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E.& O.E.

VPH150

Vacuum Power Handy

PSM4

1. General

1.1 Authorised use

The device is only for lifting or transporting/lifting natural stone, concrete slabs, large slabs, drains, steps, etc. ***in close proximity to the ground.*** The goods to be lifted must not have porous surfaces.

The device can only be used in a vertical hanging position and is designed for two-man operation

The device is additionally equipped with a suspension lug for a crane hook.

Some of the suction plates, which can be attached to the device, reduce its carrying capacity. The maximum load permitted is stated on each suction plate.

Never exceed the stated maximum load!

The stated maximum load can only be achieved with a vacuum of at least 400 mbar.

Never exceed the permitted maximum load of 150kg.

- The device is only designed for use specified in this document.
- Other uses are not authorised and are forbidden.

All relevant safety regulations, especially the declaration of conformity, and additional local health and safety regulations have to be observed.

2. Operating

2.1 Operating Elements

Main switch – on/off. This is to turn the pump on and off.

CAUTION! The suction guide line is automatically bled when the VPH is switched off.

To suction and release the load:

- Main Switch ON – suction load & hold
- Main Switch OFF – release load (ensure your feet are not below the load first)

2.2 Suction Plate

The suction plate seals the vacuum on the load.
It is used to lift various objects.
Only use suction plates intended for the VPH Vacuum Power Handy.

Never exceed the permitted maximum carrying capacity of the suction plate.

2.3 General

- Do not release the handle of the VPH whilst a load is being lifted.
- Never pull the load diagonally or drag it across the floor.
- Do not use the VPH to try to free loads that are stuck.
- If there is a power failure, lower the load immediately and clear the immediate area.
- Only suction and lift suitable loads. (Check for stability and surface density).
- Monitor the pressure gauge. Never lift a load under 0.4 bar. If the gauge moves into the red zone below 0.4 bar, lower the load immediately.
- Set all loads down on clear even surfaces only.
- Only release the load when it is fully secured and stable.

Keep your fingers away from the load at all times to prevent crush injury.

- Always load the suction plates evenly.

2.4 Lifting Loads

- Position the VPH directly above the load. Avoid pulling diagonally. Make sure the load is evenly distributed.
- Place the VPH onto the load.
- Switch on the VPH using the main on/off switch.
- The load is now suctioned.
- Check the pressure gauge. Once a vacuum of 0.4 bar is reached the load can be lifted. Do NOT lift before this, as the load will fall.
- When lifting, ensure nothing is attached to the load. Carefully remove anything still attached with a screwdriver before lifting any further.

Do NOT remove anything with you hands – Danger of crush injury.

2.5 Lowering Loads

- Lower the load onto clear and even surfaces only.
- Switch off the diaphragm pump using the main on/off switch.

CAUTION! Once the machine is switched off, the suction lead is automatically bled. This results in the vacuum being lost. Ensure your feet are not underneath the load.

2.6 Battery

LED board:

- **Yellow** - Charge complete
- **Green** - Normal status
- **Red/Green flashing** - Battery low; requires charging
- **Red** - Do not use; battery is empty.

2.7 Damage to Suction Plate

To avoid damaging the rubber seal on the suction plate (splits & abrasions), ensure that during the operation of the device, the suction plate does not brush or bump against other products or materials.
Any damage to the suction plate could result in a loss of pressure and the load may be released.

Danger of accident & injury

3. Safety

3.1 Instructions for Installation, Maintenance and Operating Personnel

The device must be installed and maintained by qualified personnel, mechanics and electricians.
Each person in involved in the installation, start-up, operation, maintenance and repair of the device must have read and understood the operating instructions; especially the 'safety' chapter.
Your company must ensure:

- The operators of the lifting device are properly trained,
- They have read and understood the operating instructions,
- The operating instructions will be available to them at any time.

The responsibilities for the tasks carried out with the device must be clearly organised and observed. There must be no ambiguity regarding responsibilities.

3.1.1 General

- Before use, check the functions and the working condition.
- Maintenance and lubrication are only permitted when the device is shut down.
- Do not use the device until all faults, which can cause safety hazards, are removed.
- If there are splits at carrying parts of the device, immediately stop using it.
- The operating instructions must be available at the workplace every time.
- Do not remove the data-plates of the machine.
- Illegible data-plates must be replaced.

3.1.2 General

- The use of the device is only permitted in close proximity to the ground. Do not swing it overhead.
- While using the device, personnel are forbidden in the work area, unless essential, e.g. if the device must be guided by hand.

Danger to life.

- Manual guiding is only allowed on devices with handles.
- Do not try to free loads that are stuck using the device.
- Do not lift any components off-centre, as they could fall.
- Do not exceed the carrying capacity of the device.
- Avoid quick or jerky movements with the device. Driving fast over uneven ground is forbidden, as the device may lose grip.

3.2 Special Hazards

- The operating area must be closed to unauthorised persons, especially minors.
- The workplace must be sufficiently illuminated.
- Take care when handling wet, dirty or unstable components.
- Take care in case of thunderstorms.
- Do not use the vacuum lifting device in atmospheric conditions under 37.5° F, as dampness or freezing can reduce the vacuum and cause the goods to fall.
- Since the load is held on the suction plates of the unit by a vacuum, it will fall off as soon as this vacuum is lost.
- This can happen if the vacuum generator fails. An integrated vacuum reservoir maintains the vacuum for a short safety period. This period depends on the porosity of the surface of the load.
- If the generator fails, lower the load immediately if possible. Otherwise, clear the immediate area below and around the load.
- The unit draws large amounts of air. Hair and items of clothing can be drawn into the air inlet. Do not look into the inlet when the unit is running. It is possible for your eyes to be sucked into the air inlet!

3.3 Instructions for the Operator

- The operator of the lifting device must be trained before start-up. You must have read and understood the operating instructions; especially the safety chapter.
- Ensure that only authorised persons use the device. You are responsible for others within operating range.

3.4 Personal Protection Equipment

When operating, always wear:

- Safety boots (with steel toe)
- Safety gloves
- Ear defenders

3.5 Emergency Procedure

An emergency situation exists when:

- Power suddenly fails and the device switches off
- The vacuum drops below 0.4 bar.

In such cases, lower the load immediately if possible. Otherwise, clear the immediate area below and around the load; as without power, the load will be released.

3.6 Checking the Safety Equipment

The vacuum lifting device has the following safety equipment:

- Pressure gauge.

Checking the pressure gauge:

- Switch on the VPH.
- Place the VPH onto a metal plate, or similar. Upon suction, a pressure of 0.4 bar must be reached.

Checking the suction hose and clamps:

- Control and tighten the suction hose and clamps.

Safety advice for the 12volt rechargeable Battery Diaphragm Pump must also be consulted.