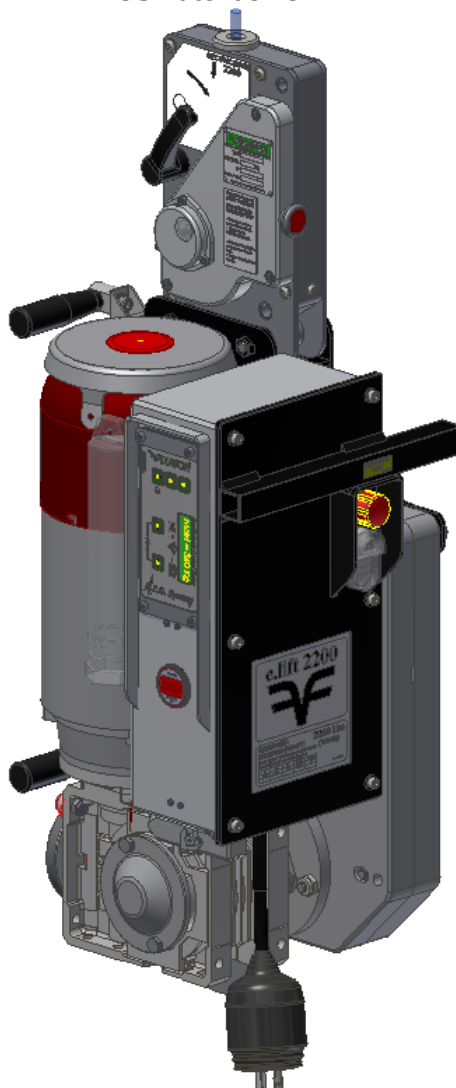


US Patent 9 284 171



## Operating Instructions

**Manufacturer :**

FIXATOR

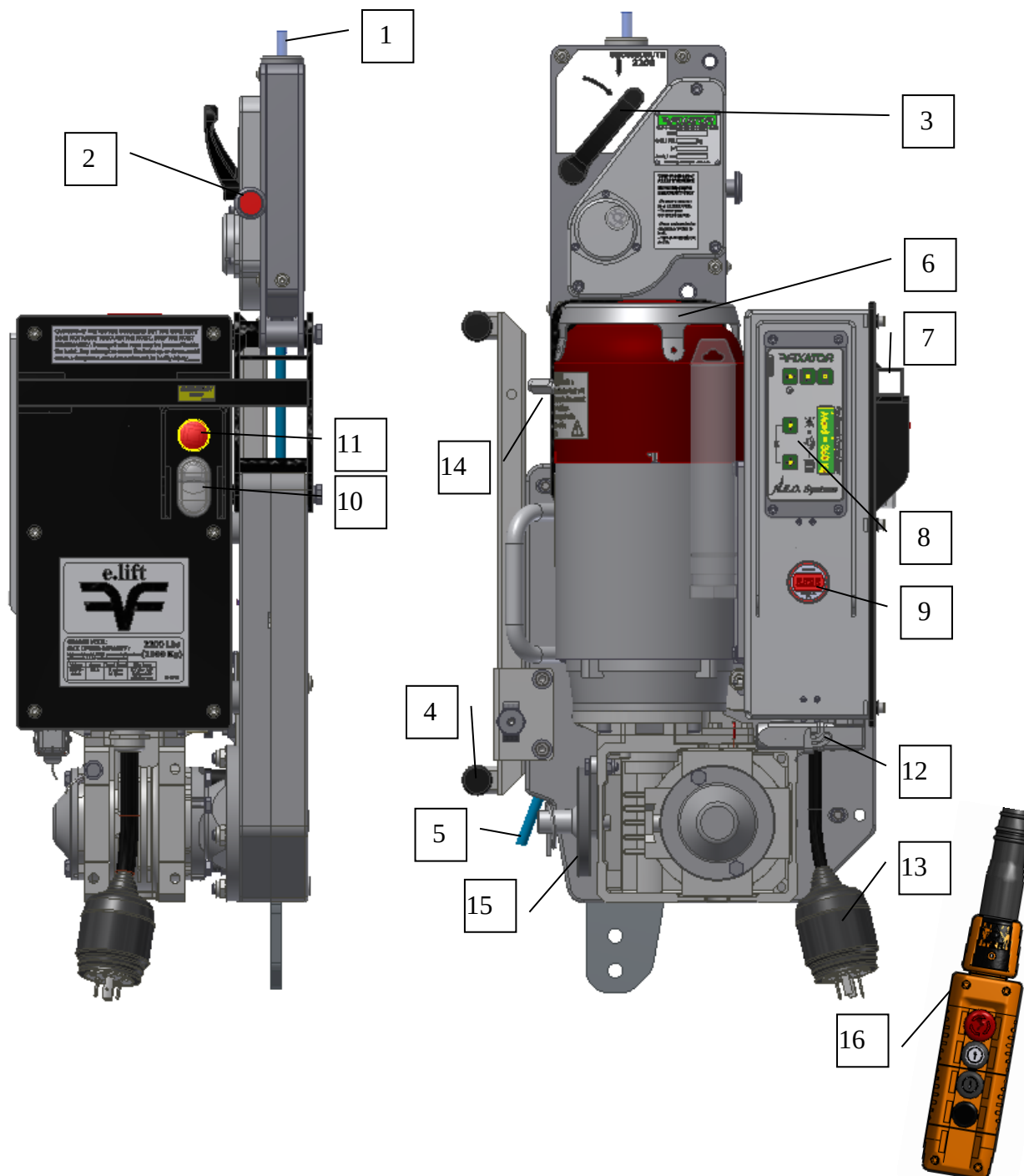
PA 8, rue du Bois Rinier

B.P. 10041

49181 ST BARTHELEMY D'ANJOU (France)

**Supplier :**

| Monitoring of updates       |                                                   |
|-----------------------------|---------------------------------------------------|
| Date                        | Description                                       |
| 22 <sup>nd</sup> Feb. 2017  | Creation                                          |
| 9 <sup>th</sup> Nov. 2017   | Overall review                                    |
| 6 <sup>th</sup> Mar. 2019   | Logbook                                           |
| 3 <sup>rd</sup> Feb. 2020   | Optional secondary wire rope brake system (Annex) |
| 28 <sup>th</sup> Oct. 2020  | Add type 527L (1500lbs Single phase)              |
| 13 <sup>th</sup> Sept. 2021 | UL certified                                      |
| 24 <sup>th</sup> Feb. 2023  | Corrections                                       |
|                             |                                                   |



- 1-Wire rope insertion point
- 2-Overspeed brake test button
- 3-Overspeed brake reset lever
- 4-Handle
- 5-Wire rope exit
- 6-Protection cap over the brake
- 7-Insertion point for optional wheels
- 8-Overload monitoring panel
- 9-Voltage indicator
- 10-UP/DOWN control switch & Indicator light

- 11-Emergency stop (power cut-off)
- 12-Pendant receptacle
- 13-Plug
- 14-Controlled descent lever
- 15-Handwheel
- 16-Pendant remote control (Emergency /UP /Down /Shunt)
- + Manual stored in a plastic pipe (not shown)

*Dimensions : see appendices.*

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**The originals of this document are in French and English. No other translation can replace the originals.**

We thank you for acquiring a FIXATOR product. In the following pages, we specify the instructions that will enable you to use it safely and maintain it in good operating condition.



#### **WARNING**

- All persons operating this equipment must read and completely understand this manual.
- All persons must be thoroughly trained in the use of this equipment, its operational and safety features, and they must also be capable of carrying out the daily inspections.
- Only authorized persons shall operate this equipment.
- Before erecting or dismantling and use of suspended scaffold, please read CODE OF SAFE PRACTICES FOR ADJUSTABLE SUSPENDED SCAFFOLDS CO-DEVELOPED BY SCAFFOLDING, SHORING and FORMING INSTITUTE (SSFI) and SCAFFOLD & ACCESS INDUSTRY ASSOCIATION, INC. (SAIA). See §5.2
- Any operation in violation of these instructions is at the operator's own risk and may result in serious injuries.
- Keep this manual with the device at all times.
- Use only spare parts and steel wire rope provided and/or specified by Fixator.
- It is the responsibility of the user of this device to determine that it is suitable to be used in conjunction with any other equipment. The user must also determine that this device and other components used will be in strict conformity with the provisions of National, Provincial, and local ordinances and regulations. The

following symbol will alert you for hazards to watch out for:  .

### 1 Introduction

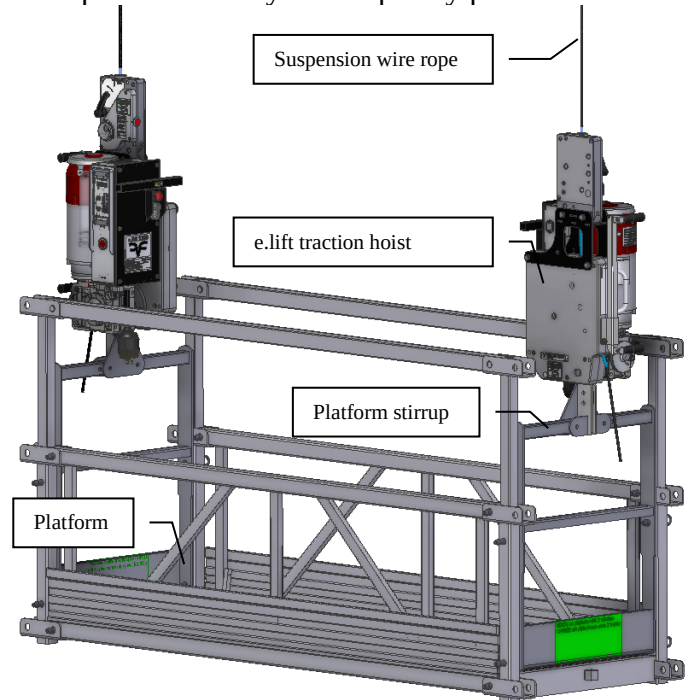
This notice covers the use of e.lift hoists with variable level temporarily suspended platforms.

Instructions for the attachment system, the temporary platform and the possible guidance system must be associated with this equipment.

The user must ensure that the equipment complies with local rules and regulations.

This document and all copies are the property of FIXATOR. Dimensions and data are indicative only.

Example of assembly on temporary platform :



### 2 General warnings

#### 2.1 Safety Instructions

Every year, workers on suspended scaffolds are injured, become disabled, or are killed because of carelessness or because they did not understand how to correctly operate the equipment. Do not become one of them. Know how to use this equipment and prevent accidents.

NEVER operate equipment that you DO NOT understand. You may cause accidents, resulting in injury or death to you or people around you.

This instruction manual is not all inclusive. It is impossible to anticipate every possible way this equipment may be used, and all possible hazardous situations. It is very important that you determine for yourself whether the equipment is safe. You must understand the operating characteristics of this hoist. You must understand how the hoist will operate in your application. You must be certain not to put yourself or others in danger, or cause damage to property or other persons. You must be sure that all the daily tests have been successfully completed. Call your hoist supplier if you have any questions concerning this equipment.

1. Read and understand this manual BEFORE using this equipment.

2. Setup and use must comply with FIXATOR instructions and local codes.

3. Use the Troubleshooting Guide in this manual to solve problems that may develop with the hoist. Repairs must only be made by people trained and authorized to do so. NEVER maintain or repair the equipment while the unit is suspended (above ground level).

#### Operating the Hoist

4. Be careful when operating the hoist in freezing temperatures. Water or moisture may enter the hoist's overspeed brake or traction assembly. See Cold Weather Operating instructions in this manual.

5. Be careful when operating the hoist in high winds. It is recommended to consider stopping work or adding stabilization at wind speeds of 25 mph or more when working on a 2-line suspended platform. When working on a single line platform, stabilization should be used in winds above 20 mph. Avoid carrying large panelized materials which can act like a sail in high winds.

6. Do not remove any parts from the hoist without replacing them. Do not change or substitute any approved hoist parts for parts that do not meet manufacturer's specifications. Do not modify this hoist without prior approval from FIXATOR. Modifications can put you in danger if not done correctly. Making modifications can also void any manufacturer's warranty and make you liable for any damage.

7. Maintain clearances and make sure no obstructions interfere with vertical travel.

8. Press the operating switch by hand only. Do not use foreign objects to operate the hoist.

9. When not in use, store hoist and stage to protect from unauthorized use. Cover the hoist if possible. Always unplug power cord when not in use and equipment is left unattended.

10. Only authorized and properly trained personnel shall operate this hoist. Each operator must determine his own fitness to operate this hoist. Consult your doctor if you are in doubt. Each operator must be free of the influence of alcohol or drugs.

11. Two units or more of the e.lift are not allowed to be used on one same wire rope.

12. The e.lift is not allowed to be used by inserting a wire rope into the wire rope outlet.

13. Do not tight end of suspension wire rope when using e.lift

14. Do not apply more than 45 lbs to the end of wire rope.

15. The e.lift is not allowed to be used in or under the water.

16. The e.lift is not allowed to be used as a lifting device for a permanent elevator.

17. The e.lift is not allowed to be used as a medical traction device.

#### Suspended Scaffolds

18.  **WARNING!** Do not use suspended scaffolds unless:

- a. You are wearing a personal fall arrest system that meets or exceeds your application requirements.
- b. You have personally made sure that:
  - the roof support system is complete, properly assembled, counterweighted (or otherwise anchored), tied off, and not overloaded; and,
  - hoists and platforms are not overloaded.
- c. The wire rope is free of defects and is the size and type specified for the hoist;
- d. Guardrails and toe boards are properly installed;
- e. The main suspension wire rope is vertical.
- f. The suspension points are directly above the hoist at all times.

19. Use approved personnel harnesses, lanyards, rope grabs, and independent lifelines at all times. Attach the lifelines to a structural member of the building or structure, never to part of the rigging unless specifically designed for this purpose.

20. Comply with all local, provincial and federal safety codes and equipment instructions.

21. If you hear any strange noises or if the hoist does not appear to work normally, stop using it

immediately. Do not continue to use the equipment until it is repaired.

22. Do not allow anyone under suspended equipment. If necessary, provide protection below the suspended equipment to prevent injury to people from falling objects. Use lanyards to secure tools and materials from falling on personnel below.

23. Do not reset the overspeed brake until you have first read and completely understood the Troubleshooting Guidelines in this manual.

#### **Wire Rope**

24. Inspect the wire rope before rigging. Handle, inspect, and maintain wire rope carefully during and after each job. Lubricate the wire rope according to the manufacturer's recommendations.

25. Do not use visibly worn, kinked, bird-caged, undersized, or damaged wire rope. Protect wire rope from sharp or abrasive edges of building. Do not use wire rope that has been exposed to fire, excessive wear, corrosive atmosphere, chemicals, passage of electric current, or temperatures above 200° F (93.3°C).

#### **Welding/Electrical Cautions**

26. When welding from a suspended scaffold, provide proper electrical grounding for the hoist.

27. Ensure platform is grounded to the structure.

28. Insulate wire rope 4 feet (1,20m) above and below the platform.

29. Insulate wire rope at suspension point and ensure that the wire rope cannot come in contact with the structure at any point along its entire length, including the tail line.

30. Cover the hoist with an insulating material.

31. Avoid power lines. Make sure the platform or hand tools cannot swing or be blown within a minimum of 10 feet (3m) of a power line. Check your local codes for minimum distances. Never, under any circumstances, rig a platform above electrical power lines.

### Corrosive/Explosive Environments

32. Never operate an electric hoist in an explosive atmosphere such as a refinery, chemical plant, grain elevator, distilleries, ship or silo interiors, mines, around coal handling equipment, or around explosive organic vapors or dust.

33. Never use hoists and aluminum platforms around caustic materials, acids, or acid fumes. Use hoist covers when corrosive materials are present.

## 2.2 General Hazard Warnings



### WARNING

If the hoist is suspended in the air and the motor runs but the wire rope does not move through the hoist, STOP the hoist immediately! Damaged wire rope may be jammed inside the hoist. Any attempt to move the hoist up or down could damage equipment or cause injury or death.

There are many hazards when working on a suspended scaffold. The following is a list of common hazards.

This list is not complete!

It is provided to increase safety awareness on the job site.

### 2.2.1 Mechanical Hazards

- Crushing between the platform and the building or structure.
- Cutting or severing between moving machine parts.
- Loss of rigging stability because of one or more of the following:
  - Insufficient counterweight or counterweights not properly fixed;
  - Inadequate mechanical strength;
  - Increase in vertical load on suspension wire because the platform encounters an obstacle, the platform overloads, or the suspension wire rope breaks;
  - Platform catches on overhang when going up.
- Falling
  - from the platform when working;
  - by using a wire rope that is too short;
  - if the platform is not strong enough for the weight and breaks;
  - if wire rope or platform interconnections fail;
  - rigging failure can cause falling.
- Idling due to loss of traction.
- Jamming due to damaged wire rope.

### 2.2.2 Electrical Hazards

- Failure of the electrical supply may delay travel of the platform.
- Control system failure can cause unwanted or unexpected movement of the platform.
- Improper power supply (voltage or frequency) may damage the hoist.

### 2.2.3 Environmental Hazards

- Consider and prepare for the effects of climate: heat/cold/ice/wind.
- Sandblasting and acid wash procedures may introduce special concerns. They may adversely affect the immediate health of an operator and may pose serious risks to the hoist and other equipment being used.

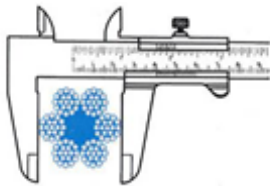
### 2.2.4 Hazard Prevention

- All electrical connections must be locked and supported by strain relief devices.
- Make sure the electrical cord and wire rope are long enough to allow full travel of the suspended equipment.

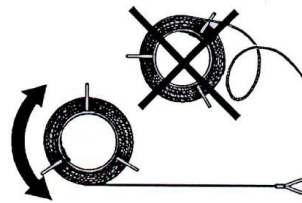
#### 2.2.5 Wire Rope Warnings

- Use protective gloves to handle the steel wire ropes.
- Use only FIXATOR-approved steel wire rope.
- Steel wires ropes must be replaced under any of the following conditions (ref. to ISO4309):

- More than 6 wires are broken on a length of 285 mm;
- Excessive corrosion;
- Damage due to heat;
- Reduction of the nominal diameter by more than 5% : <9mm / 0.354in



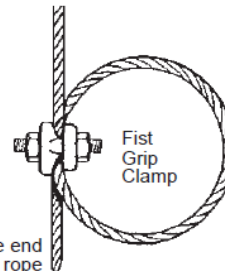
- Kinking (see below), crushing (see below), bird caging (see below) or any other distortion of the wire rope structure.



The end of the cable should be clean and sharp.



4. Use a heavy-duty thimble for the main suspension wire rope and follow the manufacturer's requirements for termination of the wire rope hardware that you are using. After reeving through the hoist, be sure to loop and clamp the free end of the wire rope, to prevent the rope from inadvertently unreeving through the hoist. Always tie this loop, using a fist grip clamp, when the platform is at ground level or other safe surface.



Bottom free end of wire rope



**WARNING** Wire rope stretches when loaded. The diameter is reduced. Always inspect the wire rope termination and refer to the manufacturer's inspection procedures.

### 3 Wire rope

1. Wire rope requires lubrication under normal conditions. Lightly lubricate it with a wire rope lubricant specified by the wire rope manufacturer on a monthly basis, or more often if necessary. Never use products containing bisulphite or MoS2 (Molikote).

2. To prepare the end of wire rope for insertion, braze and rough shape the end of the wire rope to form a smooth, tapered, bullet shape no more than 2/5" (10 mm) long. DO NOT cool the end of the hot wire rope in water or oil as this makes the end brittle and may cause it to break off. Oil the bullet after it cools to prevent rusting.

3. Always uncoil and carefully examine the wire rope before use. Worn, kinked, bird-caged, or damaged wire rope cannot be repaired. It must be replaced.

5. Be sure there is enough wire rope to reach the lowest possible point of travel. AT EVERY SET-UP OR RERIGGING check the wire rope length to ensure that it reaches the ground or other safe level with about 5 feet (1.5 m) extra for safety. Avoid extra-length of 15 feet or more.

6. Wire rope begins to wear the moment it is used. It must be regularly inspected to be sure it is in good condition. Wire rope must be removed from service when diameter loss or wire breakage occurs as listed.

#### a) Wire Rope Inspection

The need for replacement of suspension wire ropes shall be determined by regular inspection and shall be based on the condition of the wire rope inspected. Wire rope in active service should be visually inspected once every working day. A thorough inspection shall be made once a month, or before

each use if the suspension wire ropes have been inactive for 30 days or longer and are placed into service. Dated and signed monthly reports indicating the condition of the ropes found during inspections must be kept.

Wire rope with one or more of the following defects shall be removed and replaced immediately (ref. to ISO4309) :

1. Whenever there is severe corrosion. Any development of slight corrosion shall be noted and watched closely;
2. Whenever there are broken wires, as follows:
  - a. When there is more than one valley break. A valley break is a wire break occurring in the valley between two adjacent strands.
  - b. When there are six (6) randomly distributed broken wires in one rope lay or three (3) broken wires in one strand in one rope lay. (A rope lay is the length along the rope in which one strand makes a complete revolution around the rope.)
3. Whenever there are broken wires in the vicinity of attachments. If this condition is localized in an operating rope, the section in question may be eliminated by making a new attachment. This may be done instead of replacing the entire rope.
4. Whenever there is abrasion, scrubbing, flattening, or peening that causes loss of more than one-third of the original diameter of the outside wires.
5. Whenever there are severe kinks, crushing, birdcaging, or other damage resulting in distortion of the rope structure.
6. Whenever there is evidence of any heat damage resulting from a torch or caused by contact with electrical wires; and when the reduction from the nominal diameter of the rope is more than 0.45 mm (0.017 in)

## **4 The e.lift hoist**

### **4.1 Description**

The e.lift is used to raise, support and lower suspended scaffolds and work cages on, or in, buildings and structures.

If this hoist is used for any other purpose, you must take all necessary precautions to ensure that both the design and operation of the setup in which the hoist will be used will be hazard free, and that such use conforms to the manufacturer's specifications.

Before using the e.lift, learn the procedures described in this manual. Any operation in violation of these instructions may result in bodily injury or death.

The use of the e.lift within the United States is governed by OSHA CFR 29. Consult OSHA CFR-1926 for temporary applications and OSHA CFR 29-1910 for permanent applications.

It is the duty of the employer to provide each operator with a copy of this manual.

FIXATOR reserves the right to make changes or modifications to its hoist. Users of this equipment must request current operating information prior to using this equipment. Call your local hoist supplier.

This manual is included with each e.lift. Additional copies are available from your hoist supplier. Keep a current copy of this manual with the hoist at all times.

#### **4.1.1 Specifications**

The e.lift hoist has a maximum working load limit (WLL) of

- 2200lbs/1000kg for the type 527A
- 1500lbs/680kg for the types 527C and 527L

It is displayed on the hoist's plate. When installed on a platform or frame, the load that can be put on this platform or this frame is variable and determined by its manufacturer.

Adjusting the load limiter must be consistent with this load (see §4.11).

# INSTRUCTION MANUAL

## Electric scaffolding hoist e.lift

### Type 527&derived

| Type                                                                   | 527A                                                                                                                                            | 527C                           | 527L             |
|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------|
| WLL                                                                    | 1000kg / 2200lbs                                                                                                                                | 680kg / 1500lbs                |                  |
| Motor P                                                                | 1.85kW/2.5hp                                                                                                                                    |                                | 1.25kW/1.7hp     |
| Voltage                                                                | 208V - 3~ - 60Hz                                                                                                                                |                                | 208V - 1~ - 60Hz |
| I Nominal / start                                                      | 8.5/22A                                                                                                                                         | 7.1/21A                        | 8.8/25A          |
| Weight                                                                 | 73kg/160lbs                                                                                                                                     |                                | 71kg/156lbs      |
| Dimensions                                                             | 789x408x291mm / 31.1"/16.1"/11.5"                                                                                                               |                                |                  |
| T° for use                                                             | -10 ° C / +55 ° C * / 14°F//131°F                                                                                                               |                                |                  |
| Operating Speed                                                        | 0.15m/s / (9m/mn – 30ft/min)                                                                                                                    |                                |                  |
| Emergency descent rate                                                 | 0.10m/s / (6m/mn – 20ft/min)                                                                                                                    |                                |                  |
| Wire rope Ø and type                                                   | Ø9.5mm / 3/8" ; 5x19 or 5x26, Warrington Seale, Polypropylene High Density Core, Right Regular Lay, preformed wire rope with galvanized finish. |                                |                  |
| Minimum breaking load                                                  | 6800kg / 15000lbs                                                                                                                               |                                |                  |
| Load limiter                                                           | Yes, adjustable                                                                                                                                 |                                |                  |
| No load limiter                                                        | Yes, not adjustable                                                                                                                             |                                |                  |
| Hour Meter                                                             | Yes                                                                                                                                             |                                |                  |
| Coverage (as to load capacity, electrical fire and shock hazards only) | USA (UL1323)                                                                                                                                    | USA/CAN / (UL1323 CSA Z271-20) |                  |

\*: Use between -20°C and -10°C is possible providing a gradual and uniform preheating unloaded operation is carried out, then the load can be applied as soon as the hoist reaches a T ° - 10 ° C

User must verify that the wire rope meets or exceeds applicable codes for breaking strength safety factor.

US temporary applications require 6:1.

Canadian temporary applications require 10:1.

#### 4.1.2 Features of the e.lift Hoist

##### Operating Range:

208 V – 60Hz – 1 or 3 phased

Tested in various Under and Over-voltage situations.

- Reduces service calls
- Extends electric component life
- Eliminates power-induced down time
- Allows longer drops with yoked hoists
- Saves time and money

##### Voltage Indicator

Indicates voltage is flowing to unit

- Easy visual inspection can eliminate a service call
- Technician can diagnose voltage problem by phone

##### Built in phase order control (527A or 527C only)

A relay will disable the hoist (white light is OFF) if

- there is a wrong order in the 3 phases or
- if the voltage of one phase is
  - o below 80% of the 2 others or
  - o below 170V.

- Easy visual inspection can eliminate a service call
- Technician can diagnose voltage problem by phone

##### Primary Brake

An electromagnetic brake stops the motor.

It opens when activating UP or DOWN buttons.

##### Overspeed Secondary Brake (called Securichute)

Stops hoist in overspeed condition

- Ensures greater operator safety
- Improved reliability

##### Built-in hour meter

Gives information of the amount of use

- Easy visual inspection can eliminate a service call
- Saves time and money during maintenance operations

##### Controlled Descent

Allows downward travel at a controlled rate of speed in the event of power loss

- Eliminates need for rescue
- Allows self-rescue of workers and platforms

##### Built in load controller

Will trip and stop UP&DOWN if the load is above 1.25 times the rated load.

Will stop DOWN if the load is below 218 lbs (99kg)

- Reduces risks for users and/or damage to equipment from excess loads.

#### Remote Ready

Built-in pendant port accepts plug-in remote control

- No need to drill and wire remote into hoist
- Leaves hoist mounted controls operable

#### 4.1.3 Optional Feature of the e.lift Hoist

See also Annex 5

- Transport Wheels – ref 030050 :



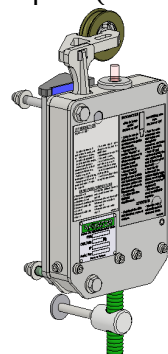
- Exit spring - ref : 030059 :



- Hook mounting kit – ref 030025 : (do not associate with optional slack rope device)
- Top Limit Switch – ref 216102 :



- Optional slack rope device for secondary wire ropes (Securistop 2200 lbs) – ref 215320



030025)

(do not use with optional hook

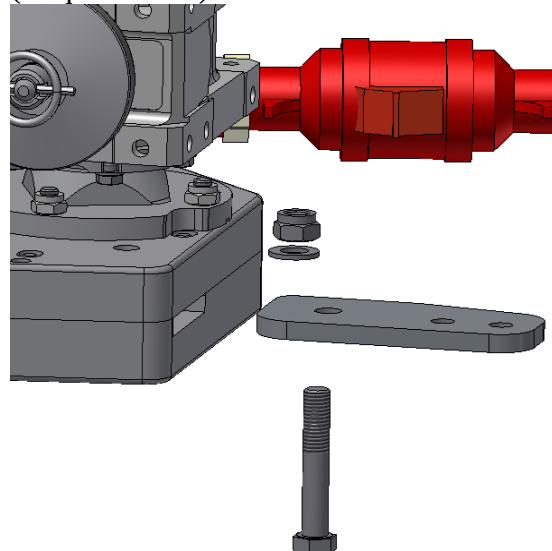
#### 4.2 Parts of the e.lift hoist

See page 2

#### 4.3 Temporary platform mounting kit

If it is not installed on your hoist:

- Install the piece in the specially designed slot
- Tighten the HM14x80 bolt supplied with the kit (torque 79N.m)



You can connect the hoist to the anchor point of a platform with this piece and Ø½inch SAE Grade 5 or better bolts (not supplied) : 2 bolts + 4 washers + 2 nylon nuts.

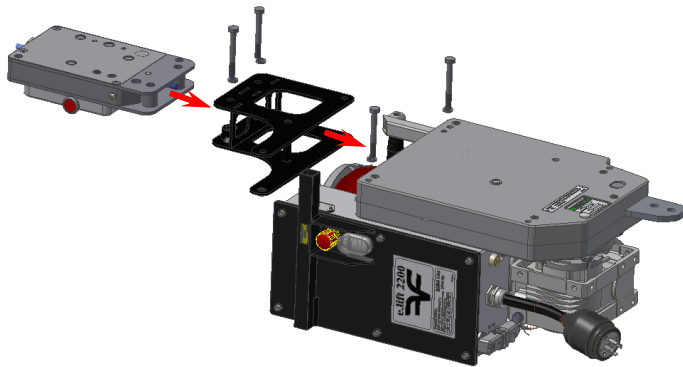


Hoist connection bolts must not bear on threads.

#### 4.4 Overspeed installation

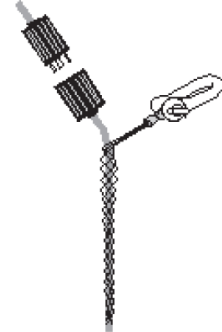
If it is not installed on your hoist :

- attach the extension bracket to your hoist with the 2 bolts (HM10x80) and 2 split washers (torque 30N.m)
- insert the overspeed inside the bracket and attach it with the 2 bolts (HM10x80) and 2 split washers (torque 30N.m)



- Always maintain a level platform.

Always secure the power cord to the platform with a strain relief fitting and shackle so the cord weight



When your hoist is installed on your platform, NEVER remove the anti-fall. Your overspeed is mandatory.

#### 4.5 Power supply



Check the capacity of each connection element to ensure your safety.

The power supply must be fitted with

- main switch
- residual current device (or earth leakage circuit breaker) of 30mA
- overcurrent protective device (automatic fuse type C).

| Type               | SOOW                                                                    |
|--------------------|-------------------------------------------------------------------------|
| Core and Size      | 1Phase: 3 cores 10 AWG                                                  |
|                    | 3Phase: 4 cores 10 AWG                                                  |
| Rated Voltage      | 600 V                                                                   |
| Recommended Length | 1Phase : 250ft (76m) per hoist<br>3Phase : 500 ft (152 m) per platform. |

Use a female connector and a cover (not supplied) :  
1Phase: HBL2323 (Maker: HUBBEL)  
3Phase: HBL2423 (Maker: HUBBEL)  
Cover: HBL6031 (Maker: HUBBEL)

- The voltage loss for 100 ft (30 m) of 10AWG electrical cable is about 2 volts for each hoist used.
- If startup is sluggish, determine the voltage at the motors when running : UP is between 190-240 VAC.
- If the voltage is lower than 190V when running:
  - Increase voltage with a transformer at the power source when voltage is low, OR
  - Use larger gauge or separate electrical cables for each hoist to improve voltage supply.
  - Do not start multiple hoists at the same time to ensure better hoist performance.

will be off the connector.

When finished for the day, make certain the power cord is disconnected at the hoist pigtail as well as at the main outlet.



Be sure to ground all electric equipment. Do not use wire rope as a ground !

#### 4.6 Reeving the primary suspension wire rope



Use protective gloves when handling wire rope.

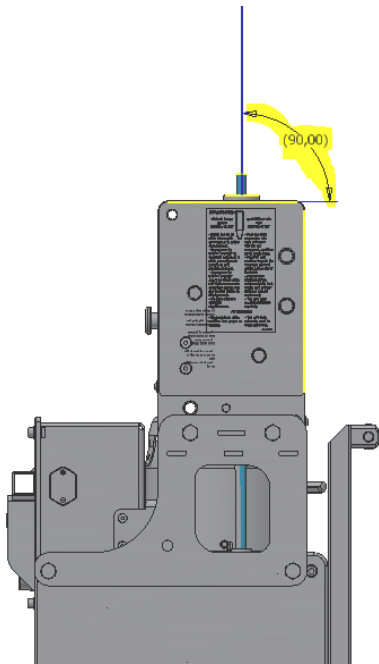


Avoid the formation of loops when unwinding. Install the hook of your hoisting cable to the anchor point at the top of the shaft.

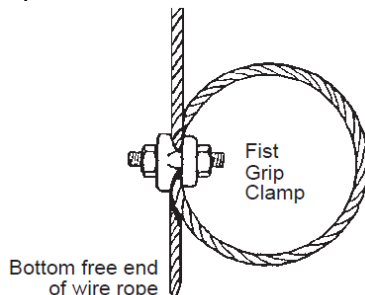
- Turn the hoist on
- Check that the various safeguards are not activated (optional limit switch, phase sequence control etc.). Check that the overspeed reset lever is reset.
- Push the main suspension wire rope bullet end through the overspeed, and then guide it into hoist.
- Press UP and continue to push the cable by hand until it comes out of the hoist.
- Press the UP button until the cable is slightly taut. (Make sure it is not wrapped around equipment)



Under load, the cable must enter perpendicularly into your hoist.



If it is not possible to lower the platform to the ground, secure the tail line with a loop termination to prevent the platform from running off the suspension ropes :



Before rigging in such an area, consult a safety professional.

Press the “UP” Button to lift the e.lift from ground along the wire rope so that the hole of the anchor point and the hole in stirrup are lined up, and then attach the hoist to the stirrup. Position of the Rope End should be outside of the platform. Use Torque Wrench to tighten the Bolts.

**NOTE:** Do not expose the wire rope to fire, temperatures above 200° F (93.3° C), passage of electrical current, or corrosive atmospheres and chemicals. Such exposure will make the wire rope unsafe.

Acids will corrode and reduce the strength of both the inner and outer strands. When using corrosive chemicals, discard the wire rope after completing the project, or sooner if any damage is evident. Do not save wire rope that has been in contact with corrosives. When in doubt, replace the wire rope.

#### 4.7 Daily testing and inspection



**WARNING** Perform all daily tests to ensure correct operation! Do not use the hoist for lifting until it has successfully completed the daily tests.

The following tests must be performed at the start of each work shift.

If the hoist fails any test, **DO NOT USE THE HOIST UNTIL IT IS REPAIRED.**

Refer to the pictures on page 2 to identify components. All tests are performed at or near ground level.

##### 4.7.1 Testing the primary brake

With platform or false car fully rigged and loaded, check for mechanical function by cycling UP and DOWN several times near ground level or safe surface. When stopping the hoist, the load must be held immediately.

##### 4.7.2 Testing the Overspeed Brake

While powering the hoist UP and DOWN approximately 3 feet (0.9 m), look through the window into the overspeed compartment to see whether the flywheel is turning.



Dereeve the wire rope:

- Re-insert the rope about 12" (30 cm) through the overspeed.
- Holding the wire rope firmly, pull it out quickly. If the brake is working correctly, it will grab and hold the wire rope in less than 4" (10 cm)

- Repeat this test at least 3 times. If the brake does not work correctly every time, DO NOT USE THE HOIST. Return the hoist to your supplier.

Reset the overspeed brake by turning its lever clockwise.



#### 4.7.3 Testing the optional slack rope secondary brake

Refer to §5.4

#### 4.7.4 Testing the Overspeed Brake Test Button

Press the control switch in the UP direction and raise the platform approximately 3 feet (0.9 meters).

While you press the control switch in the DOWN direction, push the overspeed brake test button. The hoist should stop.



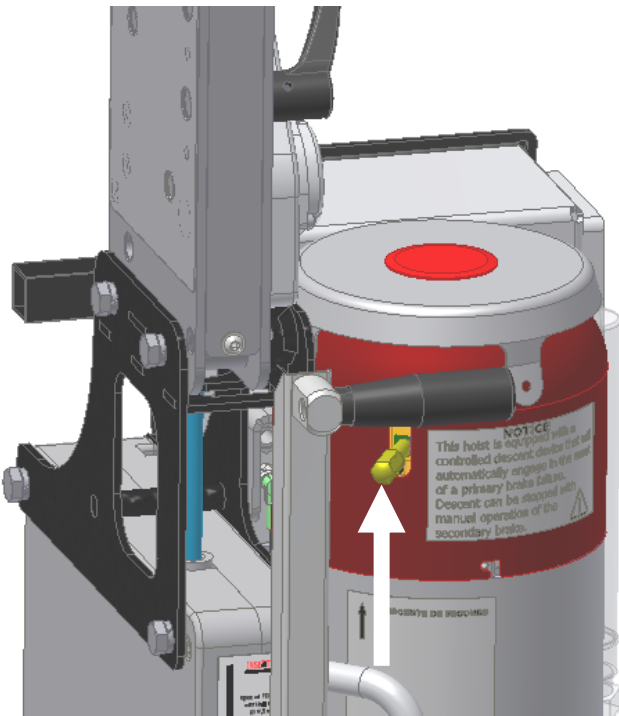
**WARNING** If the hoist continues to derieve the wire rope while the overspeed is triggered, this may indicate that the no-load controller is out. Stop operating button and DO NOT USE THE HOIST. Return the hoist to your supplier.

#### 4.7.5 Testing the Controlled Descent

Raise the hoist approximately 3 feet (0.9 meters) under load.

Disconnect the power supply.

During this test, or when you are actually using the controlled descent feature, pull the controlled descent lever CAREFULLY, to make sure the hoist does not overspeed. The hoist should descend at a slow, controlled speed.



In some cases, it may be necessary to help this movement with the hand wheel; remove the red cap and insert the hand wheel on the axle. Turn manually and remove the hand wheel when the movement is finished. Re-install the red-cap.

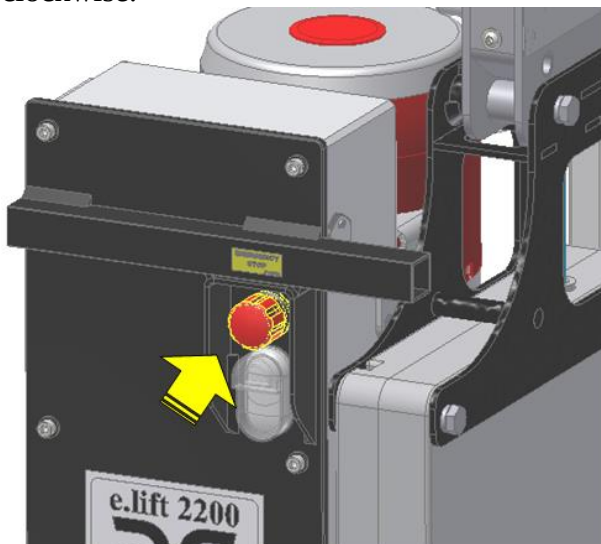
**WARNING** If the overspeed brake trips during this test, the controlled descent system is not working properly, and **THE HOIST SHOULD NOT BE USED.**

#### 4.7.6 Testing the Emergency Stop Button

While the hoist is running UP or DOWN, press the electrical red emergency stop button.

Once the emergency stop button has been pressed, the hoist should not move at all.

To reset the emergency stop button, turn it counter clockwise.



#### 4.8 Operating the hoist



##### **WARNING**

**BEFORE** operating this hoist, you must understand and follow the instructions in this manual. You must be properly trained, physically fit and authorized to operate the hoist. Failure to comply with these instructions could result in serious injury or death.

- **DO NOT OPERATE THE HOIST** IF you hear unusual noises.
- **DO NOT OPERATE THE HOIST** IF adjustments or repairs seem necessary.
- **DO NOT OPERATE THE HOIST** IF any warning, operating or capacity instructions are unclear, missing, illegible or damaged.
- Report any problems to your supervisor and also notify the next operator when changing shifts. Tag the hoist “DO NOT USE UNTIL REPAIRED”.
- **NEVER** operate an electric hoist or any electrical equipment in an explosive atmosphere. Explosive atmospheres exist around refineries, chemical plants, grain elevators, distilleries, inside silos and mines or around coal handling equipment.

This is not a complete list!

Consult an expert if you are in doubt about the safety of your immediate surroundings.

##### 4.8.1 Inspect after Previous Use

Before operating the hoist, inspect the following:

- Wire rope
- Power supply
- Rigging
- Platform
- Hoist

Verify that all parts are present, in proper working order, and are not damaged.

Bolts, nuts, and clamps must be well secured.

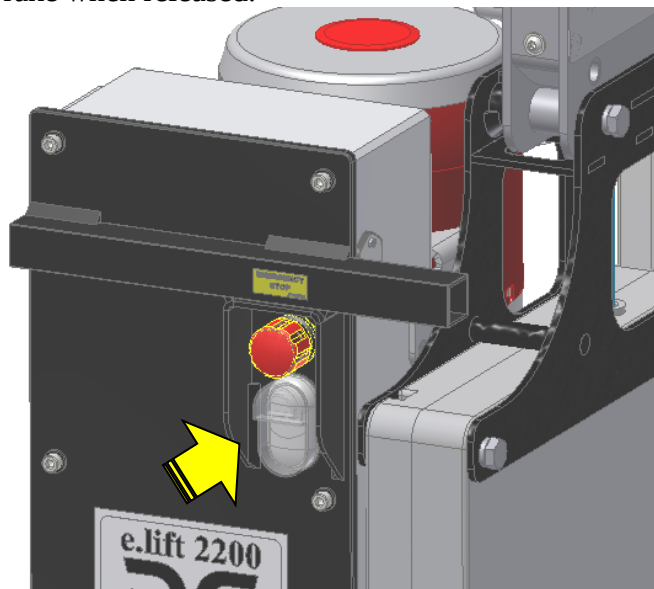
Ensure the hoist is secured to the stirrup with SAE Grade 5 fasteners and locknuts that are properly installed or with an appropriate hook.

When using the hoist in a dirty environment that contains epoxy, paint, cement, sand blast residue, or corrosive material, inspect the operation of the overspeed brake several times a day. Protective hoist covers are recommended in these environments. Contact your hoist supplier.

The maximum capacity of the hoist (WLL) should be the basis for calculations of anchor strength. Never use the value set in the load monitoring system.

#### 4.8.2 Normal use

For normal ascent and descent of the hoist, press the buttons UP«↑» or DOWN«↓». They are spring loaded and return to the OFF position and apply the brake when released.

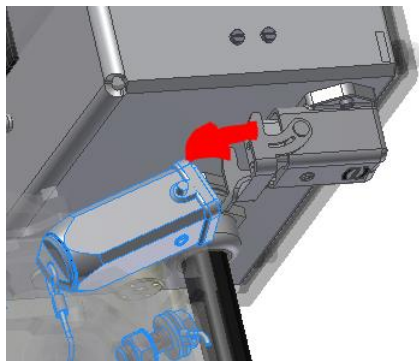


If the hoist does not stop right away, press the emergency stop and the overspeed brake test buttons. Unplug the electric supply plug from the power source and have your hoist maintained.

**!** During normal use or in the air, never disconnect the hoist from the stirrup nor the overspeed secondary brake from the hoist or its bracket.

#### 4.8.3 Use with the remote control

Disconnect the protective cover of the pendant socket :



And connect the pendant cord plug into



the socket :

For normal ascent and descent of the hoist, press the buttons UP«↑» or DOWN«↓». Press the emergency

stop.in case of malfunction.



When the remote control is connected, the buttons on the hoist are still operational.

The lower button is a SHUNT of the NO-LOAD security.

#### 4.8.4 Cautions for Cold Weather Operation

When operating the hoist in cold weather, test the overspeed brake frequently to make sure it is not frozen. If the hoist will not climb or descend while you are trying to test the overspeed brake, DO NOT USE THE HOIST unless this is corrected during the thaw-out process outlined below.

If the overspeed brake does not stop the hoist, DO NOT USE THE HOIST until the brake has been thawed, is fully dry, and is in proper working condition.

Thaw the brake by blowing ducted dry heat (150° F / 65.6° C max.) on the brake area. This can be done with an ordinary hair dryer. DO NOT USE AN OPEN FLAME on the hoist.

If the hoist does not operate properly after thawing, DO NOT USE. Return the hoist to your supplier.



**WARNING** Use extreme caution when operating the hoist in freezing temperatures. Test frequently for normal hoist operation. All tests must be done within 3 feet (0.9 meters) of ground level.

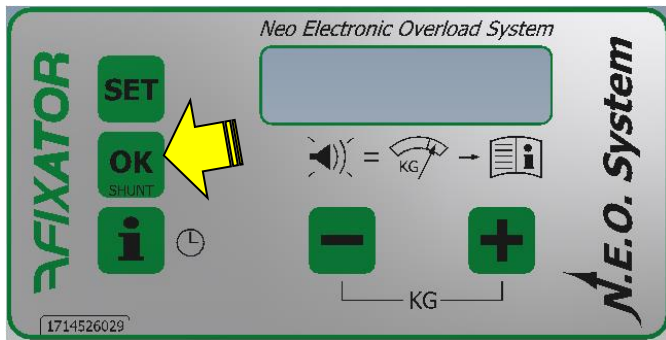
#### 4.9 Wire rope removal (Dereeving)



**WARNING** In order to prevent the platform or hoists from tipping and causing injury, ensure that the platform is properly supported on a stable surface before putting slack on the primary suspension wire rope.

Your hoist is equipped with an electrical "CABLE SLACK" safety feature; as soon as the cable tension approaches zero, the descent is prohibited. Press the "Shunt" button on the Monitoring Panel : it will shunt this security for 30 seconds (renew if necessary), and continue to press the DOWN button.





You may have to help remove the last 15" (38 cm) of wire rope. Do this by grabbing the wire rope above the rope insertion point, holding the overspeed brake reset lever in the "reset" position, and slowly pulling the primary suspension wire rope out of the hoist.

#### 4.10 Hour meter

To determine the number of hours of operation of your hoist, hold the button **i**.

(Note: when the hoist is ON, an indication of the estimated load is displayed simultaneously)

CHARGE = 0145kg  
31642:53:42

The format of the time display is hhhh:mm:ss.

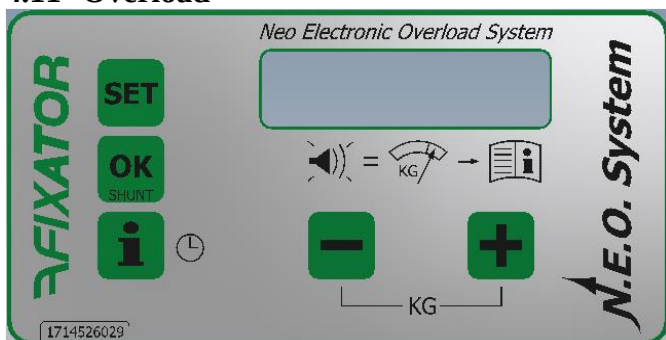
The counter is limited to 99999h of operation.

If exceeded, a "!" is displayed on the last character of the first line of the display, when is in normal operation. The display becomes:

READY !  
MIN 099-MAX 1000

Contact your supplier for resetting.

#### 4.11 Overload



A load control is included in the e.lift hoist. It allows you to stop the lifting and lowering movement of the hoist before the load reaches a maximum of 125% of the selected setting.

Upon reception, the factory overload limit setting is WLL. The hoist is therefore stopped before reaching :

- Type 527A :  $1000 \times 1.25 = 1250\text{kg}/2750\text{lbs}$ .
- Type 527C or L :  $680 \times 1.25 = 850\text{kg}/1870\text{lbs}$

(Note: when the hoist is on, an indication of the estimated load can be displayed by pressing the



Button).

If necessary, a correction of +/-50kg of the measurement can be performed. This offset adjustment can only be done by Fixator or an authorised repairer (see instructions).

##### 4.11.1 In case of exceeding the permissible load

- Lowering or raising of the hoist is automatically stopped

- the hoist gives an acoustic signal. The buzzer will stop if the load falls below this threshold, or if you turn off the control box. The display becomes:

> 1000kg  
MIN 099-MAX 1000

or else

MODE PROTECTION+  
MIN 099-MAX 1000

if the load has suddenly exceeded 1.25xWLL (that is 2750lbs/1250kg for type 527A or 1870lbs/850kg for type 527C & 527L).



Before taking any action, identify the cause of the overloading.

- Remove the cause of the excess load. The alarm stops.

- The display panel states

OK?  
MIN 099-MAX 1000

- press **OK**.

Raising and lowering the hoist is possible again.

#### 4.11.2 Setting the load limiter

To adapt to different normal load situations for your platform or work cage, the overload on your e.lift hoist is adjustable. The setting range is from

- 264 to 2200lbs (120 to 1000kg) for type 527A
- 264 to 1500lbs (120 to 680kg) for type 527C and 527L

in 88lbs/40kg increments, that is:

|                 |                |
|-----------------|----------------|
| 120 kg/264lbs   | 160 kg/352lbs  |
| 200 kg/440lbs   | 240 kg/528lbs  |
| 280 kg/616lbs   | 320 kg/704lbs  |
| 360 kg/792lbs   | 400 kg/880lbs  |
| 440 kg/968lbs   | 480 kg/1056lbs |
| 520 kg/1144lbs  | 560 kg/1232lbs |
| 600 kg/1320lbs  | 640 kg/1408lbs |
| 680 kg/1496lbs  | 720 kg/1584lbs |
| 760 kg/1672lbs  | 800 kg/1760lbs |
| 840 kg/1848lbs  | 880 kg/1936lbs |
| 920 kg/2024lbs  | 960 kg/2112lbs |
| 1000 kg/2200lbs |                |

The overload limit depends on your application or on the specifications of your platform (RL); it is essential for your safety.

To change the setting of this limit:

- Simultaneously press the buttons  and 
- Release
- Press 
- Release the button
- Press 
- Release the button

(Note: you have 5 seconds between each keystroke, if you exceed this time, the procedure is automatically cancelled and the machine returns to the previous setting)

- The display changes as follows:

1000 kg  
MIN 099-MAX 1000

(1000 is an example for the current value of your setting)

- Press the buttons  or  to increase or decrease the value by 40kg/88lbs
- Press 
- Turn off and restart your hoist
- The display then shows

READY  
MIN 099-MAX 0480

(0480 is an example, for your new setting)

If necessary, a hiding plate to be screwed can be supplied to forbidden any modification of the settings (ref : 215066).



The overload of your hoist is not a weighing instrument. After this adjustment operation, perform a test with the maximum load to ensure that the theoretical weight that you used is correct. Your installation should not be able to raise "Settingx1.25"  
*For example Setting = 800kg*  
*Place a 800x1.25 = 1000kg test load on the wire rope. The hoist should not be able to lift this load and the alarm should sound.*

#### 4.12 Hoist maintenance

The hoist should be returned to a certified FIXATOR service center for periodic maintenance at least once a year from the date it was placed into service and every 100h.

In harsh environments (sandblasting, marine, back and forth operation at full load, doubts about the proper use etc) a higher frequency of verifications may be required.

We recommend the use of a logbook (example available on request); it is not provided; it is up to the owner to create or acquire one in which the following should be noted:

- the name of the person in charge of equipment
- serial numbers of components (hoists, security systems, etc)
- operator names and dates / periods of use
- the number of hours of use,
- the characteristics of the cables used
- the number of hours the cables are used,
- a record of incidents and actions taken to remedy them
- forecast dates of periodic inspections and record of actual dates of inspections

If the hoist fails any inspection or operation, it should be returned for service.

NOTE: A maintenance program should start for each hoist immediately after it is entered into service.

This maintenance program should comply with recommendations in the applicable parts of Instruction Manual, and all pertinent Federal, State, Provincial and Local regulations.

Regular inspections should be followed for the life of the hoist and written inspection records kept as specified. In some countries, periodic audits and reviews of the installation are required.

#### 4.13 Troubleshooting

| Defects found                                         | Potential causes of defect                                                                                                                                                                                                                                                                                                                                                                                                                | Remedies                                                                                                                                                                                                                                          |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The motor is not running and the light is OFF         | Power at junction box is off<br>Circuit breaker is tripped<br>Plugs are not connected<br>Damaged electrical cord<br>Power indicator light is burnt out<br>Phase order is wrong<br>Not enough power is being supplied to hoist                                                                                                                                                                                                             | Hoist, yoke, power cord, and power source to be checked by a competent person                                                                                                                                                                     |
| The motor is not running and the light is ON          | The temperature sensor is activated<br>The brake lacks power, is disconnected or out of service<br>The overload is activated<br>The motor has a mechanical defect<br>The optional limit switch is activated<br>The main contactor in the hoist is off or disconnected<br>Error in the control circuit<br>Error in the power circuit<br>Failure of the power supply<br>Current leak to ground<br>Moisture sticking the brake on the motor. | Wait until it cools; it may takes 30'<br>Reconnect the brake or change<br><br>Reduce the load<br>Check the motor<br>Inspect<br><br>To be checked by a competent person<br><br>Tap on the motor shaft slightly while pressing the control buttons. |
| The hoists does not lift                              | The groove of the pulley is worn or dirty<br>The temperature sensor is activated<br>The overload is activated<br><br>The motor is blocked<br>The optional limit switch is activated<br>The main contactor in the hoist is off or disconnected<br>Error in the control circuit<br>Error in the power circuit                                                                                                                               | Verification<br>Wait until it cools<br>Reduce the load; check for friction on the guides<br>Check<br>Inspect<br><br>To be checked by a competent person                                                                                           |
| The hoist does not lower                              | The overspeed is triggered<br>The temperature sensor is activated<br>The overload is activated<br>The no-load switch is activated<br>The motor is blocked<br>The main contactor in the hoist is off or disconnected<br>Error in the control circuit<br>Error in the power circuit                                                                                                                                                         | Verification<br>Wait until it cools<br>Reduce the load<br>Check then press OK / shunt<br>Check the motor<br><br>To be checked by a competent person                                                                                               |
| The motor is powered but stops (abnormal loud noises, | The brake lacks power, is disconnected or out of service<br>The motor is blocked<br>Run Voltage is too low                                                                                                                                                                                                                                                                                                                                | Reconnect the brake or change<br><br>Verification (maintenance)<br>Check the power supply;<br>Replace the power cable (shorter or with                                                                                                            |

|                                                                     |                                                                                                                                                      |                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| hoist hums, starts slowly and is sluggish ...)                      |                                                                                                                                                      | larger wires); Add a booster transformer                                                                                                                                                                                                                                                     |
| Unusual Noises coming from the Hoist                                | Wire rope may be jammed                                                                                                                              |  If you are in the air : Push the emergency stop button, push the overspeed brake test button and wait to be rescued. Unplug the hoist from the power cord<br>If you are on the ground, inspect wire rope. |
| Current too high                                                    | The brake lacks power, is disconnected or out of service<br>The motor is blocked                                                                     | Reconnect the brake or change it<br><br>Verifications (maintenance)                                                                                                                                                                                                                          |
| Slow sliding                                                        | The grooved pulley is worn or dirty<br>The wire rope is worn<br>The main brake is worn, dirty or humid<br>The adherence system is worn or dirty      | Verification<br>Verification<br>Replace, clean or dry the brake<br>Verification                                                                                                                                                                                                              |
| Uncontrolled manual descent                                         | The manual lowering capacitor is faulty<br>Error/default in the control circuit                                                                      | Replace the capacitor<br>Contactor at K1 and K2 to be checked by a competent person                                                                                                                                                                                                          |
| Manual lowering not possible                                        | The brake lacks power or is blocked<br>The overspeed is triggered<br>The hoist load is too low to initiate movement                                  | Verification<br><br>Use the hand wheel (see page 2)                                                                                                                                                                                                                                          |
| The overspeed flywheel does not turn while hoist moves UP or DOWN   | Wire rope worn out<br>Material or dirt inside<br>Components worn                                                                                     |  If you are in the air : Push the overspeed brake test button and wait to be rescued.<br>If you are on the ground, inspect.                                                                              |
| Cannot reset the overspeed reset lever                              | The overspeed is triggered due to :<br>Wire rope too small<br>Wire rope too short<br>Jamming<br>Test push button engaged<br>Incline of the overspeed | Do not reset the overspeed until you know the reason that the overspeed has been tripped and there will be no danger when it is reset.<br>Power the hoist up a few inches at the same time as you turn the reset lever clockwise until the reset lever engages.                              |
| Hoist does not stop immediately when the Control Switch is released | Error in the control circuit<br>Components worn                                                                                                      | Push the overspeed brake test button and wait to be rescued<br>Have the hoist checked by a competent person.                                                                                                                                                                                 |

#### Specific overload errors:

At power up, the overload control system performs a series of self-tests to verify that it is operational.

Also, during operation, several checks are performed to ensure that the circuit board and the sensor to which it is connected are working properly.

In all cases, if a fault is found, the movements are prevented to ensure the safety of the system and users.

The hoist remains in this state until the power supply is turned off.

The display indicates which fault was encountered.

For example, if channel 1 receives no information from channel 2 and if channel 2 detected a problem with the sensor or the cable that connects them, then the display shows:

V1 ERR = COM CAN  
V1 ERR = CAPTEUR

Turn off the power and check the hoist.

If the measured load is “negative” (less to -100kg) (gears deteriorated, foreign body in the hoist, etc.), the system considers that there is a fault, the buzzer sounds and the display shows the following:

MODE PROTECTION-  
MIN 099-MAX 1000

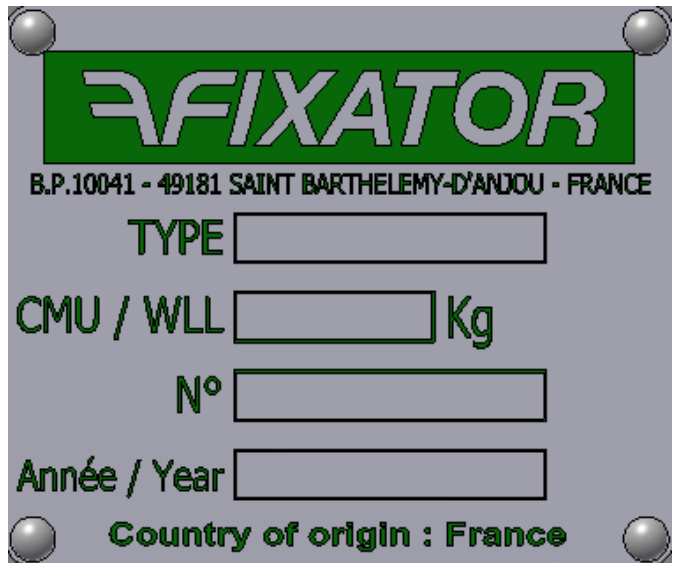
Turn off the power, press the overspeed test button if you are in the air and check your hoist.

In case of replacement of the grooved pulley axle or the electronic load control module, a verification of the measurement on a test bench is required. Exceptionally, a special recalibration procedure may be necessary. Contact your repair service or FIXATOR.

#### 4.14 Spare parts



Use only FIXATOR original spare parts.  
Note and send the information listed on the plate shown below before requesting parts.



#### 4.15 Disposal

Disassembly and disposal of the hoist must be in accordance with the current regulations in force. Electrical components, gear oils, greases, etc ... should be separated and sent to the appropriate treatment locations.

#### 4.16 Batteries

The 2 Lithium batteries in the overload electronic module should not be recharged. They can only be replaced with an identical model. They must be disposed of at a suitable location. Each battery (CR2032) contains a few milligrams of Lithium. Do not expose to temperatures above 85 ° C or extreme humidity. Do not incinerate. Do not disassemble. Do not short circuit.

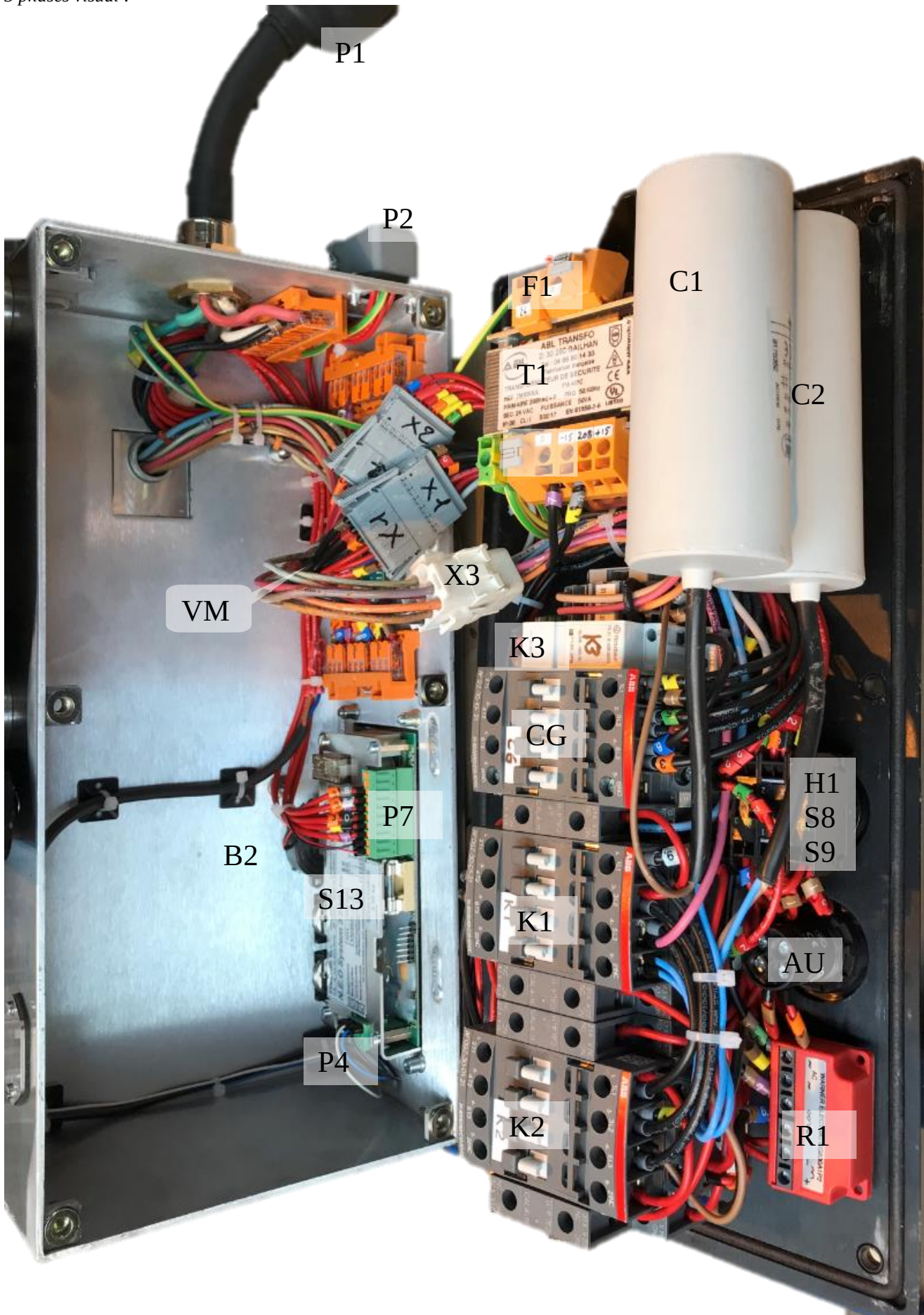


In case of non-compliance with these instructions, batteries may explode or leak, causing injury or damage to your equipment.

## 5 Appendices

### 5.1 Drawings&diagrams

3 phases visual :



# INSTRUCTION MANUAL

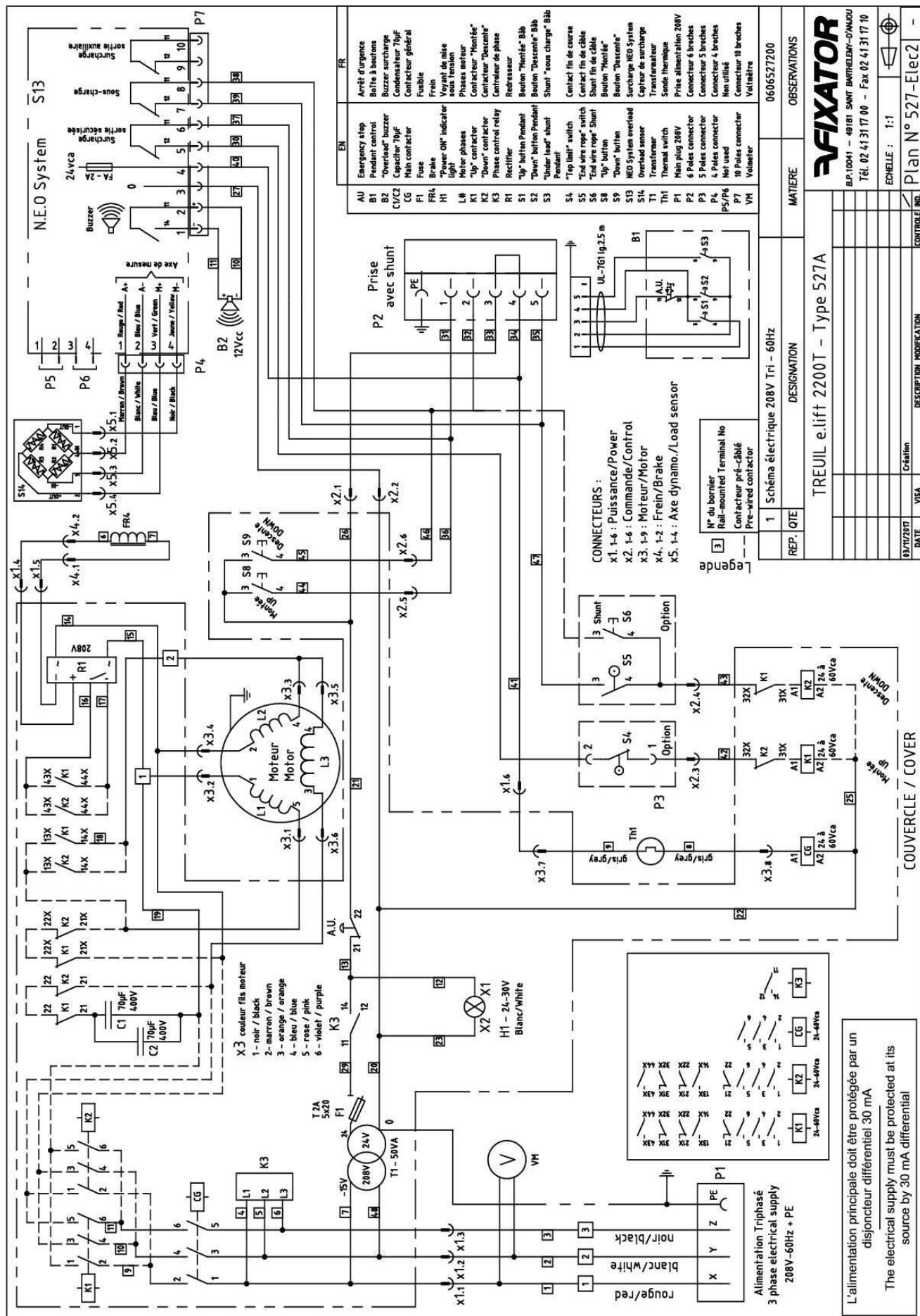
## Electric scaffolding hoist e.lift

### Type 527&derived

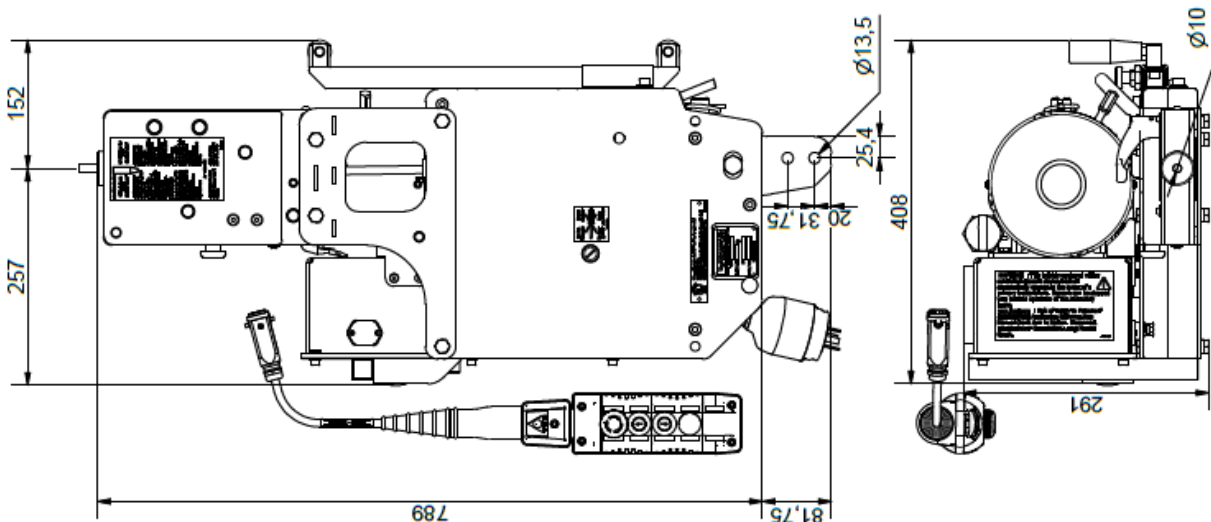
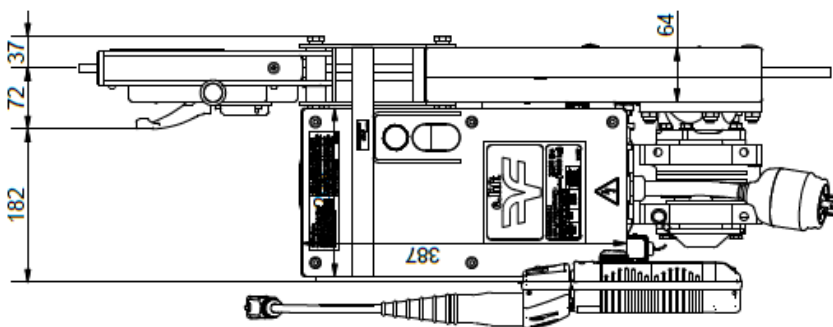
Ref: 1813000200

Page: 24/40

Version: 08/23



L'alimentation principale doit être protégée par un disjoncteur différentiel 30 mA  
The electrical supply must be protected at its source by 30 mA differential



## 5.2 Labels



**CHARGE UTILE : 2200 lbs**  
**MAX. LIFTING CAPACITY : (1000 kg)**

Moteur triphasé 1.85kW avec sonde thermique  
(3Ph motor 2.5 HP with thermic probe)

| Voltage          | Current | Travel speed         | Wire Rope                                        |
|------------------|---------|----------------------|--------------------------------------------------|
| 208V-3-<br>60 Hz | 8.5 A   | 9 m/min<br>30 ft/min | 9.5 mm - 3/8"<br>5/19 or 5X25<br>with fiber core |

1714527232

216101 for 527A  
216141 for 527C  
216162 for 527L

## SECURICHUTE

**Secondary Brake**  
**Ø3/8" - Ø9.5 mm**

**INTRODUCTION**  
**special wire rope**

- Ce câble doit rester propre.
- Le câble sous l'appareil doit rester tendu.

- Keep wire-rope clean.
- The wire under the device must be kept tensed.

**Sens de réarmement**  
**Direction of rearmament**

- L'essayer journellement avant l'emploi de l'appareil.
- Si prise des mâchoires du survitesse :
- 1 - Vérifier le bon fonctionnement de l'ensemble de l'appareil.
- 2 - Libérer les mâchoires en montant l'appareil soit électriquement, soit manuellement à l'aide du volant en bout du moteur.
- 3 - REARMER à l'aide du levier.

- Check daily before use.
- If the jaws are gripped on the wire rope :
- 1 - Check the correct working order device.
- 2 - Raise the winch pressing "UP" button when electrically operated or with the help of hand-wheel (located on the control box) by placing&turning it manually at the top of motor if power shortage.
- 3 - Unlock overspeed safety jaws by rearming the hand lever of the overspeed safety device, just pushing it down.

### POUR SORTIR LE CÂBLE - TO TAKE THE CABLE OFF

- Appuyer et verrouiller "Arrêt Urgence".
- Maintenir le réarmement et tirer sur le câble.
- Press and lock "Emergency stop" button.
- Keep down rearmament lever and pull-up wire-rope.

1714526270

215304

## INTRODUCTION

câble de levage  
spécial  
Ø9,5mm ou 3/8"



special lifting wire  
rope  
Ø9,5mm or 3/8"

- Enfiler la soie du câble à travers le survitesse et le guider dans le treuil.
- Appuyer sur le bouton "Montée" et continuer à pousser le câble manuellement jusqu'à ce qu'il ressorte du treuil.
- Appuyer sur le bouton "Montée" jusqu'à ce que le câble soit légèrement tendu (s'assurer qu'il ne soit pas enroulé autour de l'équipement).
- Ce câble doit être GRAISSE régulièrement.

- Push the main suspension wire rope bullet end through the overspeed, and then guide it into hoist.
- Press UP and continue to push the wire rope by hand until it comes out of the hoist.
- Press the UP button until the cable is slightly taut. (Make sure it is not wrapped around equipment)
- The wire rope must be GREASED regularly.

## ATTENTION

- L'extrémité du câble doit être bien propre et conique.

- The wire rope extremity must be clean and sharp.

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215309

**NOTICE:** This hoist is equipped with a controlled descent device that will automatically engage in the event of a primary brake failure. Descent can be stopped with manual operation of the secondary brake.



**WARNING:** Risk of Injury to Persons if Unintentional Application of Power Sets Manual Crank Arm in Motion. Disconnect Electric Power Cord Before Using Manual Crank.

1714527251

216104

#### Coup de poing pour ARRET D'URGENCE

#### Manual tripping for EMERGENCY STOP

- Pousser et tourner pour ACCROCHAGE.
- Tourner pour DEVERROUILLAGE.

- Press and turn in the emergency switch to lock.
- Turn in to unlock the switch.

241814



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216106

**EMERGENCY STOP**

1714527233

216091



#### EMERGENCY DESCENT DESCENTE DE SECOURS NOTABLASS DESCENSO DE SEGURIDAD

Only in case of power failure.  
Push and keep the lever up.

Uniquement en cas de panne de courant. Pousser et maintenir le levier vers le haut.

To raise:

- Take off cap.
- Put hand-wheel.
- Rise up the lever and turn in the hand-wheel.

Pour monter :

- Enlever le bouchon.
- Mettre le volant.
- Lever le levier et tourner le volant.

Nur bei Stromausfall benutzen. Zum Ablassen Hebel nach oben drücken.

Unicamente en caso de corte de corriente. Presione y mantenga la palanca hacia arriba.

Zum Heben :

- den Deckel am Motor öffnen.
- Das Handrad aufsetzen.
- Den Hebel heben und das Handrad drehen.

Para subir :

- Levante el gancho.
- Introduzca el volante.
- Pulse y gire el volante.

1714405431

241802



#### Manually-operated & Electrically-operated scaffold hoists

Classified by Underwriters Laboratories Inc. as to load capacity, electrical fire and shock hazards only.

1713527255

216109



216108

## WARNING :

**Only authorized trained and physically fit personnel** shall operate this hoist in strict accordance with the instructions on the hoist and applicable codes. Copy of instructions must be kept with the hoist.

CAUTION: IF THE MOTOR ENERGIZES BUT THE WIRE ROPE DOES NOT MOVE THROUGH THE HOIST, STOP THE HOIST IMMEDIATELY. Damaged wire rope may be jammed inside the hoist. Any attempt to move the hoist up or down could cause a dangerous situation and result in bodily injury.

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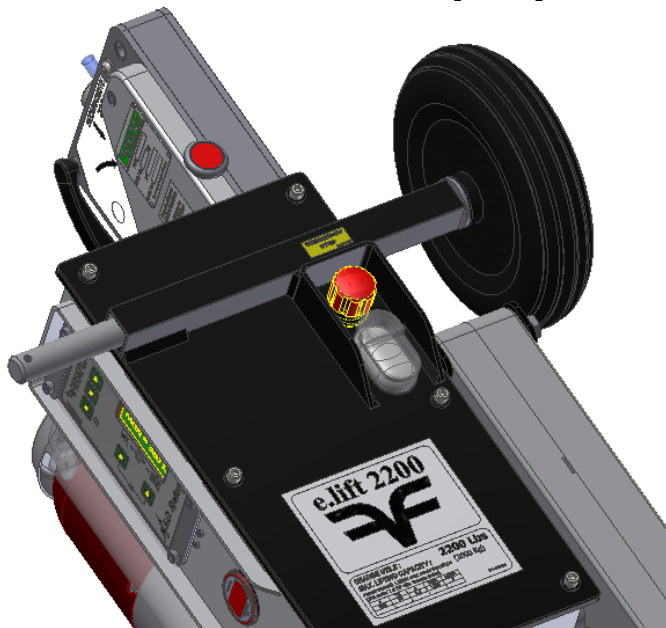
216105

### 5.3 Optional features installation

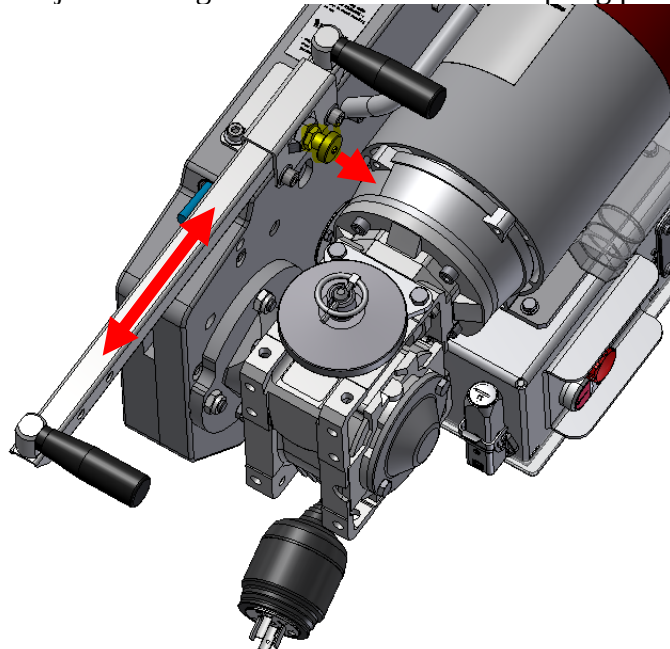
#### 5.3.1 Optional transport wheel kit (030050)

If it is not installed on your hoist:

- Remove the pin clips, washer and one wheel of the kit
- Insert the axle into the pipe
- Place back the wheel, washer and pin clips



- Adjust the length of the handle with the spring pin.



#### 5.3.2 Optional hook mounting kit (030025)



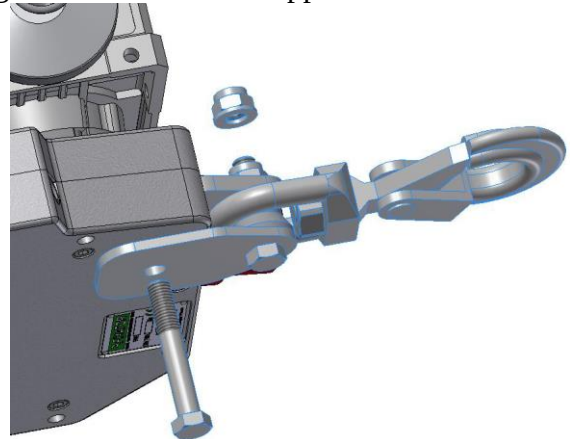
Never use with the optional slack rope device.



Never use on a 2 (or more) hoists suspended platform.

If it is not installed on your hoist:

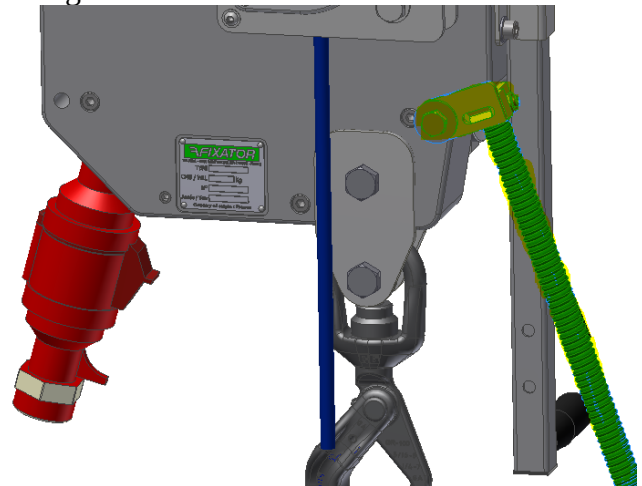
- Install the kit in the specially designed slot
- Tighten the M14 bolts supplied with the kit



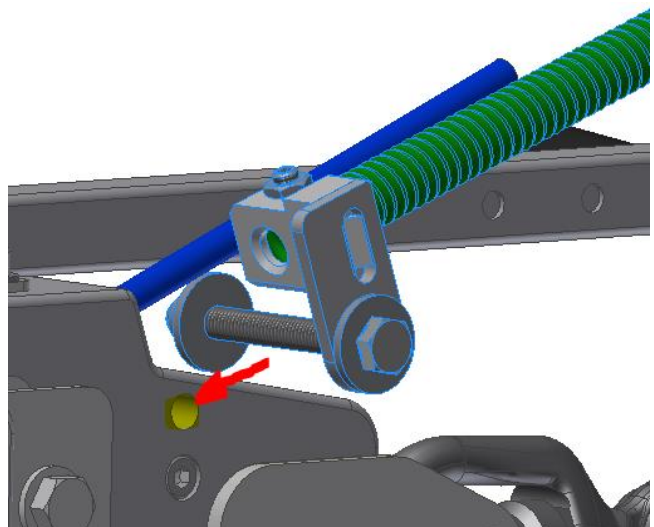
You may connect the hoist to the anchor point of a work cage or frame with this hook.

#### 5.3.3 Optional exit spring (030059)

To facilitate the exit of the wire rope after it comes out of the hoist, the kit 030059 can be installed on it. Its length is 1m.



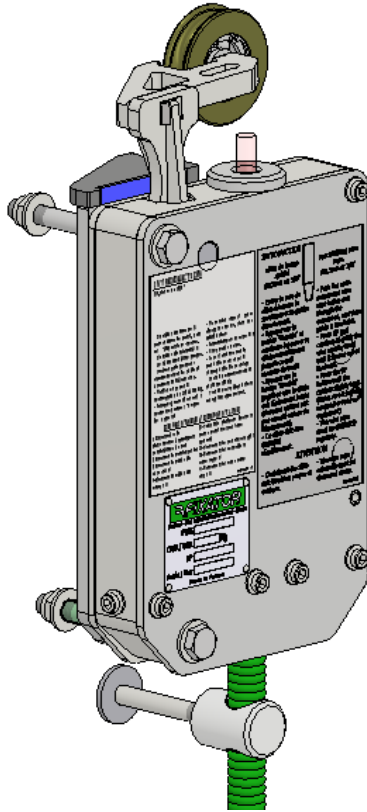
Insert and tighten the fixation screw and locknut HM10 inside the dedicated hole :



#### 5.4 Optional slack rope device for secondary wire ropes (Securistop 2200 lbs)

##### 5.4.1 Generalities

- 1 bolt M10x80mm (3.15in)



The Securistop 2200 additionally provides protection against slack wire rope or primary wire rope failure, when using secondary wire ropes with e.lift type 527A or 527C or 527L.



Never use with the optional hook mounting kit (030025).

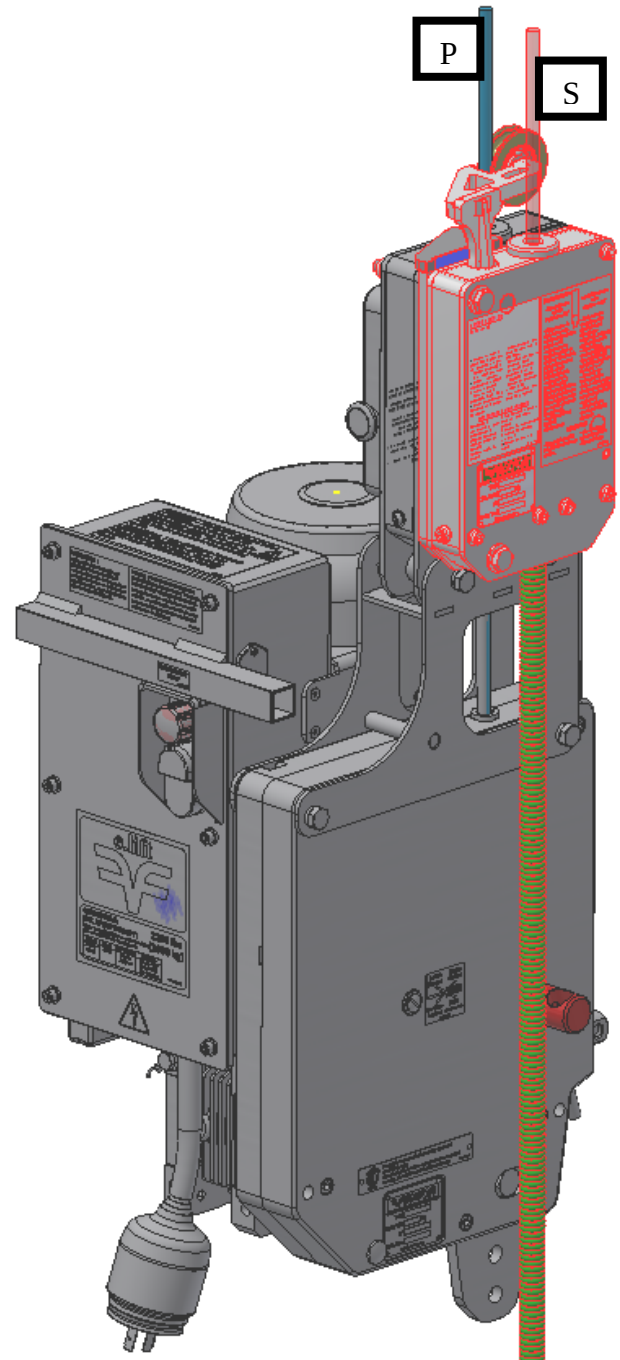


Only use special wire rope with specifications below (same as for the hoist) :

|                              |                                                                                                                                                  |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Wire rope Ø and type         | Ø9.5mm / 3/8"<br>5x19 or 5x26, Warrington Seale, Polypropylene High Density Core, Right Regular Lay, preformed wire rope with galvanized finish. |
| Minimum breaking load        | 6800kg / 15000lbs                                                                                                                                |
| Maximum allowed tolerances Ø | 9.0 to 9.5mm<br>0.354 to 0.374 in                                                                                                                |

The option is delivered with :

- 2 bolts M10x110mm (4.3in)
- 2 M10 lock nuts + 2 M10 washers
- 1 brace Ø10x1x39mm (0.4x0.04x1.53in)



When working with two wire ropes the e.lift goes up and down the primary wire rope (P).

In case of overspeed, the secondary brake of the hoist will act on the primary wire rope (P).

In case of slack primary rope or failure of the primary rope, the second secondary brake (Securistop 2200) will act on the secondary wire rope (S).

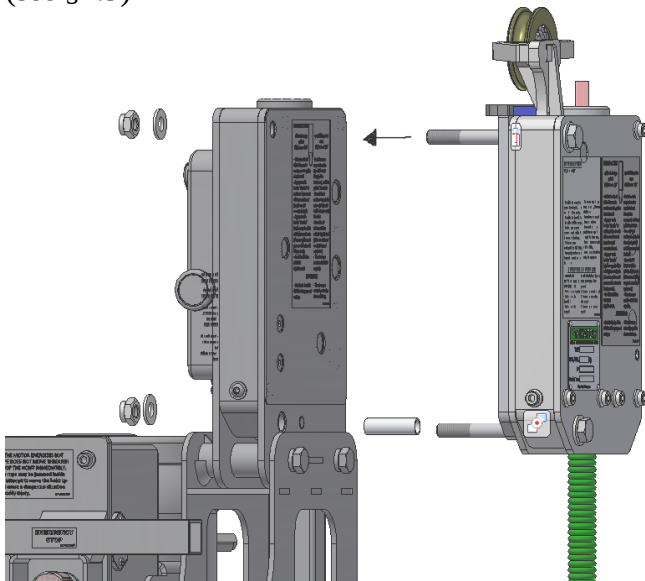


If for any reason the secondary wire rope is not rigged or used, the overspeed secondary brake functions normally, but no protection against slack wire rope is done by the optional Securistop 2200.

#### 5.4.2 Installation

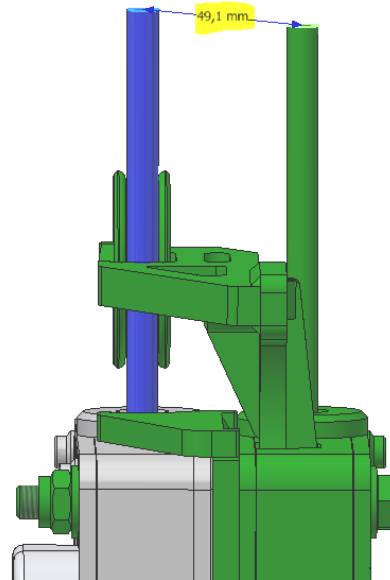
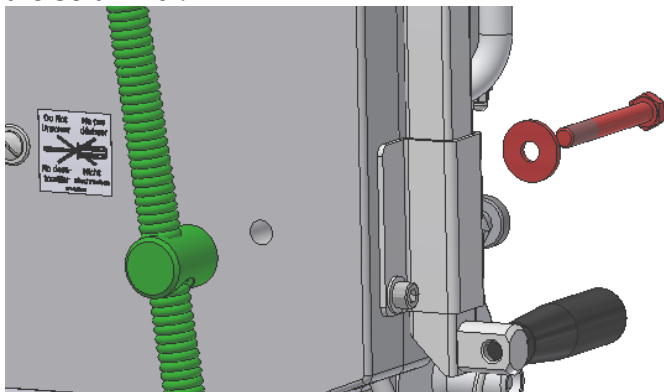
If there is already one, remove the primary wire rope. (see §4.9)

The distance between the 2 wire ropes is approximately 49mm / 1.9in



The optional device must be connected to the primary brake with the 2 bolts M10; the brace must be installed on the lower one; tighten the 2 lock nuts on the washers.

The guiding spring can be connected to the hoist with the bolt M10 :

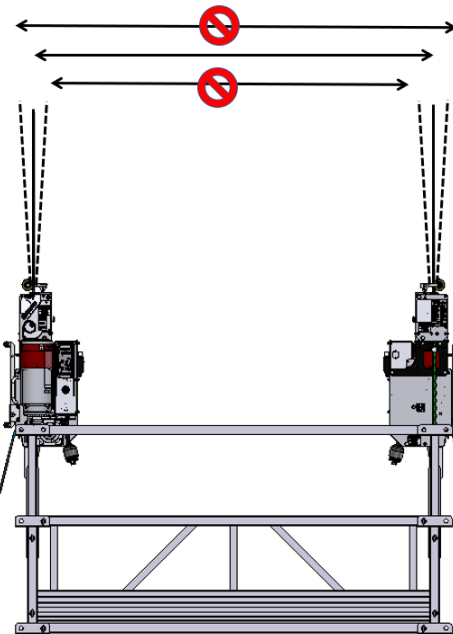


The secondary wire rope anchoring must be connected to a tie back.

Insure that the anchor points of the wire rope are directly above the position of the hoists.

Inproper spacing is dangerous and could cause failure of the support system.

The primary and secondary wire ropes must hang parallél from the suspension point :



#### 5.4.3 Wire rope



Be sure to use the wire rope according to specifications, for both Primary and Secondary wire ropes.



Refer to §2.2.5 and §3 for general rules.

Use heavy duty thimble and a ferrule for the termination.

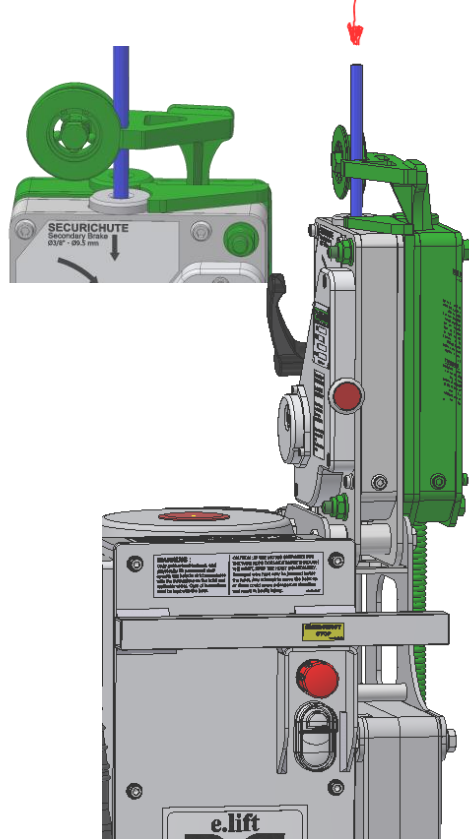
Anchor the wire rope ends to a rigging device, which complies with all relevant safety requirements.

Be sure to use compatible connecting devices with adequate strength and safety factor. Secure it.

#### 5.4.3.1 Primary wire rope insertion

Open the overspeed secondary brake by pushing down the lever until it locks.

Push and hold release lever in its vertical position to allow insertion of primary wire rope.



With gloved hands insert the rope along the roller and push it through the overspeed secondary brake and then into the hoist rope inlet. Push it inside, and press UP button, until the wire rope reeves itself automatically and exits on the other side.

Let the primary wire rope run through until it is tensioned.

Never load the wire rope exiting by applying a weight to, or tensioning.

#### 5.4.3.2 Secondary wire rope insertion

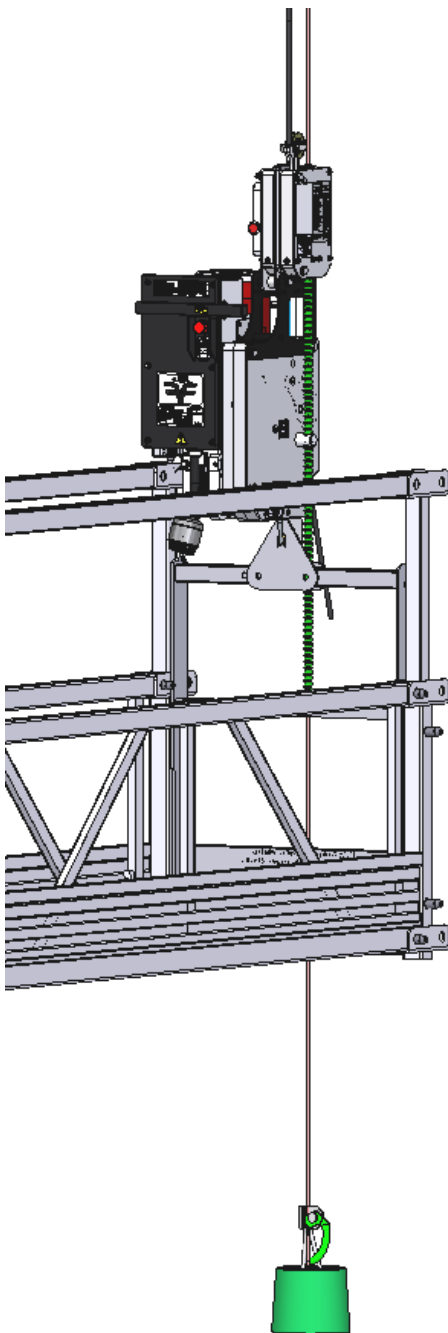
The optional slack rope device should be opened by the primary wire rope under load. Otherwise push and hold the lever in its vertical position.

Insert the secondary wire rope in the opening of the slack rope device, and push through until it is tensioned.



Above ground level fix a tensioning weight of approx. 50 lbs. (20 kgs) to the lower end of the secondary wire rope.

This weight will help to pull the secondary wire rope through the Securistop and avoid slack wire rope above the hoist, which could be dangerous in the event of fall.



Take precautions to make sure tensioning weight will not damage property or create a hazard by swinging freely.

#### 5.4.4 Operating instructions

##### 5.4.4.1 General

(1) BE FAMILIAR with the equipment and its proper care.

DO NOT operate hoist, if adjustment or repairs are necessary, if any warning, operating or capacity instructions normally attached to the hoist are obscured, damaged, or missing.

REPORT same promptly to your supervisor and also notify next operator, when changing shifts.

(2)  SAFETY DEMANDS THAT YOU TEST OUT THE SYSTEM BEFORE GOING ALOFT:

a) CHECK PLATFORM is fully rigged and loaded by cycling UP and DOWN several times near ground level or safe surface.

b) CHECK PRIMARY BRAKE for mechanical function: When stopping the hoist the load must be held immediately.

c) CHECK SECONDARY BRAKES :

- At ground level push DOWN button to get slack primary wire rope – release lever tilts to the side to close the slack rope device on the secondary wire rope. With gloved hands try to pull the secondary wire rope upwards: it must be impossible.

- At ground level push DOWN button to dereeve the primary wire rope; re-insert the rope about 12" (30 cm) through the overspeed. Holding the wire rope firmly, pull it out quickly. If the brake is working correctly, it will grab and hold the wire rope in less than 4" (10 cm). Reset the overspeed secondary brake by turning clockwise the lever until it locks in the open position. Repeat the test 3 times.

- Lift platform 3 ft. (1 m) above ground or safe surface, and push EMERGENCY STOP button of the overspeed secondary brake while lowering the platform to check that the overspeed secondary brake holds the load.



A loop should form between e.lift casing and overspeed secondary brake, which means it is supporting the load.



Raise platform until the hoist supports the load.  
Reset to the open position.

- During operation regularly check through the window that the centrifugal weights are rotating.

**WARNING: IF DURING ONE OF THE CHECKS A SECONDARY BRAKE MALFUNCTIONS, IT MUST BE REPLACED.**

d) Check EMERGENCY STOP button and push-button control according to §4.7.

e) CONTINUOUSLY CHECK rigging, lines, clearances, and all other elements throughout the entire time on the job.

#### 5.4.4.2 Controlled descent

In case of emergency you can descend with the platform without power proceeding as described in §4.7.4.

(1) Lift the handle of the primary brake.

The hoist begins to lower at moderate speed, which is regulated by a condenser inside the electrical box.

(2) To STOP just release the lever.

**CAUTION: DO NOT USE CONTROLLED DESCENT AS A REGULAR TECHNIQUE TO LOWER.**

If during this no-power controlled descent the secondary brakes have been activated, it could be because:

CASE (a): The overspeed device has locked on the primary rope.

CASE (b): The slack rope device has locked on the secondary wire rope. (Platform hits obstruction during descent)

To unlock the secondary brakes, proceed as follows:

- Remove the red cap from motor fan cover, take hand wheel from its support on the e.lift casing, and place it on the motor shaft.

- With the primary brake opened (see above) turn the hand wheel clockwise until the hoist supports the load.





– CASE (a): Reset overspeed device by turning clockwise the lever until it locks in the open position.



– CASE (b): The slack rope device is automatically opened by the transfer of the load to the primary wire rope.

– Restore hand wheel into its storage position and put back red cap on the motor fan cover.

– Continue with manual descent.

#### 5.4.4.3 Secondary brakes actions

##### (1) EMERGENCY STOP

Push EMERGENCY STOP button of the overspeed secondary brake, if – for whatever reason – you want to absolutely stop downward travel of the platform.



(2) To reset secondary brakes :

Raise the platform until the hoist supports the load. Turn clockwise the lever in the OPEN position. DO NOT force it open.

(3) If the overspeed secondary brake has automatically closed on the primary wire rope :

→CASE (a)

**WARNING: STOP DOWNWARD TRAVEL! YOU MAY HAVE RUN OFF THE PRIMARY WIRE ROPE CAUSING OVER-SPEED. WITH EXTREME CAUTION TRY TO GO UP. IF YOU CANNOT GO UP, A RESCUE IS REQUIRED.**

When the hoist supports the load, reset the overspeed secondary brake as described above.

→CASE (b)

**WARNING: STOP DOWNWARD TRAVEL! THE PRIMARY WIRE ROPE HAS FAILED. RESCUE IS REQUIRED.**

(4) If the slack rope secondary brake has automatically closed on the secondary wire rope, i. e. release lever is tilted because of slack primary wire rope :

**WARNING: STOP DOWNWARD TRAVEL! THE PLATFORM HAS HIT AN OBSTRUCTION PREVENTING DOWNWARD MOVEMENT.**

GO UP UNTIL THE HOIST SUPPORTS THE LOAD – the tensioned primary wire rope automatically re-opens the slack rope secondary brake for the secondary wire rope to move again freely through the device.

CLEAR THE OBSTRUCTION and descend.

**CAUTION:** If the secondary brakes repeatedly stops downward travel, contact the supplier for advice. **DURING USE OF THE HOIST NEVER DETACH THE SECONDARY BRAKES !**

**WARNING:**

#### 5.4.5 Troubleshooting

| Defects found                                                                                  | Potential causes of defect                                                                                                                                                                                                                                                                                                              | Remedies                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hoist goes up but not down                                                                     | One of the secondary brakes has activated.<br>- Primary wire rope has run out<br>- Primary wire rope has failed<br><br>- Platform has hit an obstruction<br><br>- Rigging is not correctly aligned with the hoist; the wire ropes are not parallel<br>- The hoist is not correctly screwed on its fixation (stirrup) and can move on it | Stop downward movement, proceed according §5.4.4<br><br>Stop downward movement, go up until the hoist supports the load; clear the obstruction<br><br>Check and re-align.<br><br>Check and correct. The 2 screws must be ½ inch |
| The secondary brakes automatically close without apparent reason                               | - Mechanical defect (pieces can be bent or worn)<br>- The wire rope can be oversized or worn or damaged                                                                                                                                                                                                                                 | Contact the supplier<br><br>Check and replace if necessary                                                                                                                                                                      |
| The secondary wire rope is not passing freely through the slack rope device                    | The wire rope can be oversized or worn or damaged<br>The counterweight is not tensioning the wire rope                                                                                                                                                                                                                                  | Check and replace if necessary<br><br>Check and re-position                                                                                                                                                                     |
| The main wire rope is slack but the secondary rope passes freely through the slack rope device | The lever is twisted or damaged<br><br>There is dust inside                                                                                                                                                                                                                                                                             | Stop using your equipment and have it maintained.                                                                                                                                                                               |

#### 5.4.6 Inspection and maintenance for the optional slack rope secondary brake

##### 5.4.6.1 Daily inspections

EACH DAY PRIOR TO USE AND DURING OPERATION CHECK:

Refer to §4.7 for the hoist.

For the optional slack rope secondary brake :

(1) At ground level push DOWN button to get slack primary wire rope – release lever tilts to the side to close the slack rope device on the secondary wire rope. With gloved hands try to pull the secondary wire rope upwards: it must be impossible.

(2) Rigging : Wire rope termination, connection to the suspension system. It must be aligned and secure.

(3) Check for parts damage. **WARNING:** If there is any : STOP working, unless the damaged part(s) is (are) replaced.

##### 5.4.6.2 Maintenance

refer to §4.12

## 5.5 Logbook

|                       |
|-----------------------|
| FIXATOR e.lift hoist  |
| Everyday check record |

|              |  |                          |  |
|--------------|--|--------------------------|--|
| Date of test |  | person in charge of test |  |
| Model        |  | e.lift Serial #          |  |
| Working Load |  | Securichute Serial #     |  |
| Hour Meter   |  | Last overhaul date       |  |

### Warning

- 1/NEVER perform any disassembly, maintenance, repair, or part replacement of the hoist when it is suspended in air or is under load.
- 2/ALWAYS test and inspect the hoist on a daily basis especially in work environments that contain contaminants. Maintain hoist (see maintenance manual) after completing work at each work site to remove dusts and foreign objects inside of hoist
- 3/If the Rigging is in an abnormal condition, or if the wire rope runs out from rigging or wire rope is cut : STOP using platform
- 4/ The Wire Rope will wear out with repeated operation. Therefore, it must be regularly inspected to be sure it is in good condition. If you use a wire rope that is deformed or damaged, it will have reduced strength and may break



Failure to do so may cause the platform to fall or tilt, and consequently operators or objects might fall, resulting in serious injury, death or damage to

|           |                       |                                                                                                                                                                                                                                                                     | judgment at acceptance |    |
|-----------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----|
| Method    | Check point           | Condition                                                                                                                                                                                                                                                           | OK                     | NG |
| Visual    | Platform and rigging  | Inspect all components of the suspended platform, especially the components supporting loads, to be sure there are no signs of damage or excessive wear and that all fasteners (nuts, bolts, clamps, wire-clip, shackle, etc.) are properly and securely tightened. |                        |    |
| Visual    | Wire rope             | Wire rope MUST be taken out of service when ANY of the conditions listed in the manual (§2.2.5) apply                                                                                                                                                               |                        |    |
| Visual    | Hoist                 | none of the bolts/nuts and Operator's Manual Cap are loose                                                                                                                                                                                                          |                        |    |
| Visual    | Hoist                 | visual appearance of the Traction Hoist (Include Cables and Connectors)                                                                                                                                                                                             |                        |    |
| Visual    | Hoist                 | no damaged place such as crack or deformation                                                                                                                                                                                                                       |                        |    |
| Visual    | Hoist                 | the emergency stop button cover and ascent/descent button cover are not damaged such as crack                                                                                                                                                                       |                        |    |
| Visual    | Hoist                 | e.lift are installed properly in the platform                                                                                                                                                                                                                       |                        |    |
| Visual    | Hoist                 | the e.lift is connected to the stirrup properly and the AC Power Plug is connected to power source properly. And check circuit breaker                                                                                                                              |                        |    |
| Operation | Power on              | Lamp lights up                                                                                                                                                                                                                                                      |                        |    |
| Operation | sound                 | Press the Operation Button to raise the platform about 40 in. (100 cm) off the ground and then lower it to its original position. Repeat this procedure several times. Check that there is not abnormal vibration such as the e.lift is shaking                     |                        |    |
| Visual    | Neo System panel      | hour meter is working normally                                                                                                                                                                                                                                      |                        |    |
| Operation | Hoist                 | test primary brake (§4.7.1)                                                                                                                                                                                                                                         |                        |    |
| Operation | Overspeed             | test Overspeed Brake (§4.7.2) --> <4" (<10cm)                                                                                                                                                                                                                       |                        |    |
| Operation | Overspeed             | test Overspeed brake test button (§4.7.3)                                                                                                                                                                                                                           |                        |    |
| Operation | Emergency descent     | test controlled descent (§4.7.4)                                                                                                                                                                                                                                    |                        |    |
| Operation | Emergency descent     | The lever moves smoothly; The lever returns to the original position                                                                                                                                                                                                |                        |    |
| Operation | Emergency stop switch | test emergency stop button (§4.7.5)                                                                                                                                                                                                                                 |                        |    |
| Operation | Wire Rope reeving     | Reeving is smooth and rope exits properly                                                                                                                                                                                                                           |                        |    |
| Operation | Underload             | stops the descent when the platform is on the ground ; shunt ok                                                                                                                                                                                                     |                        |    |

#### **5.6 Code of safe practices for adjustable suspended scaffolds co-developed by the Scaffolding, Shoring & Forming Institute (SSFI) and the Scaffold And Access Industry Association, Inc. (SAIA)**

It shall be the responsibility of all users to read and comply with the following common sense guidelines which are designed to promote safety in the erecting, dismantling and use of adjustable suspended scaffolds. These guidelines do not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures. If these guidelines conflict with any local, provincial, state, federal or other government regulations, the regulations shall supersede these guidelines and it shall be the responsibility of each user to comply therewith.

##### **I. GENERAL GUIDELINES**

**A. POST THESE SAFE PRACTICES** in a conspicuous place. Be sure that all persons who erect, use, relocate, or dismantle adjustable suspended scaffold systems are fully aware of them. Use them in tool box safety meetings.

**B. FOLLOW ALL EQUIPMENT MANUFACTURER'S RECOMMENDATIONS** as well as all local, provincial, state and federal codes, ordinances and regulations relating to adjustable suspended scaffold systems.

**C. SURVEY THE JOB SITE.** A competent person shall survey the job site for hazards such as exposed electrical wires, obstructions and, unguarded roof edges or openings.

**D. INSPECT ALL EQUIPMENT BEFORE EACH USE.** Never use any equipment that is damaged or defective in any way. Mark it or tag it as damaged or defective and remove it from the job site.

**E. ERECT AND DISMANTLE ADJUSTABLE SUSPENDED SCAFFOLD EQUIPMENT** in accordance with the design and/or manufacturer's recommendations.

**F. DO NOT ERECT, DISMANTLE OR ALTER ADJUSTABLE SUSPENDED SCAFFOLD SYSTEMS** except under the supervision of a competent person.

**G. DO NOT ABUSE OR MISUSE ADJUSTABLE SUSPENDED SCAFFOLD EQUIPMENT.** Never overload any equipment.

**H. ERECTED ADJUSTABLE SUSPENDED SCAFFOLDS ARE TO BE INSPECTED REGULARLY** by the user to be sure that they are maintained in a safe condition. Stop work and report any unsafe condition to your supervisor.

**I. NEVER TAKE CHANCES! IF IN DOUBT REGARDING THE SAFETY OR USE OF ADJUSTABLE SUSPENDED SCAFFOLDS, CONSULT A QUALIFIED PERSON.**

**J. NEVER USE ADJUSTABLE SUSPENDED SCAFFOLD EQUIPMENT FOR PURPOSES FOR WHICH IT WAS NOT INTENDED.**

**K. A COMPETENT PERSON SHALL CONSIDER STOPPING WORK WHEN WIND SPEED EXCEEDS 25 MPH FOR 2 POINT ADJUSTABLE SUSPENDED SCAFFOLDS OR 20 MPH FOR SINGLE POINT SUSPENSION.** If materials on a platform create a sail effect, stopping work at lower wind speeds must be considered.

**L. ADJUSTABLE SUSPENDED SCAFFOLD SYSTEMS** are to be installed and used in accordance with the manufacturer's recommended procedures.

**M. ADJUSTABLE SUSPENDED PLATFORMS MUST NEVER BE OPERATED NEAR LIVE POWER LINES** unless proper precautions are taken. Contact the power service provider for advice.

**N. ALWAYS UTILIZE FALL ARREST EQUIPMENT** when working on adjustable suspended scaffolds or when working near unguarded edges.

**O. DO NOT WORK FROM, INSTALL OR MOVE ADJUSTABLE SUSPENDED SCAFFOLDS** if you are sick or impaired in any way.

**P. DO NOT WORK ON ADJUSTABLE SUSPENDED SCAFFOLDS** when under the influence of alcohol or drugs.

**Q. DEBRIS SHOULD NOT BE STORED OR ALLOWED TO ACCUMULATE ON A PLATFORM.**

**R. INDEPENDENT ADJUSTABLE SUSPENDED SCAFFOLDS ARE TO BE POSITIONED SO AS TO AVOID OVERLAPPING OR POSSIBLE INTERFERENCE FROM ANOTHER SCAFFOLD.**

## **II. GUIDELINES FOR ERECTION AND USE OF ADJUSTABLE SUSPENDED SCAFFOLD SYSTEMS**

### **A. RIGGING:**

1. UTILIZE FALL PROTECTION EQUIPMENT when rigging near unguarded edges.
2. SUPPORTING DEVICES must be capable of supporting the hoist rated load with a safety factor of 4.
3. ALL OVERHEAD RIGGING must be secured from unwanted movement in any direction.
4. COUNTERWEIGHTS USED WITH OUTRIGGER BEAMS must be of a non-flowable material and must be secured to the beam to prevent accidental displacement.
5. OUTRIGGER BEAMS THAT DO NOT USE COUNTERWEIGHTS must be installed and secured to the roof structure with bolts or other direct connections. Direct connections shall be evaluated by a competent person.
6. TIE BACK ALL TRANSPORTABLE RIGGING DEVICES. Tieback shall be equivalent in strength to the suspension ropes.
7. INSTALL TIEBACKS AT RIGHT ANGLES TO THE FACE OF THE BUILDING and secure them without slack, to a suitable anchor capable of supporting the hoist rated load with a safety factor of 4.
8. IN THE EVENT THAT TIEBACKS CANNOT BE INSTALLED AT RIGHT ANGLES, two tiebacks at opposing angles must be used to prevent movement.
9. RIG AND USE HOISTING MACHINES DIRECTLY UNDER THEIR SUSPENSION POINTS to prevent movement or side loading.

### **B. WIRE ROPE AND HARDWARE:**

1. USE ONLY WIRE ROPE AND ATTACHMENTS specified by the hoisting machine manufacturer.
2. HANDLE WIRE ROPE WITH CARE. Always use gloves.
3. COIL AND UNCOIL WIRE ROPE in accordance with manufacturer's instructions in order to avoid kinking or damage.
4. ASSURE THAT THE WIRE ROPE IS LONG ENOUGH to reach to the lowest possible landing.
5. CLEAN AND LUBRICATE WIRE ROPE in accordance with the wire rope manufacturer's instructions.
6. INSPECT WIRE ROPE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DO NOT USE WIRE ROPE THAT IS KINKED, BIRDCAGED, CORRODED, UNDERSIZED, OR DAMAGED IN ANY WAY. Do not expose wire rope to fire, undue heat, corrosive atmosphere, electricity, chemicals or damage.
7. WIRE ROPES USED WITH TRACTION HOISTS MUST HAVE PREPARED ENDS. Follow hoist manufacturer's recommendations.
8. USE THIMBLES AT ALL WIRE ROPE SUSPENSION TERMINATIONS.
9. USE J-BOLT WIRE ROPE CLAMPS OR SWEDGE FITTINGS. DO NOT USE U-BOLT CLAMPS.
10. TIGHTEN THE J-BOLT WIRE ROPE CLAMPS in accordance with the manufacturer's instructions.

### **C. POWER SUPPLY FOR MOTORIZED EQUIPMENT:**

1. USE PROPERLY GROUNDED ELECTRICAL POWER CORDS. Protect them with circuit breakers.
2. USE POWER CORDS AND AIR HOSES OF THE PROPER SIZE THAT ARE LONG ENOUGH for the application.
3. POWER CORD AND AIR HOSE CONNECTIONS MUST BE RESTRAINED to prevent separation.
4. USE STRAIN RELIEF DEVICES TO ATTACH POWER CORDS AND AIR SUPPLY HOSES THE PLATFORM, to prevent them from separation.
5. PROTECT POWER CORDS AND AIR HOSES FROM SHARP EDGES.
6. USE GFCI WITH POWER TOOLS.

### **D. FALL ARREST EQUIPMENT:**

1. EACH PERSON ON AN ADJUSTABLE SUSPENDED SCAFFOLD must be attached to an independent fall arrest system.
2. EACH VERTICAL LIFELINE SHALL BE ATTACHED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS to a separate anchorage capable of supporting a minimum of 5000 pounds (2267 kg) or an anchorage designed by a qualified person.
3. DO NOT WRAP LIFELINES AROUND STRUCTURAL MEMBERS unless lifelines are protected and a suitable anchorage connection is used.
4. PROTECT LIFELINES AT SHARP CORNERS AND EDGES to prevent chafing.
5. RIG FALL ARREST SYSTEMS to minimize free fall.
6. INSTALL VERTICAL LIFELINES SO THEY HANG FREELY.
7. USE LIFELINES that are compatible with the rope grab.
8. INSTALL ROPE GRAB IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. Rope grab must be properly oriented.
9. KEEP ROPE GRAB POSITIONED ABOVE YOUR HEAD.
10. UTILIZE FULL BODY HARNESSSES of the proper size and fit.
11. UTILIZE SHOCK-ABSORBING LANYARD attached to the D-ring at the center of your back between the shoulder blades.
12. INSPECT FALL PROTECTION ANCHORAGE/EQUIPMENT BEFORE EACH USE. Consult the fall protection supplier for inspection procedures.
13. WHEN A SECONDARY WIRE ROPE SYSTEM IS USED instead of a vertical lifeline, attach the lanyard to a horizontal lifeline or an approved platform anchor.

#### **E. DURING USE:**

1. USE ALL EQUIPMENT AND ALL DEVICES in accordance with the manufacturer's instructions.
2. DO NOT OVERLOAD OR MODIFY EQUIPMENT.
3. INSPECT ALL EQUIPMENT INCLUDING HOISTS, PLATFORM, AND RIGGING before each use.
4. INSPECT WIRE ROPE BEFORE AND DURING USE.
5. USE CARE TO PREVENT DAMAGE TO EQUIPMENT.
6. CLEAN AND SERVICE EQUIPMENT REGULARLY. Follow the manufacturers' recommendations.
7. ALWAYS MAINTAIN AT LEAST (4) FOUR WRAPS OF WIRE ROPE ON DRUM TYPE HOISTS.
8. DO NOT CONNECT PLATFORMS unless the installation was designed for that purpose.
9. DO NOT MOVE ADJUSTABLE SUSPENDED SCAFFOLDS HORIZONTALLY unless safe work practices are followed.
10. WHEN RIGGING FOR ANOTHER DROP assure sufficient wire rope is available before moving the suspended platform horizontally to the next location.

#### **F. WELDING FROM SUSPENDED SCAFFOLDS REQUIRES SPECIAL TRAINING:**

1. ASSURE PLATFORM IS GROUNDED TO THE STRUCTURE using a grounding conductor.
2. INSULATE WIRE ROPE ABOVE AND BELOW THE PLATFORM.
3. INSULATE WIRE ROPE AT SUSPENSION POINT AND ASSURE WIRE ROPE DOES NOT CONTACT THE STRUCTURE ALONG ITS ENTIRE LENGTH.
4. PREVENT THE WIRE ROPE END FROM BECOMING GROUNDED.
5. INSULATE EACH HOIST WITH A PROTECTIVE COVER.
6. INSULATE TIE BACK WIRE ROPES AT THE CONNECTION POINTS.

Since field conditions vary and are beyond the control of the SSFI and the SAIA, safe and proper use of adjustable suspended scaffolding is the sole responsibility of the user.

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