USER´S MANUAL

VERTICAL PASSENGER LIFT
Model: SVU

Manufacturer: MORISPAIN S.A.
Adresse: c\ Arangutxi 8, Polígono Industrial Júndiz
01015 Vitoria – Álava
ESPAÑA

JUNE 2021

Serial Number	
Installation adresse	
Owner´s name	
Date of delivery of equipement	

"Original manual".
This instruction manual corresponds to the original version produced in English

INDEX

1. **DECLARATION OF CONFORMITY**

DECLARATION «CE» OF CONFORMITY

MORISPAIN S.A.

c\ Arangutxi 8
Polígono Industrial Júndiz
01015 Vitoria – Álava
España

MORISPAIN S.A., as manufacturer and legal entity in charge of compiling the technical construction file, declares that the lifting system:

Description:	VERTICAL PASSENGER LIFT
Model:	SVU
Material:	acero S275-JR y otros
Rated load:	500 kg *

Complies with the provisions of the Machinery Directive 2006/42/CE.

Complies with the provisions of the following harmonised standards:

UNE-EN 81-41:2011
UNE-EN 12100:2012

* According to UNE-EN 81-41:2011.

Optionally other loads (according to Machinery Directive 2006/42/CE).

2. **GENERAL INFORMATION**

2.1. SCOPE OF THIS MANUAL

This instruction manual contains useful and important information for the correct operation and maintenance of the vertical passenger lift. It also contains important recommendations to prevent possible accidents and damage during operation and maintenance.

This document was written by MORISPAIN S.A. and is intended for use by the owner.

This manual is considered part of the equipment and, together with the rest of the documentation that accompanies it, must be handed over to the owner and kept in a good state of use and be accessible throughout the life of the equipment.

Persons using the SVU Lift (hereinafter referred to as the "Lift") must be familiar with the correct operation of the Lift and must refer to these instructions at regular intervals.

Of particular interest to the user are the rescue instructions in the event of a trapped person.

2.2. UNITS OF MEASUREMENT

Unless specifically stated otherwise, all units of measurement cited in this manual and in the control programme are expressed in the International System.

2.3. SAFETY INSTRUCTIONS

Safety Notes

DANGER !	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
WARNING !	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
ATTENTION ¡	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Aditional Data

NOTES	The term "note" is used to indicate important information or usage tips.

2.4. REFERENCES STANDARS

The design and manufacture of the lift is carried out in accordance with the specifications of this dossier, thus complying with the specifications of the following legislation, both national and European:

- Directive 2006/42/EC, of the European Parliament and of the Council, of 17 May 2006, relating to machinery and amending Directive 95/16/EC (recast).

- Royal Decree 1644/2008 of 10 October 2008, establishing the rules for the marketing and putting into service of machinery.

- Law 31/1995 of 8 November 1995 on the prevention of occupational hazards.

In addition, the indications of the following harmonised standards are taken as a reference:

- UNE-EN 81-41:2011. Safety rules for the construction and installation of lifts. Special lifts for the transport of persons and loads. Part 41: vertical platform lifts for use by persons with reduced mobility.

- UNE-EN 12100:2012. Safety of machinery. General principles for design. Risk assessment and risk reduction.

2.5. DEFINITIONS

Installer: Person or company that assembles and installs the lift supplied by the manufacturer MORISPAIN S.A. Their tasks may include masonry, civil works, welding, mechanics, lighting or electricity.

Owner: Person who has the power of disposal of the installation and is responsible for its operation and use.

Maintenance organisation: A company or part of a company in which maintenance competent person(s) carries out maintenance operations on behalf of the owner of the installation.

Competent maintenance person: A designated person, suitably trained, qualified by knowledge and practical experience, provided with the necessary instruction and supported by his maintenance organisation to ensure that the required maintenance operations are carried out safely.

2.6. TO BE CONSIDERED BY THE LIFT INSTALLER

It is necessary for the installer to be aware of the current construction, safety and accessibility legislation applicable in the region or country where the lift is to be installed. It may be mandatory to register the installation with the authority and/or sign a maintenance contract.

2.7. TO BE TAKEN INTO ACCOUNT BY THE LIFT OWNER

- - He shall maintain the installation in safe operating condition. The owner must use a maintenance organisation that complies with the requirements of EN 13015.
- - He must take the lift out of service when the two-way communication system is not operational (only for models with such a system).
- - The obligation to shut down the installation in case of dangerous situations.
- The maintenance organisation must be informed of:
- - The location of the keys for access to all parts of the lift.
- - The identity of the persons accompanying the maintenance personnel, if necessary.
- - The following must also be taken into account:
- - Carry out loading and unloading operations in an orderly and safe manner.

- - Do not distribute, as far as possible, the load evenly inside the cab.
- - Do not load goods that could damage the installation, in particular the landing and cabin floor plates.
- - Do not respect the maximum load of the lift.
- - Do not manipulate elements of the lift or any work on the installation by non-competent persons.
- - Do not obstruct the doors with objects.
- - Do not use the lift in the event of fire, flood, earthquake or in a situation that may cause an interruption in the electrical power supply.
- - Do not use the lift without cabin lighting.
- - Do not force the doors while the lift is in operation.
- - Avoid unnecessarily pressing the alarm or emergency systems.
- - Do not jump into the car.
- - Smoking is forbidden inside the lift.

2.8. TO BE TAKEN INTO ACCOUNT BY THE MAINTENACE ORGANISATION

- Ask qualified personnel to instruct you in the use and handling of the platform.
- - Only if you have been trained in the use and handling of the platform will you be able to use it with complete peace of mind.
- - You are responsible for keeping a record of the results of each intervention due to a failure of the installation. These records must include the type of failure. They must be available on request from the owner.
- - He must put the installation out of danger in the event of a dangerous situation, and inform the owner.
- - It must provide the necessary spare parts for each repair.
- - Must be able to provide a competent person for any inspection by an authorised third party or maintenance work on the building in the areas reserved for the maintenance organisation.
- - The need for regular maintenance.

3. **SAFETY**

3.1. BEFORE PUTTING INTO OPERATION

For the commissioning of the lift, the owner must ensure that:

- Have the name and telephone number of the maintenance company in a visible area of the platform.

It is also recommended that the owner

- - Has contracted a planned maintenance service, to be carried out by a maintenance company.
- - Has a "24-hour" call service for the lift during the entire time it is in operation.

3.2. SECURITY CONDITIONS

The owner of the installation must ensure that the building is safe by respecting the following considerations:

- - If a person cannot be rescued quickly, due to the availability of rescue personnel, the lift must be taken out of service.
- - Pay attention to the various warning pictograms on the lift and take special care not to access electrically live parts.

- - Access areas to maintenance areas should be kept safe and clean. The maintenance company should be informed of any changes or hazards in these areas.
- - Keys for maintenance and floor doors should be kept secure and inaccessible to unauthorised persons.

Preventive maintenance shall be carried out to maintain the safety of the lift.

Periodic checks of safety equipment help to locate defective components before failure.

WARNING !

Attention shall be paid to the following safety instructions.

Fig. 1 Do not push / lean on doors.

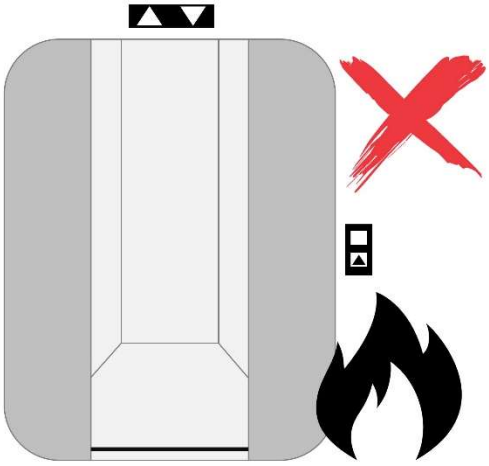

Fig. 2 Do not use in case of fire.

Do not use for evacuation operations.

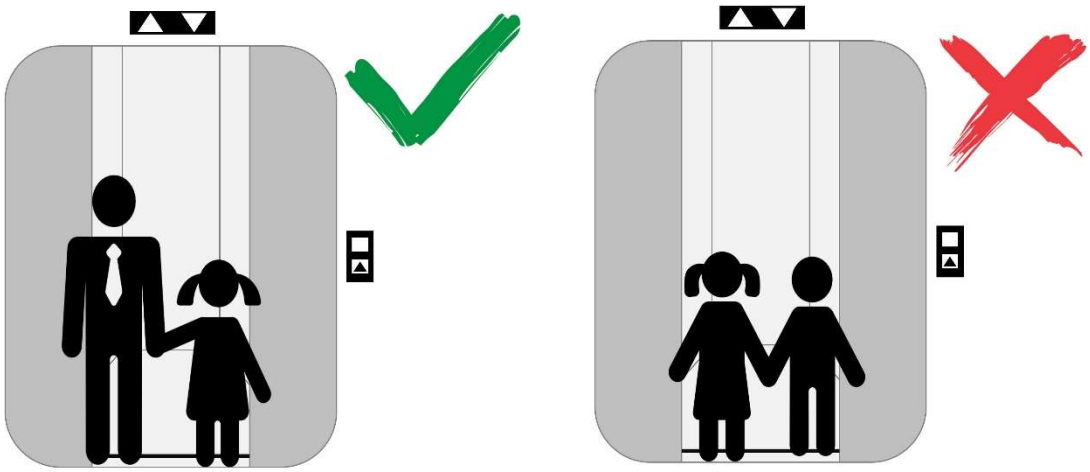

Fig. 3 Do not allow use by children alone.mitir el uso por niños solos.

4. ENVIRONMENT

4.1. MATERIALS USED IN THE ELEVATOR

The lifters are made of different types of steel. There are various electronic components as well as plastics.

The most common hazardous materials and their use in the elevator:

Material	Used
Oil ISO HV-46	Yes
Lead-acid battery	Yes
Mercury-containing fluorescent tubes	No
Asbestos	No

Batteries shall be compatible with the Sunlight SPA 12 -1.3 model with nominal voltage of 12V in 6 cells with 10 year cycle life and nominal capacity of 1200 Ampere hours.

200 - 240 Vac (50 -60Hz) constant voltage charging system delivering 12-14Vdc at 1.5Amp and with a maximum of 151W.

Fig. 4 Hazardous materials table.

NOTE :
The maintenance company must have adequate waste management procedures.

4.2. PACKAGING

Para su instalación las partes del elevador se empaquetan en cajas de madera. Se utiliza también cartón y plástico para proteger las piezas pequeñas de posibles daños en el transporte y manipulación. Se deberán clasificar y reciclar cuando las circunstancias locales lo permitan.

4.3. FINAL ELIMINATION

The disassembly and disposal of the hoist at the end of its service life must be carried out by a specialised waste disposal company.

In each country there are different regulations regarding the disposal of electronic or hazardous waste, such as batteries. It is necessary to strictly comply with the specific standards in force in the country of use of the equipment.

Do not dispose of equipment components in ordinary waste.

5. **DESCRIPTION OF THE EQUIPEMENT**

5.1. INDEX

The lift consists of an indirectly (or directly, depending on the model) driven hydraulic machine. It is designed for use in homes, buildings and commercial premises. It allows anyone, or anyone with a disability or mobility impairment, to overcome architectural barriers.

The dimensions and loads of the lift are designed for use by several standing passengers, or by a passenger in a wheelchair with a companion. Depending on the chosen cabin dimensions, it is suitable for both manual and compact motorised wheelchairs (class A and B according to EN 12184) as well as for medium-sized scooters.

NOTE:
The manufacturer declines all responsibility for any damage or injury, to persons or other equipment, resulting from the use of the hoist for an operation other than that for which it was designed.

The lift is designed to withstand low, non-intensive use like conventional lifts. It can be installed in existing buildings, under construction or under renovation and is especially recommended in:

- Single-family homes or townhouses in private use.

- Housing blocks in private use.

- Public buildings for restricted use.

Excessive use of the equipment may cause accelerated deterioration of some of its components, in which case the frequency of maintenance should be increased to prolong the life of the equipment.

5.2. GENERAL DESCRIPTION

The SVU lift consists of a mobile frame, which moves on a column fixed to the wall or structure inside a closed or partially closed shaft, which can be made of any resistant material that guarantees the protection of the system from possible damage caused by atmospheric agents.

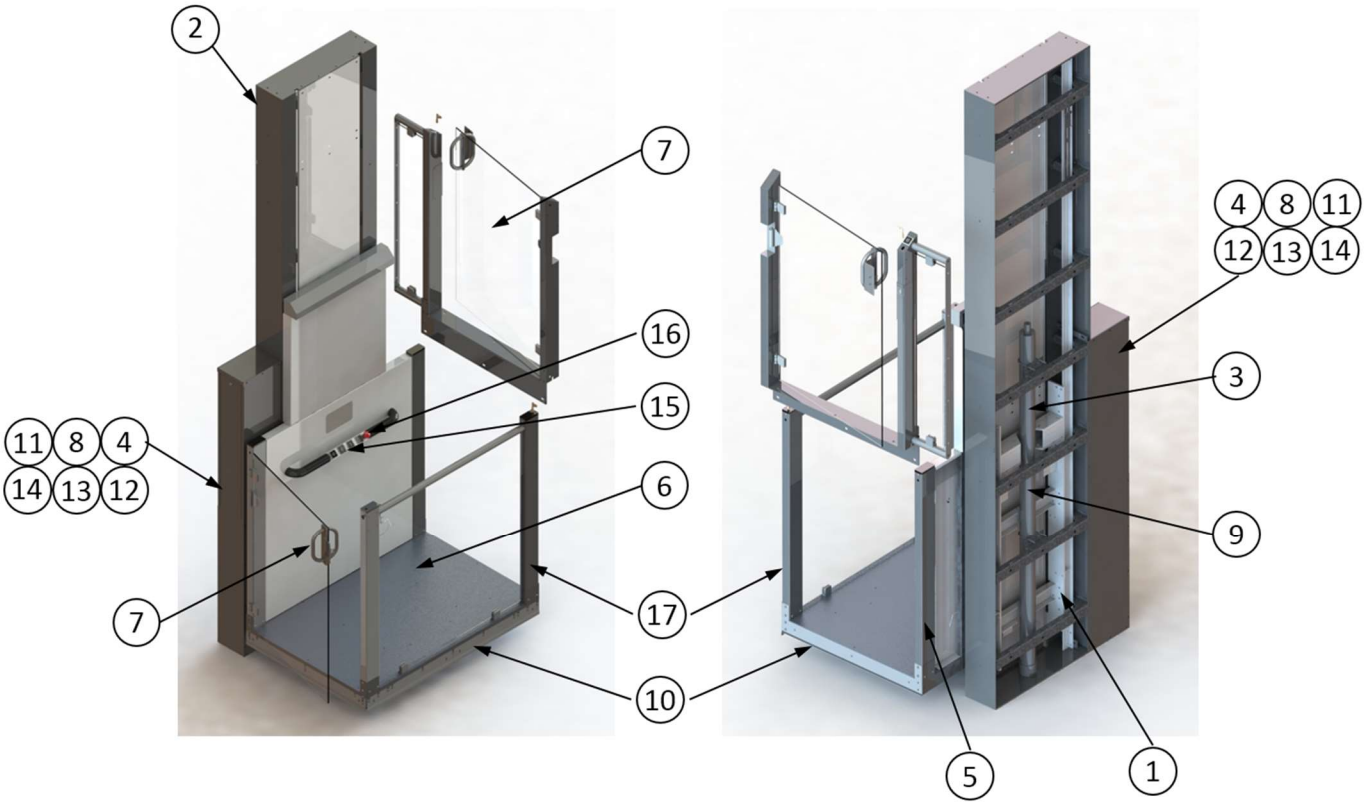

Fig. 1 Parts of the elevator

The elevator is essentially composed of:

1- Column. This is a C-shaped metal structure on which the lifting platform moves. This column will be anchored both to the floor where it is located and to the wall where it is fastened.

2- Column closing covers. It closes the mobile parts inside the column.

3- Hydraulic piston. Set consisting of jacket, rod and parachute valve, which transmits the movement to the lifting platform.

4- Hydraulic power unit. Hydraulic equipment incorporating the following elements: motor, pump, oil filter, valve block, solenoid valves, manual control for emergency lowering, manual pump for emergency raising and ISO HV 46 grade oil.

5- Cabin frame. It is made up of two metal beams that will move along the guides and a metal base on which the cab rests.

6- Cab. This is the assembly formed by the cabin frame and the surrounding plates, inside which the people who are going to move from one level to another are placed. It is equipped with a control button panel and, in cases where there is an open space, a closing door. Optionally, the cabin may be a closed enclosure.

7- Floor doors. Located on each level, they are hinged, manual and are fitted with a lock with electric presence contact and interlocking. Optionally, they can be motorised with 24 Vdc current.

8- Electrical control panel. Controls the operation of the platform lift.

WARNING !

Never remove electrical system guards when the system is energised. The electrical systems of the hoist are behind these guards and therefore there is a risk of electric shock if they are removed.

The elevator incorporates the following safety devices:

1- Parachute valve with actuation by speed increase in the cabin, or by hydraulic conduction breakage. It blocks the lowering of the piston, and therefore stops the cabin.

2- Sensitive edge under the cabin, which blocks the descent of the cabin in the event of an obstacle. If the lift has an open or partially closed shaft, it is possible to install a sensitive edge with a bellows.

3- Safety valve and re-levelling with door closed, to maintain the level between the cabin floor and the stop level with door closed.

4- Manual rescue in the event of a power failure, by means of a pushbutton located in the hydraulic unit.

5- Electrical control device on the floor and cabin doors, which prevents the landing door from opening if the cabin is not facing it; or the operation of the platform if any door is open.

6- Overload control.

7- Constant pressure on cab and external pushbuttons to make the journey.

8- Emergency stop stop in the passenger compartment.

9- (Optionally) Photo-cell or photo-electric curtain on the opposite side of the access door, which stops the movement of the lift if a person or object gets too close to the wall.

5.3. DATA SHEET

The attached table sets out the characteristics of the different elements that make up the lift:

ITEM	DESCRIPTION
Max.Dimensions	Standard: max. Up to 1100 x 1400 mm (by EN 81-41). Anothers measures (By Machine Directive 2006/42/CE).
Rated Load "Q"	Standard: max up to 500 kg (by la norma EN 81-41). Anothers loads (By Machine Directive 2006/42/CE).
Rated speed	0,15 m/s
Max. travel	10 m.
Traction	Hydraulic 1:1 (estándar) Hydraulic 2:1 (en algunos modelos)
Habitáculo	Half-car standard with half glass door with lock (hinge and door safety lock). Optionally it´s posible to not install the car door, always in enclosed shaft with full doors in lowers floors, with locks (hinge lock and door safety lock).
Electric	3 phases motor, supplied with invertor.
Hydraulic System	By hydraulic tank, with summerged motor and spindle pump. Valves 2 speed in down direction- KV2P. 2 speeds in up direction thanks to invertor..
Safety components	Certificates, by norm EN 81-20 only in case of : Hydraulic parachute Moris 0825/P (HES) (or similar) Safety lock valve Blain L10 (or similar) Certificates by Directive 2006/42/CE, and/or requirements of EN 81-41: Electric door lock Schmersal AZM 161 (or similar)

5.4. NOISE

The equivalent continuous A-weighted equivalent sound pressure level emitted by the lift is less than 70 dB(A).

6. **USE**

6.1. CAR OPERATION PANEL (C.O.P)

It is located on the cabin handrail.

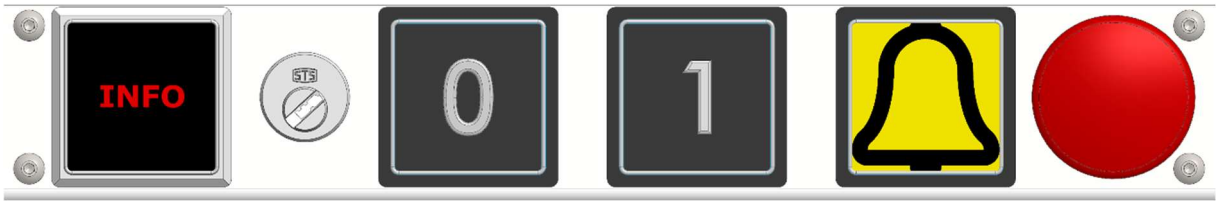

Fig. 2 Operator panel.

Information screen.

(Optional) Can display various information, such as the floor to which it is going, excess load, damage, etc.

Key.

(Optional) It must be turned with the key inserted in order to be able to press the desired floor.

Landing Push button.

Move the lift to the desired level. Normally the level "0" corresponds to the low floor.

Alarm Push button.

Allows the alarm buzzer to be activated. Optionally, it allows communication with the breakdown service (if contracted by the owner).

Emergency Push button.

Switches off the power supply to the lift in case of emergency. Stops immediately.

The level push buttons must be depressed for the entire travel time.

If released before the desired level is reached, the lift will stop immediately.

6.2. LANDING PANEL

It is reduced to a call button, located on a vertical pillar of the lift, or on the adjacent wall of the building, if preferred by the customer. Optionally, this can be a key instead of a push button.

The call button does not have to be pressed for the entire travel time, a single touch is sufficient.

Depending on the model, when the lift is located in an open shaft, call buttons of the "man present" type must be used (Directive 2006/42/CE).

6.3. CONTROLLER

The lift is not equipped with a memory, so it only responds to the first call it registers. After the call, the push buttons on each floor will light up, indicating that it is busy.

When the passenger in the car presses a button continuously, the car immediately moves to the required floor. If another person calls the lift from another floor, the call will not be registered and will not be answered.

6.4. CONDITIONS FOR CONTROLLER

- - All doors must be closed: if the door on any level is open, the lift will not respond to the call.
- - There is a time limit: if approximately 8 seconds elapse after the lift has reached the desired level and it is not accessed, then the door will automatically close (whether the standard lock is present or the door is optionally motorised at 24 Vdc).

7. **INCIDENTS**

The following situations require the intervention of a competent person:

- - The lift has stopped due to a malfunction. Rescue is required (see section 7.1).
- - The alarm has been triggered and there is a person inside (see section 7.1).
- - Due to an external power failure (see section 7.2).
- - Due to a failure of the platform lighting.
- - An abnormal noise in the installation.
- - The lift is stopped and the doors do not close.

ATTENTION ¡¡
Do not attempt to exit the lift without the assistance of a competent person. It is very dangerous to attempt to exit the lift without outside assistance. Wait for the technician to arrive and follow his instructions.

7.1. RESCUE PROCEDURE

The lift has stopped between floors due to a malfunction. For example: cable of the indirect drive system, electronic control board, etc.

In such cases, a rescue manoeuvre is necessary. Keep calm. The rescue manoeuvre does not mean that there is a danger, on the contrary, it prevents it. Ventilation is sufficient.

1. Try to start the lift again by pressing the desired level button (0, 1, etc).

2. Press the alarm button. The alarm buzzer will sound and warn people in the vicinity.

3. (Optionally, if contracted by the owner) The lift is equipped with a communication with the intervention service. Wait a few seconds, the conversation will not start immediately.

4. Follow the instructions of the service. A competent technician will come to the lift. If the service service is not contracted by the owner, you must call the telephone number indicated on the control panel.

5. When the technician arrives on site, he will start the rescue manoeuvre, which consists of lifting the platform by means of a hand pump or by switching on the rescue system.

6. The technician shall initiate the manual rescue descent, by means of a hydraulic control that allows lowering at a slower speed. For further information, see section 8.4.

7. Finally, after reaching the low level, the technician shall open the access door, using a special key. For more information, please refer to section 8.3.

8. Exit the lift normally. The technician will declare the machine "out of service".

In a fault situation, the push buttons on all levels will remain illuminated.

7.2. **PROCEDURE FOR POWER FAILURE**

The lift has stopped between floors due to a lack of external power supply.

In such cases, you can continue the journey yourself. Stay calm. This manoeuvre does not mean that there is a danger, on the contrary, it prevents it. Ventilation is sufficient.

1. Start the lift again by pressing the button for the lower level (ground floor), normally indicated with "0".

2. Keep the button pressed until you reach the lower level.

3. Open the door normally (option: 24 Vdc motorised doors will also open automatically when reaching the lower level).

It is also advisable to notify the intervention service by pressing the alarm button. The technician can then check the correct operation of the lift and rule out other malfunctions.

The lift is able to perform this manoeuvre because it has a battery which automatically powers the safety systems and controls in the absence of external power. It is only possible to descend in level, not to go up.

7.3. OTHERS PROCEDURES

The elevator presents another problem. For example:

- A failure in the platform lighting.

- An abnormal noise in the installation.

- The lift is stopped and the doors do not close.

8. MAINTENANCE

8.1. GENERAL RECOMMENDATIONS

The lift must be maintained by a competent maintenance company. Particular attention must be paid to the maintenance of the safety components.

DANGER !

Under the lift platform, there are no items or components to be inspected. No person should remain under the lift in operation.

NOTES:

If you detect any abnormal behaviour, contact your maintenance company immediately. Shut down the hoist in dangerous situations.

8.2. MAINTENANCE PROGRAM

Do not exceed the recommended maintenance intervals, unless otherwise specified by the manufacturer.

ELEMENT	INTERVALS (months)	ACTIONS (in case of)		
		LUBRICATION	ADJUSTEMENT	CLEANING
EQUIPEMENT				
Documentation	12			
Control system: re-leveling and stop level	4		X	
SHAFT				
Guide rails and fixations	12	X	X	X
Safety gear and safety rope *(only some models)*	4			X
Sahft protection,panels	4			X
Electric installation	4			
Extra limit switches	12		X	
Hydraulic hose	12			
Hydraulic parachute	4			
Electric hose	12			
Non wáter and oil	4			X
FRAME & CAR				
Lower safety Edge (under cabin)	4		X	
Cable guard (only some models)	12			
Wear of traction pulley and ropes (only some models)	4		X	X
Fixing between car and frame	4		X	
Cable installation (only some models)	4		X	
Safety gear operation (only some models)	4		X	X
Rescue Operation	12			
Lighting (only some models)	4			X
Safety chain: Electric switches	4			X
Pushbuttons	4			
Cabin Alarm (communication) *(only some models)*	4			
Cabin door: locks and operator	4		X	X
Photocell/infrared bar operation	4			

ELEMENT	INTERVALs (months)	ACtIONS (In case of))		
		LUBRICACIÓN	AJUSTE	LIMPIEZA
LANDING COMPONENTS				
Pushbuttons	4			X
Landing door operation	4		X	X
CONTROLLER OPERATION				
Operating, noises, confort, leveling	4		X	

Fig. 3 Table of intervals and maintenance checking.

8.3. MANUAL DOOR OPENING (AUTHORISED PERSONAL ONLY)

In the event of maintenance or an incident, the landing door can be opened with a special triangular slotted key. Make sure that the cab is close to the door level where it is located.

WARNING !

When manually opening the door, be careful with the hoistway. Take appropriate measures to prevent the risk of falling. Only authorised maintenance personnel are allowed to open the lift doors manually.

1. Open the landing door lock with the emergency key. The lock returns to the closed position by itself after opening.

2. Unlock the door.

8.4. MANUAL RESCUE (AUTHORISED PERSONAL ONLY)

In the event of an incident, the lift can be rescued manually (according to the conditions in section 7.1).

Deactivate the circuit breaker at the bottom of the control panel.

Turn the red emergency lowering key on the distributor, labelled "H" in the image, until the platform is positioned on the ground.

Unlock the door manually by inserting the triangular key into the hole "L" and turning clockwise.

After the rescue, make sure that the door is closed and locked.

Call the service department to make the platform operational again.