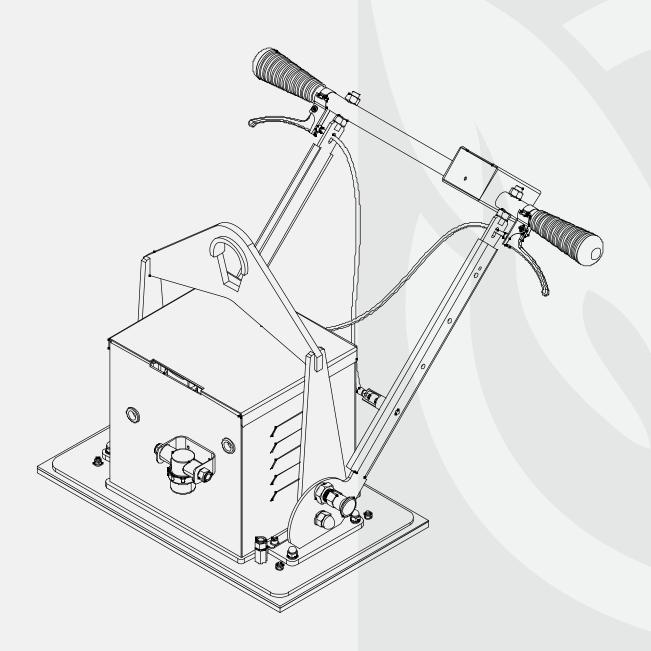




# **AARDWOLF**

# **ELECTRIC VACUUM LIFTER**

**AEVL1-250** 



Featuring a sliding valve, the Electric Vacuum Lifter is a powered vacuum lifter that is suitable for securely handling small-sized materials. By means of a vacuum tank, the lifter ensures safe pick-up in the event of a sudden power break to the vacuum pump.

## **GENERAL SAFETY OPERATIONS**

Read and understand the operator's manual and all the instructions before operating this lifter. Failure to follow the operating instructions and all safety procedures could result in serious injury to personnel and damage to products.

 Determine whether the capacity of a crane or hoist is suitable for use with the Electric Vacuum Lifter.

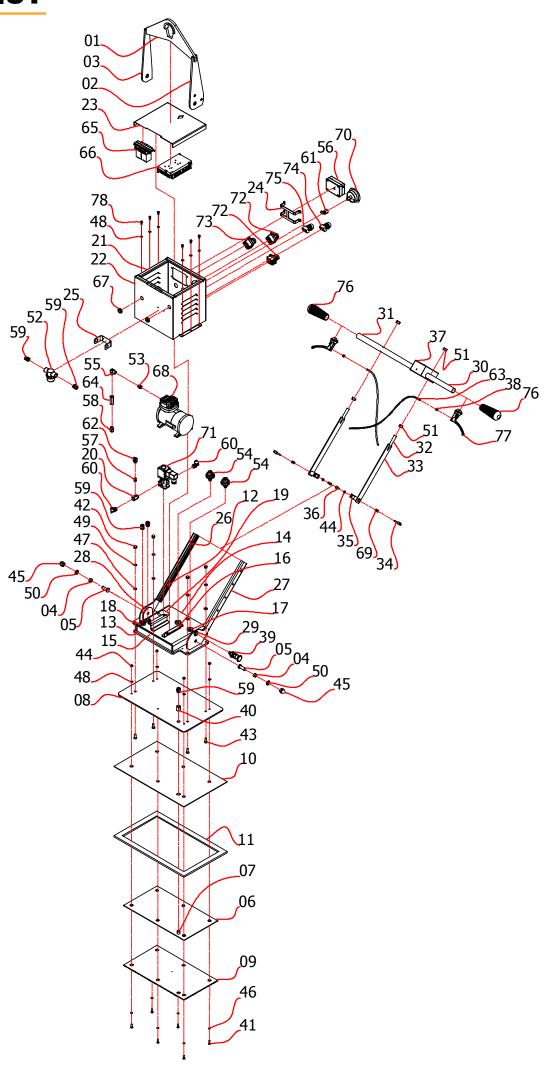
**CAUTION:** Some hoisting equipment hooks could interfere with an upright load that loads beyond the lifter's pad frame. The operator must prevent the load coming in contact with the hook during lifting by attaching a sling, (or other rigging that does not interfere with the load) between the hook and the lift bail.

- Ensure that the manual is available during operation.
- The load must not exceed the maximum allowable weight specified.
- The load must be a single sheet with a smooth and non-porous surface.
- The load's contact surface must be suitable for obtaining a safety factor of 1:2 with the lifter's vacuum pads.
- · Perform the load test, vacuum test and pumping test to ensure the lifter is safe before using.
- Carefully read the lifter manual before operating.
- Carefully check the maximum/minimum length & width as well as the thickness of the load.
- Make sure that the vacuum pad surface is clean and free from dirt and oil.
- Make sure that there are no obstructions during the working process.
- Operate only by competent and authorised personnel.
- Always wear appropriate protective equipment.

## **GENERAL SAFETY OPERATIONS**

- Always place the vacuum pad correctly on the load.
- Always check battery levels before lifting the load•
- Avoid operating the device in the rain.
- The lifter should not be used or operated if the vacuum level is lower than 53 kPa (40Cm Hg) and the red light is turned on.
- To avoid injury, no one is allowed to be right under the load.
- Disconnect the power source when not in use.
- Never operate a lifter that is damaged, malfunctioning or missing parts.
- Never operate a lifter if the edges of the vacuum pad are cut or damaged.
- Never operate a lifter if the labels for load capacity or any other warnings are missing or obscure & unclear.
- Never press the Release button during the lifting process.
- · Never lift a load over people.
- Never use the lifter in dangerous environments.
- It is important to ensure that regular examinations and inspections of lifting gear are undertaken to ensure maintenance is kept, and to verify that the equipment can continue to be safely used.
- Lifting gear inspections must be undertaken on a regular basis, by a person with adequate training, knowledge, skills and expertise.

# **DRAWING LIST**



# **PARTS LIST**

POS.	CODE	DESCRIPTION	Q'TY
1	AEVL1 - 001	TOP PLATE	01
2	AEVL1 - 002	SIDE PLATE	01
3	AEVL1 - 003	SIDE PLATE	01
4	AEVL1 - 004	BUSHING	02
5	AEVL1 - 005	PIN	02
6	AEVL1 - 006	UNDER PLATE	01
7	AEVL1 - 007	FITTING	01
8	AEVL1 - 008	PLATE	01
9	AEVL1 - 009	RUBBER	01
10	AEVL1 - 010	PLATE	01
11	AEVL1 - 011	BORDER	01
12	AEVL1 - 012	BLOCK	02
13	AEVL1 - 013	VACUUM TANK	01
14	AEVL1 - 014	VACUUM TANK	01
15	AEVL1 - 015	VACUUM TANK	02
16	AEVL1 - 016	PAD MOTOR	02
17	AEVL1 - 017	CONNECTING	02
18	AEVL1 - 018	CONNECTING	02
19	AEVL1 - 019	BLOCK	01
20	AEVL1 - 020	CONNECTING	01
21	AEVL1 - 021	COVER	01
22	AEVL1 - 022	COVER	01
23	AEVL1 - 023	COVER	01
24	AEVL1 - 024	BRACKET ALAM	01
25	AEVL1 - 025	BRACKET FILTER	01
26	AEVL1 - 026	OUTSIDE PLATE	01
27	AEVL1 - 027	OUTSIDE PLATE LOCK	01
28	AEVL1 - 028	INSIDE PLATE	02
29	AEVL1 - 029	NUT	01
30	AEVL1 - 030	PIPE	01
31	AEVL1 - 031	PIPE	01
32	AEVL1 - 032	THREAD PIN	02
33	AEVL1 - 033	BAR	02
34	AEVL1 - 034	PIN	02
35	AEVL1 - 035	LOCATING	02
36	AEVL1 - 036	BOLT 02	
37	AEVL1 - 037	CONTROL	01
38	AEVL1 - 038	CLOCKING	02
39	AEVL1 - 039	FIX WORK	01

# **PARTS LIST**

POS.	CODE	DESCRIPTION	Q'TY
40	AEVL1 - 040	THREAD CONNECTING	01
41	AEVL1 - 041	BOLT COME M6	06
42	AEVL1 - 042	NUT M8	04
43	AEVL1 - 043	BOLT M8	04
44	AEVL1 - 044	NUT M6	06
45	AEVL1 - 045	NUT M14	02
46	AEVL1 - 046	O-RING SEAL	06
47	AEVL1 - 047	WASH FLAT M8	04
48	AEVL1 - 048	WASH M6	10
49	AEVL1 - 049	WASH M8	04
50	AEVL1 - 050	WASH M14	02
51	AEVL1 - 051	NUT M12	04
52	AEVL1 - 052	FILTER	01
53	AEVL1 - 053	CONNECTING 1/4 & 1/8	01
54	AEVL1 - 054	VACUUM SENSOR	02
55	AEVL1 - 055	CONNECTING 1/4	01
56	AEVL1 - 056	ALAM BOX	01
57	AEVL1 - 057	CONNECTING 1/8 PIPE 6	01
58	AEVL1 - 058	CONNECTING 1/4 PIPE 10	01
59	AEVL1 - 059	CONNECTING 3/8 PIPE 10	05
60	AEVL1 - 060	CONNECTING 3/8 PIPE 10	02
61	AEVL1 - 061	CONNECTING 1/4 PIPE 6	01
62	AEVL1 - 062	CONNECTING Y PIPE 6	01
63	AEVL1 - 063	PIPE HANDBRAKE LEVER	02
64	AEVL1 - 064	ONE -WAY VALVE 1/4	01
65	AEVL1 - 065	RELAY	02
66	AEVL1 - 066	POWER	01
67	AEVL1 - 067	ROAM	02
68	AEVL1 - 068	VACUUM PUMP	01
69	AEVL1 - 069	SPRING	02
70	AEVL1 - 070	VACUUM GAUGE	01
71	AEVL1 - 071	VALVE 3-2	01
72	AEVL1 - 072	BUTTOM GREEN	02
73	AEVL1 - 073	BUTTOM RED	01
74	AEVL1 - 074	LIGHT GREEN	01
75	AEVL1 - 075	LIGHT RED	01
76	AEVL1 - 076	HAND HOLD	02
77	AEVL1 - 077	HANDBRAKE LEVER	02
78	AEVL1 - 078	BOLT M6	06

# **SPECIFICATIONS**

AEVL1-250	Metric	Imperial
Pad dimension	520 x 320 mm	20.5 x 12.6 in
Working load limit	250 kg	551 lb
Net weight	35 kg	77 lb
Gross weight	48 kg	106 lb
Packaging dimensions	760 x 660 x 470 mm	29.9 x 26 x 18.5 in

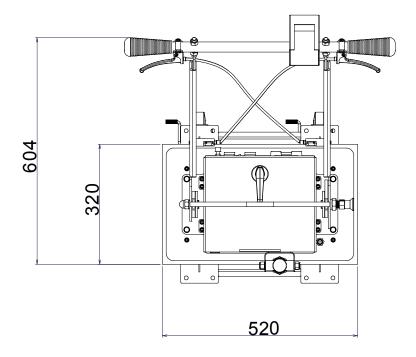
# • Battery information for the alarm system

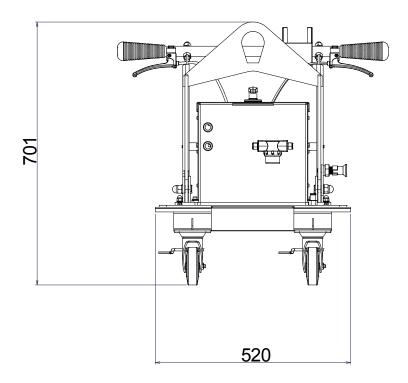
Power supply	3.7V Lipo battery	
Battery capacity	2000 mAh x 1	
Adapter	DC 5V-1A	
Standby time	720 hours	
Charging cycle	1000 times	
Charging time	2 hours	
Non-stop working time	7 hours	
6-month warranty		

# Motor information

Input supply	AC 220-1Phase 50/60Hz
Vacuum flow rate	-

# **DIMENSIONS**





# **FEATURES**

- Metal structure tilting from 0 to 90° manually.
- Vacuum tank for no risks when lifting/tilting materials.
- Press the Vacuum and Release buttons for attaching materials to the vacuum pads and releasing the materials from vacuum pads.
- Audio-visual alarm system.

## **INSTRUCTIONS FOR USE**

The lifter works perfectly and effectively for lifting & transporting marble, granite slabs and concrete.

Before use and during the working process, the operator must adhere to the instructions below:

- **Step 1:** Connect the Aardwolf Electric Vacuum Lifter to a crane or other hoisting equipment.
- **Step 2:** Connect the Lifter to the electric source to start.
- **Step 3:** Place vacuum pads of the lifter on the sheet material so that it is balanced.
- **Step 4:** Check and install the battery to Electric Vacuum Lifter for ready to work. Ensure the battery is full for the warning alarm system.

**Step 5:** The operator obsevers the vacuum generator with a warning alarm system:

- The pressure is indicated on the LED light.
- The audio alarm system. It has an ability to warn the vacuum leak.
- The energy saver alarm. It is an unique feature with vacuum leak warning and can close or open the electric valve automatically to save compressed air.
- Set the vacuum level.
- Alarm.
- Vacuum gauge. It shows in green zone with over 53 kPa that means the operator can lift the material.

**Step 6:** Press the Power and observe the Vaccum Leakage Detector and warning alarm system:

- If pressure is not full, the screen of the Vaccum Leakage Detector and warning alarm system will indicate the red color. The alarm (black-circle button) will ring & activates automatic pumping. This means that the lifter is not safe to lift the material.

**NOTE:** When the pressure reaches under 50 - 55 kPa ( $\sim 37.5 - 41.2$  Cm HG), it is dangerous stage and DO NOT lift the material.

- When pressure reaches 70 75 kPa (~ 52.5 56.2 Cm Hg), the screen of Vaccum Leakage Detector and warning alarm system will indicate the green color, simultaneously the alarm will turn off and the vacuum pump will stop pumping, this indicates that the pressure is safe for lifting material and the lifter can be put to use.
- **Step 7:** Press the Vacuum button to lead the vacuum into the vacuum pads and then lift & move the material slowly to the desired location
- **NOTE:** The Electric Vacuum Lifter can be tilted manually the slab panel from 0 to 90 degrees in vertical or horizontal directions easily.

## **INSTRUCTIONS FOR USE**

**Step 8:** Place it down and then press the Release button to exhale vacuum until vacuum pads are released the material.

If the lifter is employed in a construction area, CE Standard EN 13155 requires the use of a secondary positive holding device, such as a sling system, designed to support the load in case of a vacuum system failure

**WARNING:** Where CE Standard applies, a secondary positive holding device is required for lifting loads in construction zones.

### **VACUUM SETTING ADJUSTMENT INSTRUCTIONS**

The vacuum setting is set to maintain the minimum vacuum level specified for the load capacity. However, shipping vibration, shocks and normal wear may affect the vacuum level.

- The "Low" indicates the pressure level for vacuum pump activates automatically pumping.
- The "High" indicates the pressure level for vacuum pump stops automatically pumping. Therefore, the operator may have to adjust the vacuum setting so that it works properly:
- **Step 1:** Use the screwdriver to open the black nuts.
- **Step 2:** Use your hands to adjust the vacuum level.
  - Adjust the Low vacuum level (Standard level is always set at 50 55 kPa):
- Adjust the "Low" in the clockwise direction to increase the setting value for the low vacuum.

  Adjust the "Low" in the anti-clockwise direction to decrease the setting value for the low vacuum.
  - Adjust the High vacuum level (Standard level is just set at 70 75 kPa):
- Adjust the "High" in the clockwise direction to increase the setting value for the high vacuum.

  Adjust the "High" in the anti-clockwise direction to decrease the setting value for the high vacuum.

**NOTE:** If the operator sets the vacuum to over 75 kPa, the vacuum pump will be pumping continuously which could result in damaging the pump. Therefore, the vacuum level reaching 70 – 75 kPa is maximum and allowable.

### **INSPECTIONS AND MAINTENANCE**

#### **INSPECTIONS:**

Check the Electric Vacuum Lifter regularly to make sure it does not exhibit the following faults:

- The battery is disconnected before servicing the lifter.
- The vacuum pads and load surface for contamination or debris.
- The lifter's structure and vacuum system for visual damage.
- The air filter to ensure it is clean.
- · Unusual vibrations or noise while operating the lifter.
- Inspect the entire lifter for cracks, cuts, corrosion or any deficiency.
- The lifter has no missing parts.
- The edges of the lifter are not cut or damaged while sealing.
- Repair all faults before using the lifter.

#### **MAINTENANCE:**

A maintenance service must not be carried out if the lifter or battery is being connected to a power source. The lifter only operates well when it undergoes routine maintenance every day, every week, every month and whenever the lifter has indicated faults, damages & abnormalities.

The operator must test the lifter to ensure safety during operation. Do not carry out any lifting operations if any issues are found. If the lifter is used for less than one day in two-week period, the inspection should be performed before use.

### Vacuum pad maintenance:

The load capacity of most Aardwolf lifters is based on a safety factor of 1:2.

However, the vacuum pad may be reduced by factors such as contamination, normal wear, aging and exposure to sunlight or the conditions of the load surface.

- Never use solvents, petroleum, gasoline or any harsh chemical to clean the pad.
- Use the pad cover to protect the vacuum pad when the lifter is not in use.
- Keep the pad in dry conditions to avoid damage.
- The pad should be replaced with a new original pad regularly every two years when the safety factor is reduced.

#### Air filter maintenance:

- Clean the elements for dust or contaminations which can harm for the air filter.
- Replace with a new, original element when the vacuum drops approximately 0.02 MPA.
- During disassembly or reassembly make sure the O-ring is not cut or damaged.

## **WARRANTY**

After receiving the product, the buyer should check, based on the spare parts list and spare drawings attached to the product, that the spare parts have not been damaged or lost during shipment. Any damages or losses must be officially reported to The Aardwolf Industries LLC within eight days from the date of purchase.

The Electric Vacuum Lifter is granted a 12-month warranty based on Aardwolf Industries LLC's warranty policy from the date of purchase.

#### The warranty coverage is not applicable if:

- The lifter is handled incorrectly during maneuvering.
- The user fails to comply with the instructions in this booklet.
- The lifter's maximum permissible capacity is exceeded.
- The specifications for stone thickness are not followed.
- Damages are due to inadequate maintenance and inspections.
- Damage is due to improper storage.
- Repairs were performed by the user without our permission.
- Unofficial spare parts were used.

#### **DISCLAIMER:**

The Aardwolf Industries LLC's warranty does not cover the incorrect assembly and misuse of the lifter, the lack of maintenance and repair of the lifter as scheduled by the manufacturer, the operation carried out by non-competent or non-authorized operators or unofficial spare parts being used or installed.



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