# **UPCLIMBER**



# INSTRUCTION MANUAL

UPCLIMBER FOR LIFTING AND INSTALLING WINDOWS WEIGHING UP TO 130 KG



# INSTRUCTION MANUAL FOR UPCLIMBER

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Supplier: Nordic Tech Tools ApS

Manufacturer

website:

NordicTechTools.dk

The UPCLIMBER is patented.

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### **READ THIS FIRST**

Before you start to use the UPCLIMBER, it is important that you read and understand the contents of this instruction manual. For the safety of the operator and those present and to avoid damage to equipment, related systems and buildings, it is important that all instructions be followed.

The UPCLIMBER should only be used by persons who possess in-depth knowledge of the features of the device and its associated procedures and who have read this instruction manual!

# ABOUT UPCLIMBER

The UPCLIMBER is a compact and transportable lifting device with integrated motor, battery and synthetic wire rope.

The UPCLIMBER system can be used from JIB or fixed anchor points for the installation of windows and brick lintels (see side 21). The UPCLIMBER has been designed for use on sites that comply with applicable working environment regulations related to the installation of windows and brick lintels.

### SAFETY REGULATIONS

Using the UPCLIMBER inevitably involves certain risks. There is a risk of crushing between equipment and façade, and during lifting there will be a risk of the load falling if lifting regulations are not followed.

Good judgement and caution are required when fitting windows with the UPCLIMBER, and it is important that you and your colleagues all focus on the task at hand when the UPCLIMBER is used for installation.

The UPCLIMBER must never be left unattended with a suspended load and must be switched off when not in use!

The UPCLIMBER must never be used for anything but lifting windows and brick lintels.

### Warning signs



DANGER! Warns of accidents that may lead to serious injury or death



WARNING! Indicates risks that may lead to serious injury if the device operated incorrectly



BE CAREFUL! Indicates risks that may lead to minor injury if the device is operated incorrectly

OBSERVE! Indicates that the instruction shouldbe followed in order to avoid damage to tools

#### General information

- The operator is responsible for ensuring that users of the UPCLIMBER possess the required qualifications, have received the necessary training and instruction and are familiar with this instruction manual
- The operator is responsible for ensuring that the UPCLIMBER is in a condition that does not expose the operator or other persons to danger
- Do not use the UPCLIMBER if defects or damage can be observed to the system
- Always inspect the condition of the suction cups before any lifting is performed
- Always wear a helmet and safety shoes when using the UPCLIMBER
- For lifting above a height of one metre, the area below the UPCLIMBER must be clearly cordoned off, and people are not permitted within this area
- Never use equipment with the UPCLIMBER that has not been approved by the manufacturer
- Never place your entire body weight in the UPCLIMBER as this may result in the weight limit being exceeded
- Discontinue work if hazardous situations arise when using the system
- Never use the UPCLIMBER to lift people
- Never leave the UPCLIMBER unattended with a suspended load
- Never use the UPCLIMBER with other external lifting equipment
- Never connect the UPCLIMBER in a series
- Never use the UPCLIMBER to lift loads outside the limits of the scaffolding
- Always protect the UPCLIMBER, including suction cups, during transport
- A min. of 300 lux must be available when using the UPCLIMBER

### **Emergencies**

 In emergencies where the UPCLIMBER runs out of power or encounters an unexpected obstacle during lifting, the load must be secured as quickly as possible before the UPCLIMBER is dismantled

### Inspection and repairs

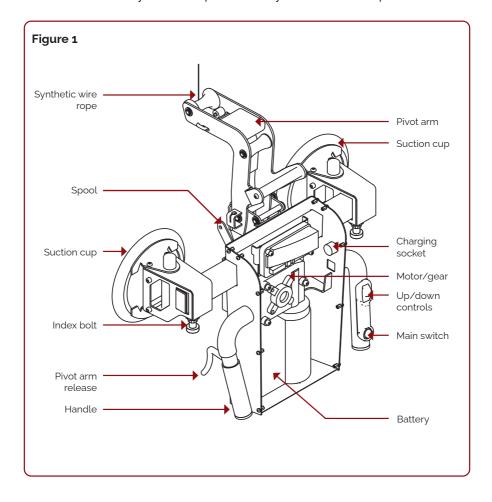
- Qualified inspections must be performed on an ongoing basis and, if necessary, parts, including the synthetic wire rope, suction cups and controls, must be replaced
- Only use original parts for service and repair work
- The user is responsible for calling in applicable professional expertise for inspection and repairs

### Disposal

- The machine MUST be disposed of without fail after a period of ten years
- The machine must be disposed of according to applicable environmental regulations

### **FEATURES**

The UPCLIMBER is a device for lifting and installing windows and brick lintels and can be used from scaffolding or from the ground where it is possible to secure an anchor point. The UPCLIMBER basically comprises two suction cups mounted on a frame that includes a battery, motor, spool and synthetic wire rope.





# Lifts above one metre – only permitted with the use of battery-powered suction cups

The manual suction cups have been certified for lifting windows up to a height of one metre. If the window needs to be lifted higher, the battery-powered suction cups must be used.

#### Main switch

The main switch is located on the right handle (fig. 1)

#### Motor, spool and battery

24 V DC motor, spool and battery (24V 10 Ah) are located behind the front screen (fig. 1)

OBSERVE! Always listen out for jarring sounds from the motor, spool and internal parts.

### Up/down controls

The stepless up/down controls are located on the right handle (fig. 1)



WARNING! Always check that the button has not in any way become stuck or blocked.

### Manual suction cups

The suction cups (fig. 1) have been tested and certified for lifts of up to 130 kg. The suction cups must be clean, and the rubber coating must be intact. During lifting of windows the red line must never be visible.



DANGER! Risk of falling window. The red line must never be visible when windows are lifted.

### Rechargeable suction cups

The suction cups (fig. 1) are each rated for up to 65 kg which gives a total weight limit of 130 kg. The battery indicator on the suction cups must show a minimum of two green dots when windows are to be lifted. Always inspect the condition of the foam strip before any lifting is performed.



DANGER! Risk of falling window. The rechargeable suction cups must always be switched on and active when a window is lifted.



DANGER! Risk of falling window. The battery level on the suction cups must not be below two green dots when a window is lifted.

### Charging socket, battery indicator and charger

The charging socket is located on the right side (fig. 1)

OBSERVE! Always check battery status before commencing the installation of a window.

### Synthetic wire rope

The synthetic wire rope (fig. 1)



DANGER! Risk of falling window. Always check that the synthetic wire rope is intact and undamaged.

### The glass pane must be clean and free of dirt.

It is very important to ensure that the glass pane of the window is clean and free of dirt as the suction cups may otherwise partially lose their ability to maintain the vacuum. It is the operator's responsibility to ensure that a window is not lifted if it is dirty.



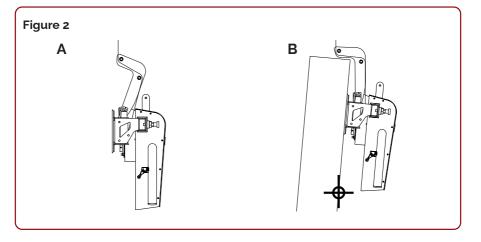
DANGER! Risk of falling window. The suction cup may lose its vacuum and slide if the pane is dirty.

#### Index bolts

Always check that the index bolts (fig. 1) are fixed all the way through the pipe before lifting.



DANGER! Risk of falling window.



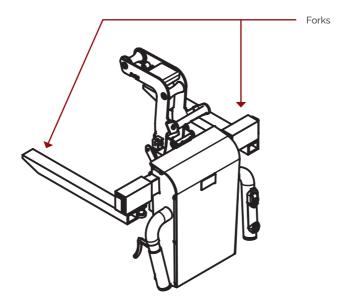
#### Pivot arm

When the pivot arm is in position A (fig. 2), the UPCLIMBER will without a load hand down vertically from the suspension point. In position B (fig. 2), the balance point will move when the UPCLIMBER is carrying a load and the window will hang with the lower part of the window tilted forward. The pivot arm release is located on the right handle (fig. 1).



DANGER! Risk of the lower part of the window moving outwards. Always check that the pivot arm is securely connected before the window is lifted.

As described above, the UPCLIMBER can also be used for the installation of brick lintels. The forks can be used for this purpose.



#### **Forks**

The load straps on the forks must be pulled around the brick lintel and locked during lifting.



DANGER! Risk of the brick lintel sliding off the forks.

# **REMOTE CONTROL**



The remote control included can be used to lift and lower the UPCLIMBER.

The UPCLIMBER only operates when the button is depressed.

The range is approx. 30 metres.

### Remote control operation

The remote control can be used to lift and lower the UPCLIMBER without having to handle the device.



WARNING! Always be sure that the UPCLIMBER and the window have sufficient clearance to move up and down.

### Window moving outwards

Be careful that the window does not move outwards and damage itself or other equipment during extended lifting where the operator is not holding on to the handles.



BE CAREFUL! Always hold on to the window using a guide rope etc.

# HOW TO USE THE UPCLIMBER

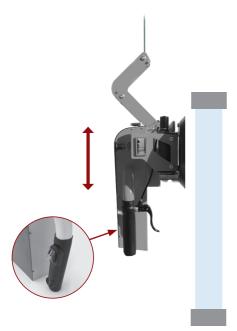


# Connecting the synthetic wire rope to the anchor point

The carabiner on the synthetic wire rope must be connected to a fixed and secure anchor point.



Danger! Risk of falling window. Always check that the anchor point is securely installed and undamaged.



# Attaching the UPCLIMBER to a window

Lift/lower the UPCLIMBER to a height where the suction cups/forks are at the required height. Immediately below the window frame/bottom of the brick lintel.

The pivot arm must be loosened so that the UPCLIMBER is suspended vertically on the synthetic wire rope.



Danger! Risk of falling window. Always check that the suction cups are intact and clean and that the window pane is clean.



# Attaching the UPCLIMBER to a window

### Rechargeable suction cups

Activate the rechargeable suction cups by pressing the green button, and press the UPCLIMBER against the pane. The green button must be activated throughout the lift.

### Manual suction cups

The plunger must be pumped until the red line is no longer visible.



Danger! Risk of falling window. The rechargeable suction cups must be activated throughout the lift (green button depressed all the way). The red line on the manual suction cups must never become visible during lifting.



### Activating the pivot arm

When the suction cups grip the window pane, loosen the synthetic wire rope by 'running' down 5 cm while the window is still standing on the ground. Then activate the pivot arm by pushing it in across the window frame.



Danger! Risk of window moving outwards. Always check that the pivot arm is securely connected before the window is lifted.



### Lifting the window

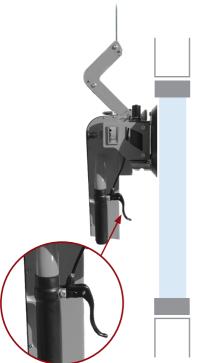
When both suction cups and pivot arm are activated, the window is lifted by pressing the orange button on the right handle upwards. Note that the window is suspended with the lower part of the window tilted forward.



Danger! Risk of uncontrolled lift. Check that switches are not blocked.



Danger! Never lift a window that is tilted more than 20° from vertical.

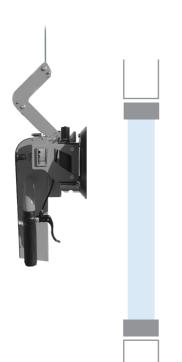


# Placing a window in an opening

Place the window with its lower edge in the window opening. Only when the entire weight of the window is resting on the lower part of the opening, deactivate the pivot arm by pressing the release. The window can then be pushed all the way into the opening.



DANGER! Risk of falling window. Always ensure that the window is held manually when the UPCLIMBER is disconnected



### **Deactivation of suction cups**

### Rechargeable suction cups

The rechargeable suction cups are deactivated by deactivating the green button (so it is in its outer position). Then depress the red button all the way. The vacuum is then equalised.

### Manual suction cups

The manual suction cups are deactivated by pressing the tilting button underneath the plunger.



Danger! Risk of falling window. Always ensure that the window is held manually when the UPCLIMBER is disconnected.



Tilting button for deactivation of the manual suction cups.

### **CONTROL AND MAINTENANCE**



Always check the suction cups for defects and dirt. The suction cups must be clean and intact.



Danger! Risk of falling window.



Always check the synthetic wire rope and carabiner for defects. The synthetic wire rope must be inspected every 12 months. During inspection, the synthetic wire rope should be opened up at various points. On the inside, the rope must be as light and clean as a new rope. Check whether the fibres of the rope have broken or whether dust particles etc. have accumulated.



Danger! Risk of falling window.



When setting the suction cups, always check that the index bolt is securely in place and is gripping the through pipe.



Danger! Risk of falling window.



Always check that the pivot arm mechanism is not damaged or blocked.



BE CAREFUL! If the machine is loaded when blocked, this may damage the mechanical parts of the machine.



When lifting heavy equipment after loosely winding the synthetic wire rope on the spool, the synthetic wire rope may lock. In some cases, the synthetic wire rope may run the wrong way on the spool, which means that the synthetic wire rope wears against the edges of the UPCLIMBER and that up/down has changed direction.



BE CAREFUL! The synthetic wire rope may be damaged if it is not wound correctly.

# REPLACING THE SYNTHETIC WIRE ROPE

Start by running the synthetic wire rope completely out of the UPCI IMBER.

Now detach the hook from the synthetic wire rope by pulling out the safety pin and then removing the pin.

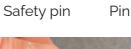
The synthetic wire rope can now be pulled through the loop at the other end and thereby detached from the synthetic wire rope on the spool in the UPCLIMBER.

The new synthetic wire rope is installed in the same way by wrapping a loop around itself.

The hook can then be mounted on the synthetic wire rope.

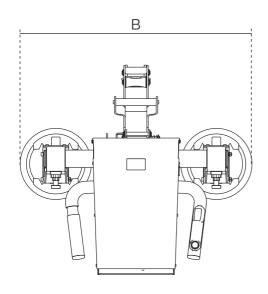
IMPORTANT: Do not forget to insert the safety pin again.

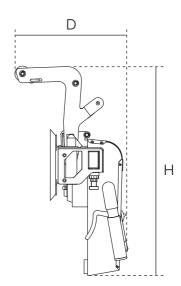






# **TECHNICAL SPECIFICATIONS**





 Height (H):
 620 mm

 Width (W):
 530-640 mm

 Depth (D):
 315 mm

 Weight:
 16 kg

Lifting weight: max. 130 kg

Battery: 24 V 10 Ah

The lithium-ion battery lasts for up to a week

- Stepless lifting speed up to 10 cm/sec
- The pivot arm ensures that the window is inserted lower part first.
- · Manual suction cups
- · Locking forks for the installation of brick lintel
- Function controls located at grip
- · Durable aluminium construction
- · Battery indicator on front
- Two different settings for the distance between suction cups/forks
- · Remote control included

# ACCESSORIES

# **UPCLIMBER**

### Batteridreven sugekop

- Med UPCLIMBER kan én mand montere vinduer på op til 130 kg helt uden tunge løft!" Løftevægt: op til 130 kg Trinløs løftehastighed Pivot-arm sikrer at vinduet placeres med bunden først

- Li-ion batteri med stor kapacitet Sugekopper m. manuel pumpe Egenvægt: 16,5 kg



Batteridreven sugekop med pressostat

De batteridrevne sugekopper kan bruges til at gribe fat i og løfte flere forskellige materialer.







Glas med tekstur Betonelement

Med de batteridrevne sugekopper er Upclimber altså ikke længere begrænset til løft af normal glas.



Aktivering af sugekop Udlign vakuum

Kan leveres med Imanometer.

#### Specifikationer

Sugekoppen kan kører i halvanden time på én opladning. Sugekop samt beslag vejer til sammen ca. 1,7 kg.

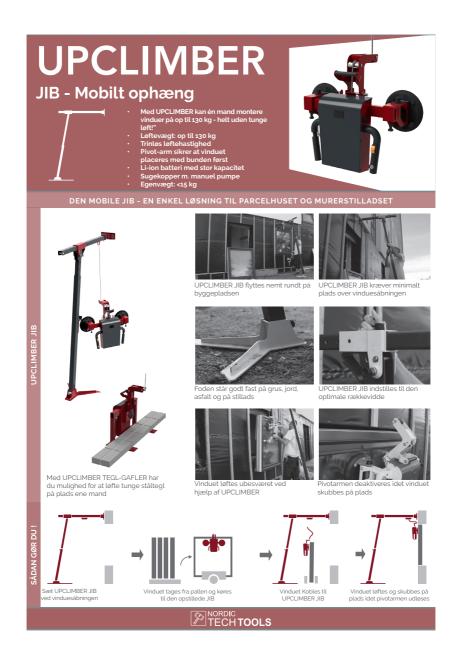
Sugekopperne stopper med at suge når et tilstrækkeligt vakuum er opnået og starter igen når vakuumet falder vha. den indbyggede pressostat.







# **ACCESSORIES**



# **SETTING OF JIB**



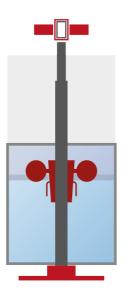
# **LOCATION OF THE JIB**

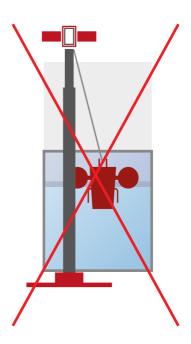
### **CORRECT**

Always centre the JIB above the window and window opening.

### **INCORRECT**

Never lift a window that is not centred under the JIB, and never pull sideways on a window hanging in the JIB. This may cause the JIB to overturn.





The UPCLIMBER is developed on an ongoing basis. Reference is therefore made to the manufacturer's website for an updated list of equipment that has been certified for use with the UPCLIMBER.

### WARNINGS



Never leave a window suspended in the UPCLIMBER unattended.



Never hang items on the UPCLIMBER. The UPCLIMBER should only be used to lift windows or brick lintels and only with the equipment included – suction cups or forks.



Never place your entire body weight in the UPCLIMBER as this may result in the weight limit being exceeded.



Never run the synthetic wire rope all the way in as your fingers may get caught, and the machine may be irreparably damaged.



Never transport the UPCLIMBER while it is lying on the cover with the On button facing downwards as the device may be able to switch on and run the synthetic wire rope in and out.

# **UPCLIMBER**



