform closed.
	Open. The stairlift prepares for the user to board.
	Closing. The stairlift prepares to be closed.

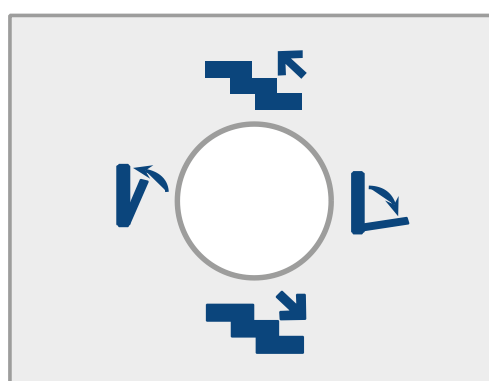


Fig. 16 – Detail



ATTENTION!

The stop button associated with the floor stop controls will only interrupt the commanded movement in relation to the call box in question

2.1.6 Intermediate stops (only for curved staircases version)

In the case of an intermediate stop, an additional call box will be present near the landing floor.

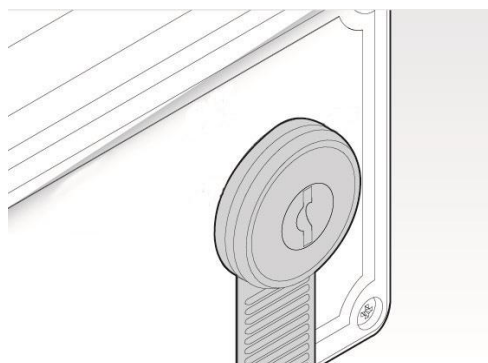


Fig. 17 – Intermediate stop

The functionality of the call box and the on-board controls will remain unvaried, save for the possible automatic opening/ closing of the platform, which can be performed using an additional key selector on board the stair lift itself and/or a remote control (the functionalities may vary based on the destination market).

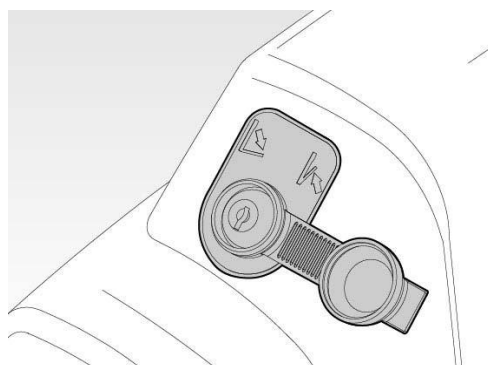


Fig. 18 – Key selector on the machine cover

2.1.7 Radio remote control

The radio control is to be used for stairlift activation in addition to onboard controls.

The following controls (with indication in illustrations to the right) can be activated via lever movement:

	Ascent. This command activates movement of the stairlift both with the platform open and with the platform closed.
	Descent. This command activates movement of the stairlift both with the platform open and with the platform closed.
	Open. The stairlift prepares for the user to board.
	Closing. The stairlift prepares to be closed.

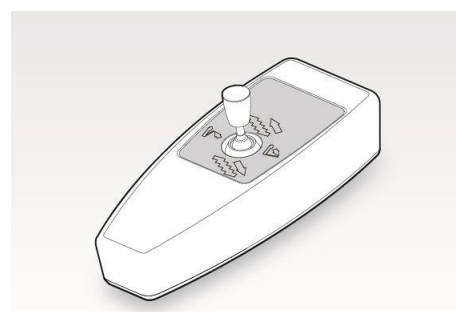


Fig. 19 – Radio remote control

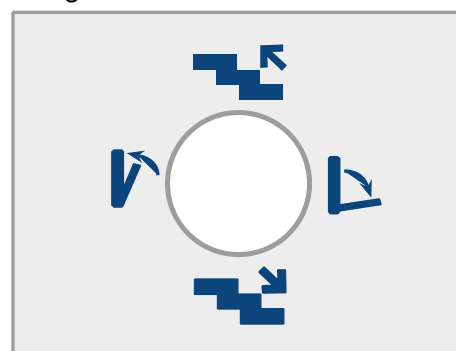



Fig. 20 – Detail

**ATTENTION!**


For safety reasons the operation of the remote control, when the inclined platform lift has the platform open (therefore with a user on board), is only possible when the person using the remote control is in direct line of sight of the inclined platform lift; this remote is in any case limited to a short distance of just a few metres between it and the machine.

2.1.8 Replacing the Floor Call Station Battery



When the flat battery LED switches on, replace the battery. Always keep a spare battery. 



ATTENTION: When the yellow warning symbol lights up you must call technical service because a fault has occurred in the system.. 

Each floor call box is powered by 2 AA type batteries.

If operation from the call devices appears to be discontinuous replace the batteries.

The battery's charge level is indicated by the battery shaped Indicator.

If this indicator should turn red when attempting to activate the lift, this indicates that the battery needs to be replaced

To replace the floor call box batteries:

- undo the four screws located on the front part at the corners;
- delicately lift the cover (taking care for the electrical wires);
- replace the batteries with new ones of the same type;
- close the box and screw the cover back on.

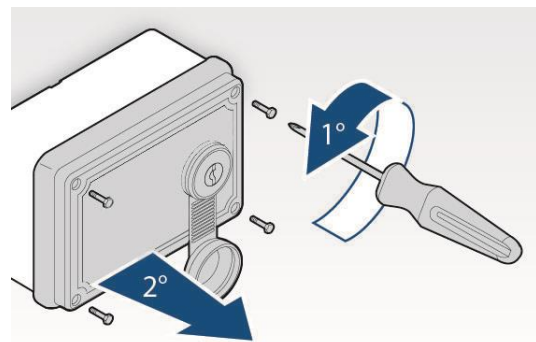


Fig. 21 – Battery Replacement

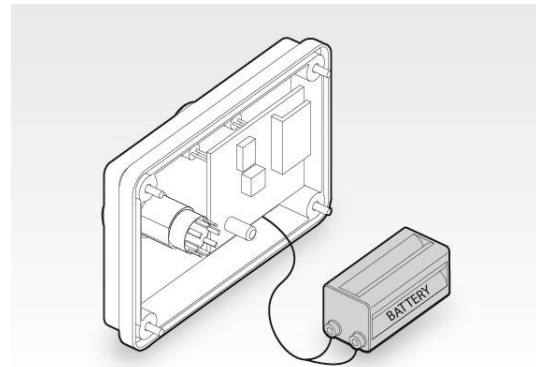


Fig. 22 – Battery Replacement



In some versions, the call stations with buttons are powered by the mains. In these cases, battery replacement operations are not necessary.

2.1.9 Check Panel



The presence of some components may vary based on the intended market and on current standards.

The check panel of the inclined platform lift contains:

1 emergency pushbutton, 2 machine operation indication LEDs, 1 acoustic signal and 1 key selector.

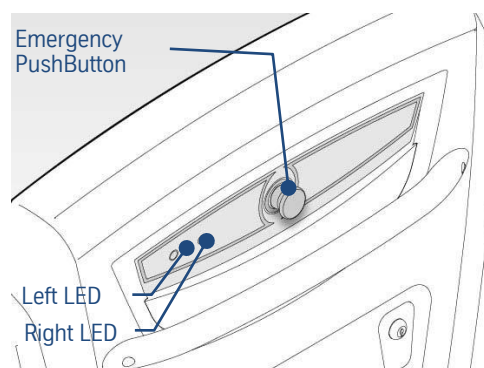


Fig. 23 – Check Panel

Operation of the Left LED

OFF

No power / fuse needs to be replaced / System in Lock State

STEADY GREEN

Stand-by (awaiting use)

FLASHING GREEN

Command received

ORANGE

Safety function engaged (Anti-impact / anti-crushing)

RED

Emergency push-button pressed



Operation of the Right LED

OFF

No alarm

ON (STEADY OR FLASHING)

Over travel / governor engaged or electronically locked (contact technical support)

Any instantaneous lighting of the RH LED when a command is sent should be considered normal

Acoustic Signal



3 beeps	Stairlift departing / Drive command received
Slow beep	Command not permitted
Fast beep	Safety function engaged (Anti-impact / anti-crushing)
Continuous beep (for about 10 seconds)	System in locked state

2.2 Platform

2.2.1 Electromechanical movement of the platform

The opening (or closing) of the platform comes about by using the specific control on the call station.

Make sure that objects, animals or persons do not obstruct the space required for the unfolding of the platform.

In particular, in the models equipped with the Mobile Side Slide, keep the additional movement of the flap in mind during the opening / closing of the platform.

For the indications regarding the controls, please refer to section 1.6.3.

2.2.2 Moving flaps

The moving flaps on the sides of the platform, are fundamental elements of the inclined platform lift, and besides fulfilling their main function of "CONNECTION WITH THE FLOOR LANDING", they perform other functions as illustrated in the chapter, "Safety Functions"

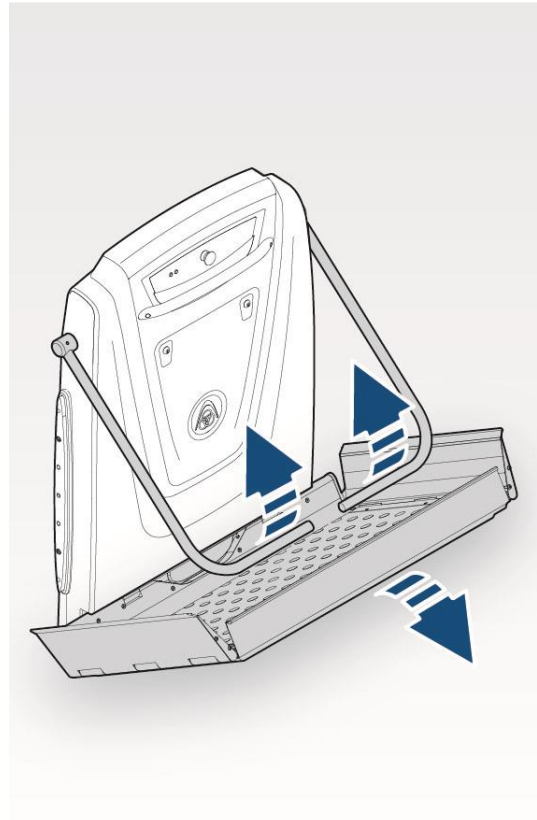


Fig. 24 – Opening and closing the platform



ATTENTION!

To avoid causing the inclined platform lift to stop, the User must pay particular attention:

- not to hamper the motion of the flaps
- avoid leaning on the flaps when the inclined platform lift is in motion, so the safety devices will not be activated

2.3 Options

2.3.1 Folding Seat

**WARNING!**

To use the seat carefully follow the following instructions; do not exceed the indicated capacity and **ALWAYS** buckle the belt.

The folding seat has a capacity of 120 kg; never exceed this value.

In order to open the folding seat, press down lightly to lower it, then accompany the seat to its horizontal position.

- Sit in the correct position on the seat;
- fasten the belts ensuring that the buckle closes correctly and tighten them adequately;
- while in operation maintain an erect seating position with the back resting against the body of the stairlift.

Remember to bring the folding seat back to its vertical position and to replace the belts before closing the stair lift's platform.



2.3.2 Auxiliary Power System

The auxiliary power system is activated every time mains voltage (230 V ac) is lost, and it can power the inclined platform lift under a full load for a time (approx. 15 min) that depends to the typology of device installed, provided the batteries are charged and fully functional.

We recommend checking the proper operation of the auxiliary power device at least twice a year, removing the power supply.

2.3.3 Cover Cloth

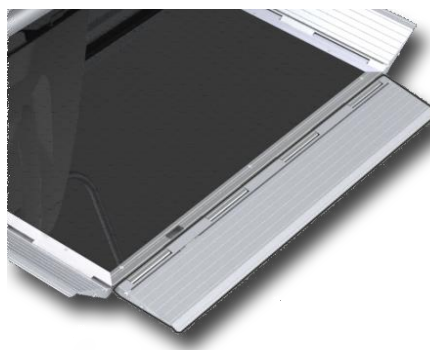
It is a cover cloth, specifically designed to best preserve the inclined platform lift as a result of long inoperative periods and/or when it is installed directly in contact with atmospheric agents such as SUN, RAIN, FROST or DUST.

2.3.4 Lateral Motorized Flap (Long side access)

The lateral motorized flap allows the user to perform boarding / disembarking operations utilizing the long part of the platform.

This lateral flap is motorized in the same way the lateral flaps are.

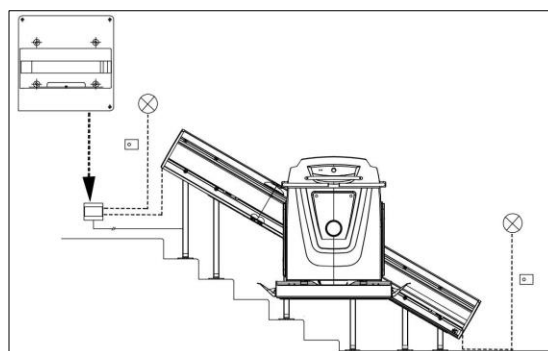
It's particularly useful when landing area is limited or there are obstacles in the way of the stairlift area.



2.3.5 Acoustic / luminous indicator on stair

The system serves to signal the presence of a machine moving on the stairs and is composed of two **sirens** (upon purchase of the **optical/acoustic unit**) or of two **flashing lights** (upon purchase of the **optical unit**).

An additional control unit may be present for automation management.



2.4 Operation

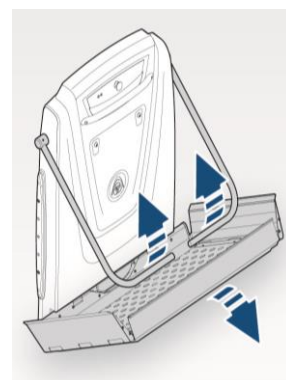
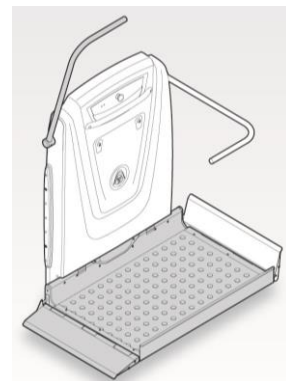
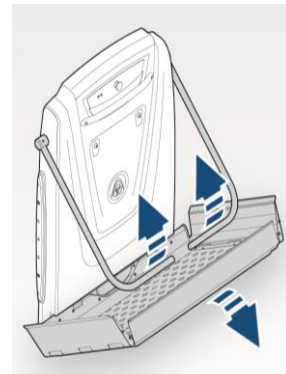
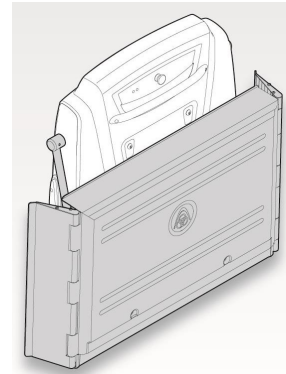
Inclined platform lift parked at the low stop (the platform is closed and the safety bars are housed between the platform and the machine body).

- Use the controls to open the platform, bringing it to its horizontal position; if the machine has stopped at an intermediate stop, refer to the indications described in section 2.1.6 to open/close the platform.
- Once the platform has been opened, the safety bar on the descent side rises automatically (this operation also brings about the simultaneous lowering of the boarding flap on the platform). Board the inclined platform lift.
- Send the control using the device on-board the machine. The safety bar lowers automatically and the inclined platform lift begins to move.
- Keep the control activated until arrival at the floor. In the case in which the floor reached represents an intermediate stop, when the control releases, the safety bars located on the ascending side raise to facilitate landing operations. If the control is not released, the stair lift will continue along the run.
- In correspondence of a high stop (last stop), the stair lift will automatically stop. Two seconds after the control is released, the safety bar on the ascending side will raise automatically (this movement will determine the lowering of the corresponding flap on the landing side). In this position, the descending side bar will remain horizontal and the corresponding flap will stay raised; at this point, it is possible to exit.
- Once one has gotten off of the inclined platform lift (upper stop), give the command to close the platform with the wall mounted call station until such a time that the bar is in a horizontal position. Continue giving the command until the platform has completely closed, automatically.

In case of intermediate stop it is possible to close the platform using the key selector positioned on the top cover of the machine.

In the case of an intermediate stop, refer to the indications described in section 2.1.6 to close the platform.

- With the stair lift in a parking condition (with the platform closed and bars lowered inside), it is possible to move until the desired stop point is reached. This is a "dead man control" and its release will stop stair lift movement.





ATTENTION! - PARKING CURVE: If the last stop at the top is only used for parking, for safety reasons opening of the bars is prevented.
To disembark you must direct the stairlift to the previous stop (intermediate stop).
The high parking curve is usually in a position above the normal boarding stop position.



ATTENTION!
To avoid any malfunctions, do not ever manually force the closure or the opening of the safety bars, the flaps or the platform.



ATTENTION!
To avoid risk of injury, keep away from arm during operation.

2.4.1 Load control system (if present)

This device detects the load applied on the platform and in case of an overload, stops the stairlift from starting up. Its activation is signalled by an acoustic signal emission; the stairlift does not start up and the LED on the right of the check panel lights up becoming red and the green LED on the left flashes. The acoustic signal relative to this device is recognizable by the fact that it will sound when the machine has come to a halt without any commands given by the User

2.4.2 Alarm: emergency call device

If the stairlift user requires emergency assistance, by pressing the on board emergency push button an emergency call device is activated which sounds an acoustic alarm signal.

3 Safety Functions

3.1 Overview

Safety devices are built in compliance with current standards and with utmost accuracy.

Nevertheless, said devices must be considered a safety backup and they must not cause any reduction in the considerable attention that must be paid to any mechanical means.

**ATTENTION!**

- **DO NOT TAMPER** with the devices for any reason.
- **DO NOT TRIP** the devices without a reason.

If you want to verify the proper operation of the devices, YOU ALWAYS MUST ASSURE THE BEST POSSIBLE SAFETY CONDITIONS, i.e. in such a situation that if the device fails to activate, no dangerous situations will be caused.

**ATTENTION!**

The stair lift comes equipped with a main switch for shutting off the system's power supply. Be sure to shut off the system's power supply before performing any emergency manoeuvres (section 3.5).

3.2 Anti-Impact and Anti-Shearing functions

If the inclined platform lift meets an obstacle while ascending/descending, the anti-shearing and anti-impact devices will automatically be activated, stopping travel. At this point, it is possible to resume travel in the opposite direction. If, once the obstacle is removed, you wish to continue in the same direction, you need to release the travel control and activate it again.

If during **ascending drive with the platform open** (with user on board) the stairlift should encounter an obstacle, the safety devices will be triggered as follows:

- a) If the obstacle met is in such a position that it is hit from the ascent side of the platform, when the ascent side strap, in raised position, comes in contact with the obstacle it will activate a safety device that stops the inclined platform lift;
- b) if the obstacle is in proximity to the guide in such a position that it will be hit by the body of the inclined platform lift, contact with the sensitive edge positioned on the side of the machine body will activate a safety device that stops the inclined platform lift.

If during **ascending drive with the platform closed (with call command)** the stairlift should encounter an obstacle, the anti-impact safety devices are triggered. Because the platform is closed the hinge covers part of the stairlift body, fulfilling the safety function. Operation is the same as described in the previous point.

If during **descending travel with the platform open (with user on board)** the stairlift should encounter an obstacle, the safety devices will be triggered as follows:

- a) If the obstacle met is in such a position that it is hit by the edge of the platform oriented towards the descent side of the platform, then the descent side strap serves a similar anti-impact safety function to the one described in the previous paragraph a).
- b) If the obstacle is in proximity to the guide in such a position that it will be hit by the body of the inclined platform lift, then the sensitive edge positioned on the descent side of the case will intervene similarly to the manner described in the previous paragraph b).
- c) if the obstacle is in such a position that it will be hit by the part underlying the platform and the movable bottom of the platform is hit, then a safety device will be activated, stopping the inclined platform lift.
- d) if the obstacle is in such a position that it will be hit by the part underlying the machine body and the movable bottom of the machine is hit, then a safety device will be activated, stopping the inclined platform lift.

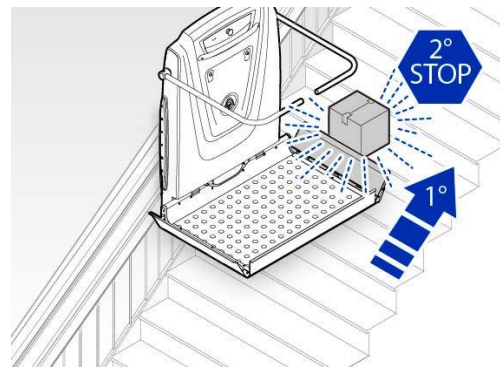


Fig. 25 - Anti-impact and anti-shearing functions

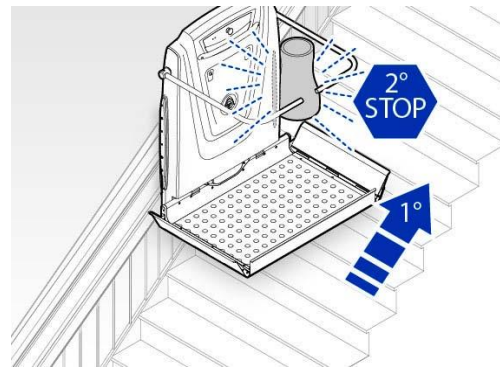


Fig. 26 - Anti-impact and anti-shearing functions

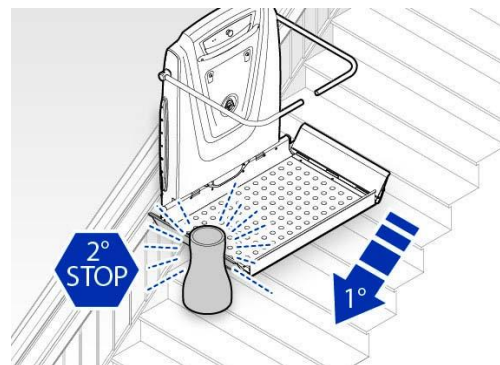


Fig. 27 - Anti-impact and anti-shearing functions

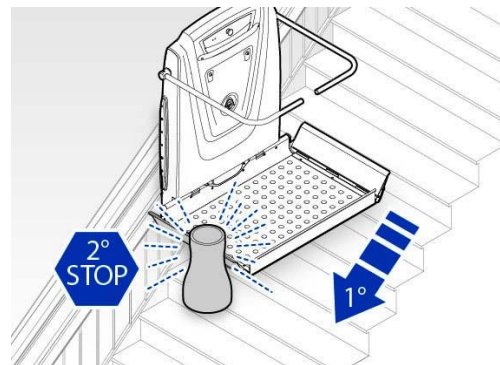


Fig. 28 - Anti-impact and anti-shearing functions

If during **descending travel** with the **platform closed (with call command)**, the inclined platform lift meets an obstacle:

- a) if the obstacle met is in such a position that it hits the straps, then the safety devices intervene as in the previous paragraph a).
- b) if the obstacle met is in such a position that it hits the machine body, then the safety devices intervene as in the previous paragraph b).
- c) if the obstacle is in such a position that it will hit the inclined platform lift as per the previous point, paragraph d): the safety devices will intervene as described in that point.

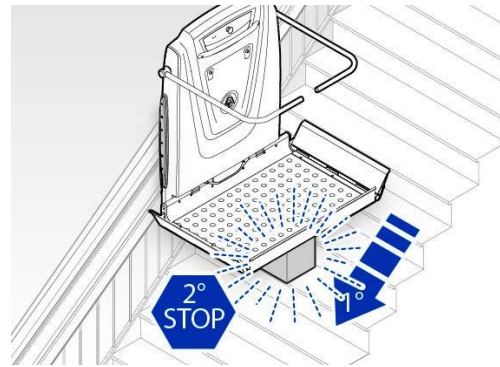


Fig. 29 - Anti-crushing functions

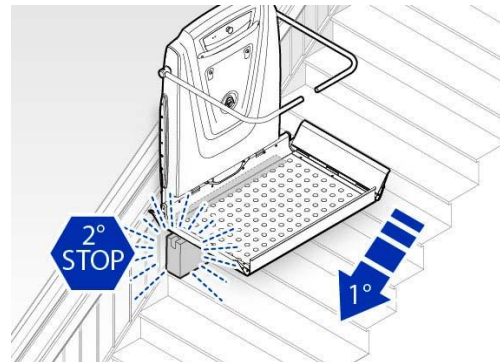


Fig. 30 - Anti-crushing functions

3.3 Flaps

In addition to serving the anti-impact function, the straps also serve to control the load applied on them.

A user on a wheelchair has to position him/herself on the platform correctly, thus without loading the straps.

Caution must be exercised to prevent the “load control system” from operating and blocking the inclined platform lift without an actual danger.

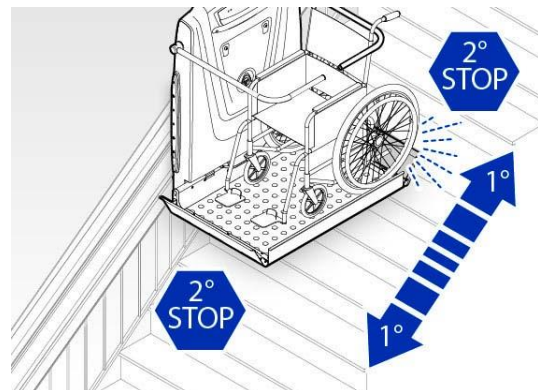


Fig. 31 - Flaps

3.4 Arresting functions

Stop button

The travel of the inclined platform lift can be stopped if dangerous conditions require it.

The button's functionality is described in section 2.1.1. To resume operation, reset the pushbutton by rotating clockwise as shown by the arrow on the pushbutton.

Over-travel

If the stairlift does not stop at the high or low stop position, the "over travel" safety function is triggered immediately, which locks the stairlift and requires operations by skilled personnel to be placed back in service.

Overspeed governor

If the inclined platform lift has a mechanical failure that increases descending travel speed beyond a pre-set limit, an overspeed governor will be activated directly by a speed limiter and it will stop the inclined platform lift.

After the activation of this safety feature, the inclined platform lift will remain mechanically and electrically blocked.

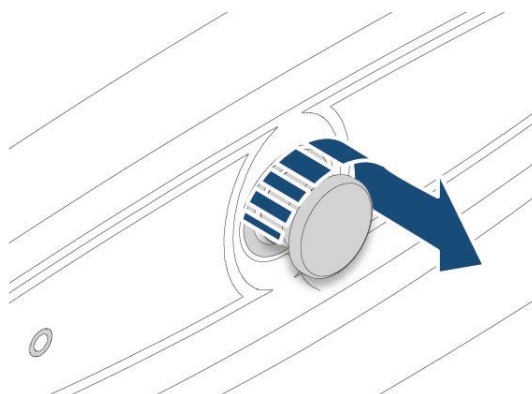


Fig. 32 – Emergency pushbutton



If there is a failure in the speed limiter, which would compromise its proper operation, the inclined platform lift stops and remains electrically blocked.

In these cases, the unit requires operations by *skilled personnel* to be placed back in service.

3.5 Emergency manoeuvres

3.5.1 Instructions for Using the “MME” Emergency Descent Manual Device


ATTENTION!

This procedure must be carried out only by *trained person*

In case of failure or power supply outage, the inclined platform lift can be made to descend using the dedicated rod with hand wheel (we recommend positioning it near the master switch).

- First of all, shut off main power to the machine, placing the master switch on the 0 position.
- Remove the white cap on the front case with the inscription to uncover the underlying hole.
- Insert the Allen wrench end of the rod into the hole on the case, until finding the axis of the bevel pinion. This procedure will vary based on the type of stair lift installed: the rod with the handwheel must be inserted perpendicularly to the protective guard for the RPsp stair lift, or else tilted towards the protective guard for the Supra stair lift.
- Press the hand wheel to engage the bevel pinion on the motor, then rotate it in the direction corresponding to descending travel, i.e. clockwise for left-hand inclined platform lift and counter clockwise for right-hand inclined platform lift; as an additional safety feature, the engagement of the bevel pinion will shut off power to the auxiliary circuit of the inclined platform lift.
- After completing the operation, always remove the hand wheel from the hole before powering the machine.
- Put back the white cap on the hole.

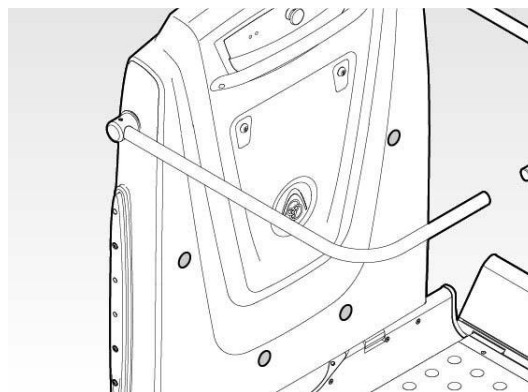


Fig. 33 - Holes

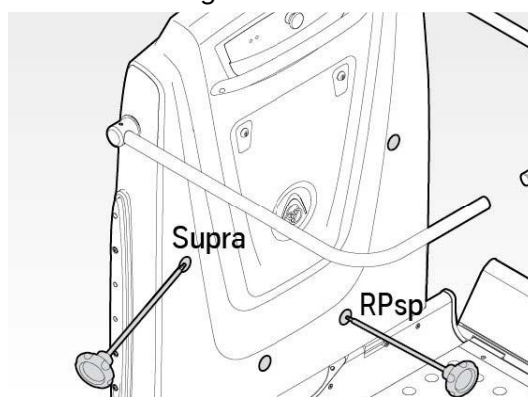


Fig. 34 - Handwheel insertion


ATTENTION!

The hand wheel must never be left inserted in the stairlift..

3.5.2 Instructions for the emergency manual unlocking of the safety bars


ATTENTION!

This procedure must be carried out only by *trained person*

If the safety bars stay locked in the horizontal position (once the stop has been reached or because a generic fault has occurred with the stairlift during the run with a user on board) only the ascent side safety bar can be released.

The descent side safety bar must NEVER be manually released.

- First of all remove **mains power to the system**, positioning the main switch to 0.
- Go to the “ascent side step” closest to the platform.
- Remove the hole’s cover sticker on the lower part of the machine (see adjacent detail).
- Insert the provided “flywheel” tool, making sure you line up the yellow lodging inside the machine (see adjacent detail). Insert the tool until reaching the reference mark on the flywheel
- Release with lateral movement (toward the track) simultaneously lifting the bar which will automatically lock in the vertical position

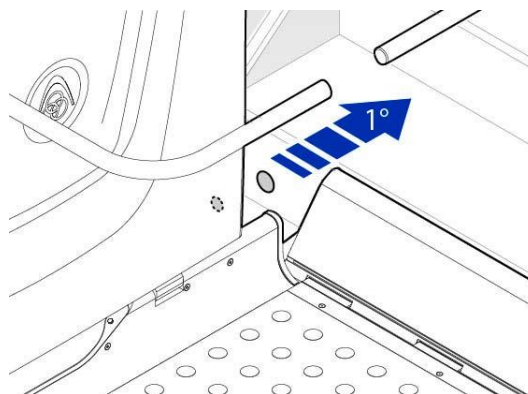


Fig. 35 - Unlocking Sequence

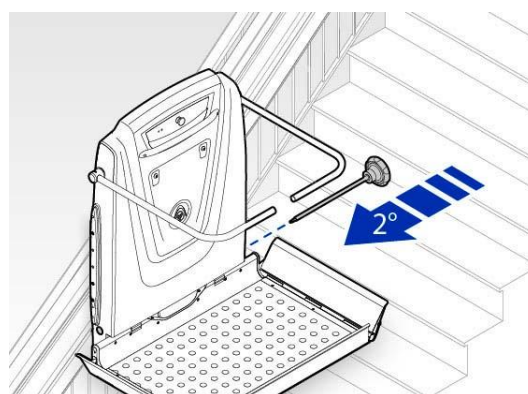


Fig. 36 - Unlocking Sequence

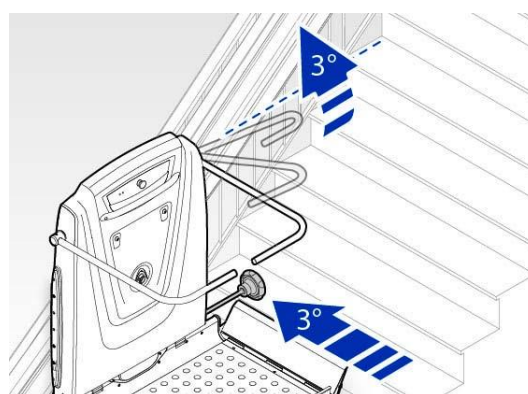


Fig. 37 - Unlocking Sequence

- To bring the bar back to its original position, invert the procedure.

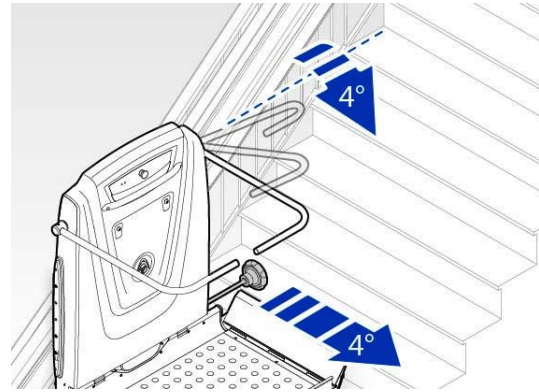


Fig. 38 - Unlocking Sequence

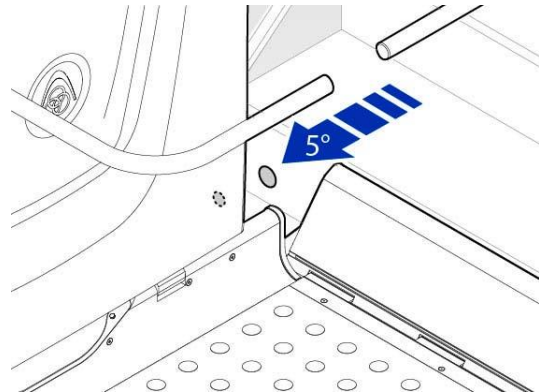


Fig. 39 - Unlocking Sequence

3.5.3 Instructions for the closure of the platform during an emergency condition



ATTENTION!

This procedure must be carried out only by *trained person*

The closure of the platform during an emergency condition requires some simple manual operations.

Make sure that the safety bars are both in a horizontal position. If this is not the case, then lower the bar manually until it is horizontal.

Push one of the two bars downward to about half of its closing position and making the platform rise.

Grasp the platform that has risen up and push it to its completely closed position.

The unit is equipped with mechanical guards against overloads, during opening/closing operations; in an emergency condition one must contrast their action.

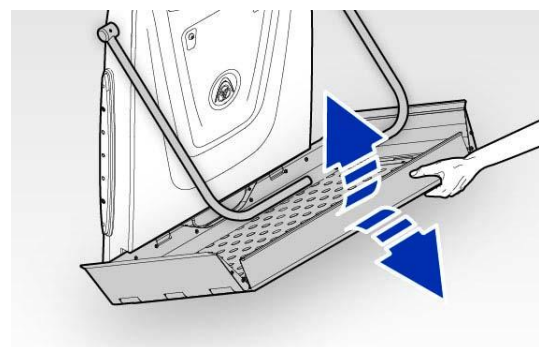


Fig. 40 - Opening and closing the platform

4 Maintenance

Maintenance on the stairlift is required by law and must be entrusted to a specialised and qualified company which possesses the technical and professional prerequisites required by prevailing standards and laws.



Before any maintenance operation on the stairlift always remove voltage from the system using the mains switch. If the system has a rescue unit, disconnect this as well using the appropriate devices.



Grease the rack periodically (use small quantities of multi-use mineral grease). The recommended frequency can be increased if the unit is placed outdoors.



The straight line stairlift is electrically powered using a cable-conduit chain in a "specific compartment" in the guide. Ensure that nothing is introduced into the specific chain run channel and clean it if necessary.

For a curved stairlift clean the copper channel with a dry cloth.



Periodically check the proper operation of the rescue unit (if installed).

Simple maintenance operations can be carried out by the owner / user:

- Keep the slider guide clean using water and dry it thoroughly with a soft cloth. Neutral detergent may be used.
- The case (outer covers of the inclined platform lift, made of plastic) can be washed with water and neutral detergent; never use chemical solvents, which could damage the material.
- The rubber-coated loading plane can be washed with common detergents for rubber; the aluminum loading plane can be washed with normal detergents for home use

4.1 Table of Recommended Maintenance Operations

ACTIVITY	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
Check the presence of the documents (operating manual, wiring diagrams, ...)	X					X						X
Check the presence of the tools for manual emergency operations	X					X						X
Check machine integrity and the absence of tampering	X					X						X
Check the presence of signs and labels	X					X						X
Fill in the User Manual checklist with date and result of the maintenance operation	X					X						X
Check guide stability and tightness of the fastenings according to the related paragraph of the operating manual	X					X						X
In particular check the tightening of the drive unit components.	X											X
Check the operation of the stop pushbuttons	X					X						X
Load control device test (if installed)	X											X
Check the safety devices in accordance with the related chapter of the operating manual	X					X						X
Check the operating cycle according to the related paragraph of the operating manual	X					X						X
Lubricate the drive assembly	X					X						X
Adjust flaps operating cables	X					X						X
Test speed limiter and over speed governor	X											X
Verify the Check Panel	X					X						X
Clean the sliding guide	X					X						X
Clean the sliding channel of the cable holder chain, with a visual inspection	X					X						X
Check the operating condition of the batteries of the Auxiliary Power System (if installed)	X					X						X
Greasing the drag rollers of the support device for the "third track" (curved machine), check all the wheels and their rolling and wear condition. The replacement frequency of the wheels and rollers must in any case not exceed 24 months	X					X						X



The table shows the periodic operation which should be considered cyclically
For anything not expressly shown refer to the Installation Manual.

5 Faults

If the inclined platform lift does not work, perform the following checks before calling the maintenance service.

Is the master switch (circuit breaker) of the machine in the ON position?

Does the inclined platform lift appear to be powered? (See whether the green voltage indicator light on the check panel is lighted).

Are all safety devices of the inclined platform lift activated? (Stop pushbuttons not engaged, overturning protections lowered, movable straps free of obstacles and not deformed or loaded.)

Do the check panel indicator lights regularly light up when the checked components are operated?

Providing the maintenance service with this information makes it easier to identify the fault and speeds up repairs.

Tell the Maintenance Service the Serial Number, Model, and Year of Manufacture of the inclined platform lift.

5.1 Locked State

In some conditions, the system could become blocked. Blocked conditions can be recognised as the system:

- is stopped on the lower or upper floor with the LEDs on the check panel off;
- at each command a continuous acoustic signal is sounded for about 10 seconds;
- only opening / closing of the platform is permitted.



Contact technical service if the system is locked.

6 Warranty

Inclined platform lifts are guaranteed in compliance with the standards in force beginning from the date of delivery, shipment or installation.

The manufacturer undertakes to repair or replace, at its discretion, free of charge, any parts it may recognize as defective in terms of design, material or construction.

The warranty does not cover any defects due to the natural wear of the material, batteries and accumulators and in general all malfunctions due to causes other than the product itself (e.g., lacking or insufficient power supply voltage, open switches, blown fuses, overload, erroneous operation, etc.).

The warranty does not cover any failures due to an improper use of the machine and neglect by the user, or to external factors (e.g., damage caused by lack of maintenance or poor maintenance, dirt, floods, fires, etc.).

The warranty is voided if the machine is tampered with, modified, or repaired by persons not authorized by the Manufacturer.

7 Approvals

Under particular environmental conditions, it may become necessary to design particular solutions both for the inclined platform lift itself and for its operating cycle.

In these cases, a specific design is shared with the Customer/Building owner.

The shared details are provided in this chapter for the sake of completeness, and they contribute to complete the operating instructions and they are an integral part of this manual and of the delivered inclined platform lift.

8 Indications for disposal



Picking up the stairlift at the end of its useful life is not arranged by the manufacturer. In any case the equipment may be picked up by your supplier after specific consultation. If this is not possible contact the waste disposal service in your municipality to arrange for pick up and disposal. Adequate disposal contributes to preventing negative effects on the environment and health and favours reuse and/or recycling the materials that make up the equipment.



The non recyclable components, such as oil and batteries, must be delivered to an authorised distribution or disposal centre.

8.1 Packaging materials

The packaging materials provided for transportation and protection of the stairlift are comprised of materials which can be reused. Therefore ensure that you do not dispose of these packaging materials with common household waste.

8.2 Accumulators and batteries

The stairlift may be equipped with rechargeable batteries for the anti-blackout device. Also, each call and parking unit contains two AA batteries. Be sure not to dispose of accumulators and batteries along with common household waste. Contact the waste disposal service in your municipality for further information on collection points for accumulators and batteries.

8.3 Circuit boards

The circuit boards, including the components on them, should be considered electronic waste. Be sure to deliver the circuit boards to be disposed of to specialised collection centres.

8.4 Steel parts of the stairlift

Almost all the parts of the stairlift are made in steel and aluminium. Contact your municipal street cleaning and waste disposal service in your municipality for further information on collection points for these materials.

9 Final Checks


ATTENTION!

All verifications indicated in the end of installation list contained below must be carried out prior to issuance of the machine. The test list must be filled out and signed by the installer.


ATTENTION!

Failure to perform final testing can compromise system operation and terms of the warranty.

Ref.	Test	RESULT		
		Positive	Negative	Value
1	Guide and anchor tests	-	-	-
	Maximum guide rotation in degrees (°)	<input type="checkbox"/>	<input type="checkbox"/>	
	Guide residual deformation (mm)	<input type="checkbox"/>	<input type="checkbox"/>	
2	Strip test	-	-	-
	Strip deformation under load (mm)	<input type="checkbox"/>	<input type="checkbox"/>	
3	Safety bar test	-	-	-
	Deformation under vertical load (mm)	<input type="checkbox"/>	<input type="checkbox"/>	
	Deformation under horizontal load (mm)	<input type="checkbox"/>	<input type="checkbox"/>	
4	Speed limiter and overspeed governor test	<input type="checkbox"/>	<input type="checkbox"/>	-
5	Operational checks	<input type="checkbox"/>	<input type="checkbox"/>	-
6	Safety device check	<input type="checkbox"/>	<input type="checkbox"/>	-
7	Stop distance check	-	-	-
	for safety intervention (mm)	<input type="checkbox"/>	<input type="checkbox"/>	
	resulting in the interruption of the run command (mm)	<input type="checkbox"/>	<input type="checkbox"/>	
8	Manual emergency manoeuvre check	<input type="checkbox"/>	<input type="checkbox"/>	-
9	Any observations			
System Serial Number				
Test Date				
Signature of technician (legible)				
Installation Company				

Inclined Platform Lift installation and maintenance sheet

Model**Serial No.****Year of
Manufacture****Capacity (Kg)**

Installation

Date**By**

Maintenance

	Date	By	Reason for intervention

List of Revisions

Rev.	Date	#	Pag
04	Jan 2015	Full revision and new layout	-