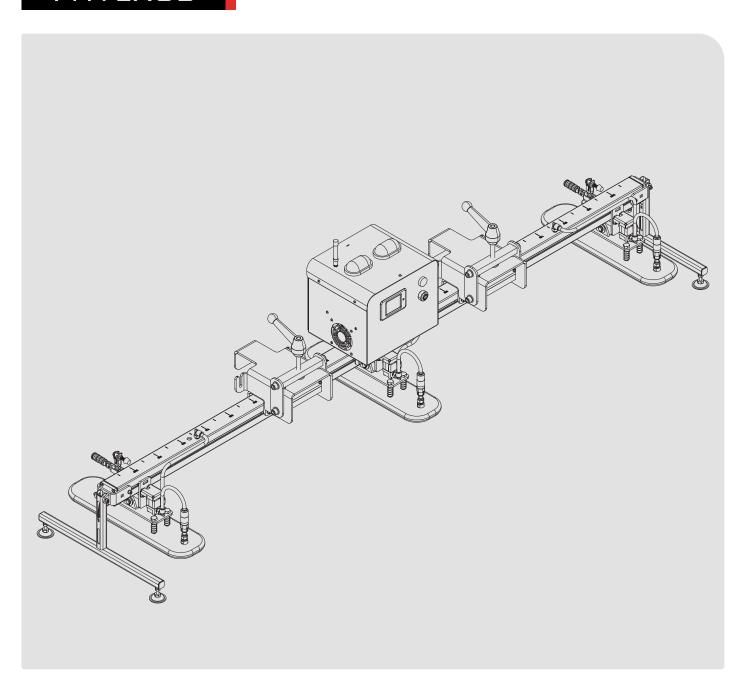




# **FORK MOUNTED VACUUM** LIFTING ATTACHMENT

FMVLAC2



# **CREATED BY**





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# Dear Customer,

Thank you for choosing the Aardwolf Fork Mounted Vacuum Lifting Attachment - FMVLAC2 - 150 Kg.

Please read the manual carefully before use and keep it readily accessible beside the vacuum lifter at all times.

If you have any questions, require spare parts, or need to report any issues, please contact the Aardwolf distributor at your location, provide the product code and serial number, and send them to info@aardwolf.com.au for assistance.

We hope this advanced tool meets your needs and exceeds your expectations.

Best regards,

**Aarwolf Industries** 

info@aardwolf.com.au www.aardwolf.com.au



# 01 OVERVIEW



#### **INTRODUCTION**

The light version of Forklift Mounted Vacuum Lifter Attachment, with a lifting capacity up to 150 kg (330.7 lb), simplifies operations and enhances convenience through a remote control with a large signal area. Designed for quick, safe, and efficient lifting of slab materials, this advanced tool transforms standard forklifts into highly capable lifting devices.

# **Key features**

### Advanced Vacuum System

Comes equipped with an integrated 3-pad vacuum system, each pad having its own filter and valve to increase efficiency and performance.

#### Precision and Balance

Features a self-locking stand and a measuring scale on the aluminum bar for optimal balance and precise adjustments.

# Easy Adjustments

Effortless clamp adjustments allow quick vacuum pad setup and seamless integration of the forklift.

# → Smart Monitoring

Includes a smart control box with a warning system and an LED display for real-time vacuum pressure monitoring.

# Battery Backup

Supported by a reliable backup battery to ensure continuous operation.

# Remote Control Operation

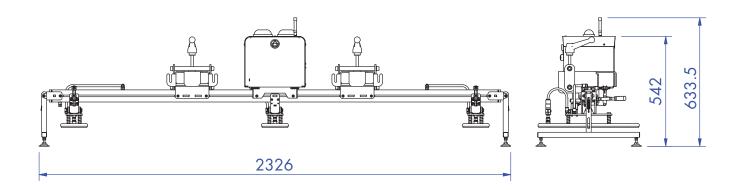
Control easily from a distance, enhancing operational convenience with its wide

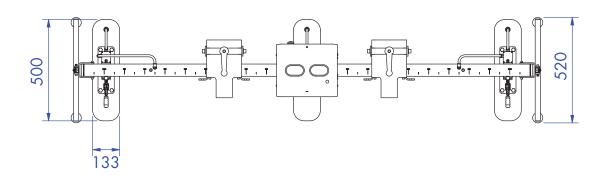






# **DIMENSIONS**







# **SPECIFICATIONS**

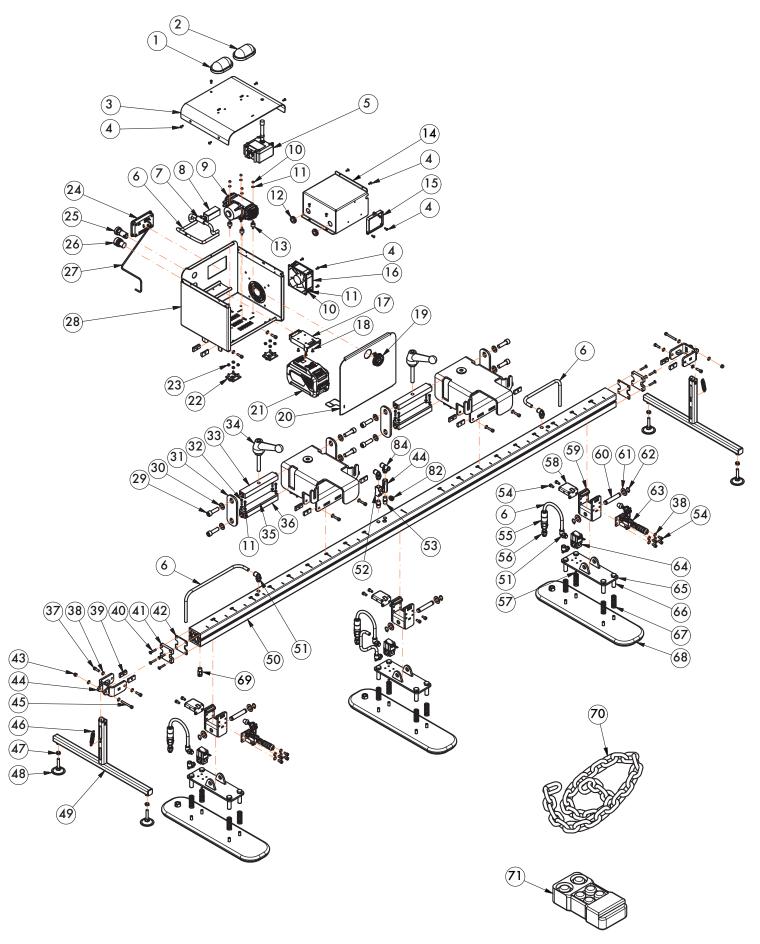
FMVLAC2 - 150 Kg						
Number of pad	3					
Pad sizes	$500 \times 133 \text{ mm}$ $19.7 \times 5.2 \text{ in}$					
Working load limit	150 kg/ 331lb					
Net weight	65 kg/ 143 lb					
Gross weight	100 kg/ 220 lb					
Packaging dimensions	2390 x 600 x 735 mm 94 x 23.6 x 28.9 in					

BATTERY INFORMATION					
Power supply	24V Lithium battery				
Standby time	>100 hours				
Charging cycle	1000 times				
Charging time	5 hours				
Vacuum pump's continuous working time	3 hours				

MOTOR INFOMATION					
Vacuum flow rate	70 litters/ minute				
Motor	24V - 4.5A				



## **DRAWING - FMVLAC2 - 150 KG**





## **PARTS LIST - FMVLAC2 - 150 KG**

POS.	DESCRIPTION	Q'TY
1	Emergency light red	1
2	Emergency light green	1
3	Electric box cover	1
4	Bolt M4x10	16
5	Receiver	1
6	Tube Ø10	10
7	T fitting Ø10	1
8	Silencer	1
9	Pump	1
10	Nut M4	8
11	Washer M4	22
12	Rubber round	3
13	Shock absorber	4
14	Pump cover	1
15	Pump driver	1
16	Fan	1
17	Battery holder	1
18	Bolt M4x10	4
19	Lock	1
20	Door	1
21	Battery	1
22	Hinge	2
23	Nut M5	12
24	Controller	1
25	Button	1
26	Buzzer	1
27	Tube Ø4	1
28	Electric box	1
29	Bolt M12x40	8
30	Washer M12	8
31	Plate 01	4
32	Bolt M4x20	8
33	Plate 02	2
34	Thread handle	2
35	Rubber plate	2
36	Plate 03	2

POS.	DESCRIPTION	Q'TY
37	Bolt M6x20	16
38	Washer M6	28
39	Nut M6 for aluminum bar	16
40	Bolt M5x30	8
41	Aluminum cap	2
42	Rubber seal	2
43	Nut M6	2
44	Stand support	2
45	Bolt M6x50	2
46	Spring	2
47	Nut M8	8
48	Level leg	4
49	Stand	2
50	Aluminum bar	1
51	L fitting Ø10	8
52	T fitting 1/4''	1
53	Union fitting 1/4	2
54	Bolt M6x12	18
55	Filter	3
56	Straight fitting	3
57	Bolt M4x15	6
58	Valve cover	3
59	Vacuum pad holder	3
60	Shaft Ø14	3
61	Washer M14	6
62	Circlip Ø14	6
63	Clamp	3
64	Valve	3
65	Vacuum pad support	3
66	Nut M8 for vacuum pad	12
67	Spring Ø15	12
68	Vacuum pad	3
69	Radiator drain lug	1
70	Chain Ø6, length = 3m	1
71	Remote controller	1



# 02 SAFETY INSTRUCTIONS



#### **GENERAL**

#### **PREPARATION**

Manual Availability

Ensure the operator's manual is available and understood by all operators.

Load Specifications

Ensure the load is a single load with a smooth, non-porous surface and does not exceed the W.L.L.

Surface Safety

Do not attach the suction pad to slippery surfaces where the load could slide off.

#### **PRE-USE CHECKS**

**Tests** 

Perform load, vacuum, and pumping tests to ensure the Lifter works well.

Vacuum Pad

Check that the vacuum pad surface is clean and free from dirt and oil.

→ Obstructions

Ensure there are no obstructions during operation.

▶ Battery Levels

Always check battery levels before lifting the load.

#### **OPERATING INSTRUCTIONS**

Placement

Center the Lifter on the load.

Personnel

Only competent and authorized personnel should operate the Lifter.

Protective Equipment

Operators must always wear appropriate protective equipment.

Environment Conditions

Avoid operating in unpleasant, poor quality, or hazardous physical environments.

#### **OPERATING INSTRUCTIONS**

Load Handling

Never lift a load over people. Ensure no one is under the load during lifting.



- Power Source Power off the Lifter when not in use.
- Damaged Equipment Do not operate the Lifter that is damaged, malfunctioning, or missing parts.



#### **WARNINGS**

# Always

**Wear** personal protective equipment.

Use one load per operation.

Check for Damage: Always inspect the Lifter for damage, malfunctioning parts, or missing components before each use.

Maintain Clean Surfaces: Always ensure that the contact surfaces of the load and all vacuum pads are clean before applying the pads.

**Power Source**: Always ensure the power source is available throughout the entire lifting operation.

Use Appropriate Load Characteristics: Always ensure the load is within the specified W.L.L.

Conduct Regular Maintenance: Always perform regular inspections and maintenance as outlined in the manual to ensure the Lifter is in good working condition.

Follow Operating Procedures: Always follow the specified operating procedures when lifting, rotating, or moving loads.

#### Never

Operate a Damaged Lifter: Never operate the Lifter that is damaged, malfunctioning, or missing parts.

**Exceed W.L.L:** Never exceed the Lifter's W.L.L or attempt to lift loads it is not designed for.

**Lift Unstable Loads:** Never attempt to lift a cracked or broken load.

Operate Without Clean Pads: Never use the Lifter if any vacuum pad's sealing edge foam seal is cut, damaged, or contaminated.

**Remove Warning Labels:** Never remove or obscure any warning labels on the Lifter.

**Touch Vacuum Release Buttons:** Never touch the vacuum release buttons during a lift, as this may result in the release of the load.

Lift Over People: Never lift a load over people or allow people to ride on the Lifter or the load.

**Leave Suspended Loads Unattended:** Never leave a suspended load unattended or lift it higher than necessary.

**Modify the Lifter:** Never modify the Lifter, as modifications may compromise its safety and performance.

Use in Dangerous Environments: Never use the Lifter in inherently dangerous environments or likely to compromise its ability to function, such as areas containing explosives or caustic chemicals.

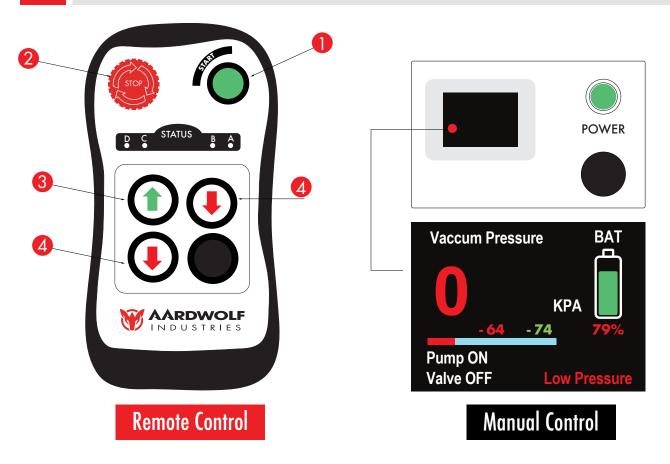
**Never** release the handle while lifting.



# **03** USER INSTRUCTIONS

# 

#### UNDERSTANDING THE CONTROL BUTTONS



- 1. START: Active the remote.
- 2. EMERGENCY STOP: Disables the remaining buttons for enhanced safety.
- 3. VACUUM: Activates the vacuum to attach materials.
- 4. RELEASE: Simultaneously pressed to disengage the vacuum safely.

#### **IMPORTANT**

- Antenna Setup: Ensure the remote antenna is mounted on the Electric Box before use.
- Release Button: Pressing one Release button does not release the vacuum. This safety
  feature prevents accidental deactivation during operation.
- Emergency Button: Never press during lifting operations. To reactivate, turn the Emergency button and press Start.





#### **OPERATING THE LIFTER**

### 1 Secure Attachment

Attach the Forklift to the Lifter's Forklift Mounted Pocket securely by turning the Thread Handle clockwise and tightening the chain.

# 2 Adjust Suction Pad

Unlock the Clamp, align the pads on the Aluminum Bar for balance, and lock it back.

#### 3 Power Activation

Press the POWER button on the control panel.

The red LED lights up, and the audio/visual safety system activates.

#### A Remote Control Activation

Press START on the remote to activate the Remote Controller.

## 5 Position Lifter

Center the Lifter on the material.

# **6** Engage Suction

Press the VACUUM button.

The vacuum pump starts to create pressure from 0 kPa to -75 kPa, then stops.

The vacuum safe zone for working is between -64 and -75 kPa.

The green LED lights up, and the audio/visual safety system deactivates.

# 7 Adjust Height

Use the fork truck's hydraulic control to lift or lower the load.

### 8 Move and Release Load

Move the load to the desired position and release the load by simultaneously pressing the two RELEASE buttons.



Release load by Remote Control



# 04 MAINTENANCE



#### **MAINTENANCE SCHEDULE**

A maintenance schedule is crucial for keeping equipment in optimal condition. It specifies routine tasks like inspections, cleaning, and part replacements at regular intervals. Following this schedule helps prevent breakdowns and extend equipment lifespan.



## **VACUUM FILTER MAINTENANCE**

#### Clean

Use a soft brush or compressed air to remove debris.

#### Inspect and Replace

Check for signs of damage, such as tears or holes, and replace the filter if it is significantly worn or damaged.

#### Installation

- Turn off the vacuum pump before performing any maintenance.
- Ensure the filter is dry and properly aligned before placing it back into the housing.



# **VACUUM PAD MAINTENANCE**

#### **Placement**

Do not place suction pads on the floor or other surfaces when not in use to prevent the vacuum blower's uncontrolled movements and potential overheating.

#### Clean

Avoid using solvents, petroleum, gasoline, or harsh chemicals. Stick to mild cleaning solutions.

#### **Protect**

Use the pad cover when the lifter is not in use to protect the vacuum pad.

#### Store

Keep the pad in dry conditions to prevent damage from moisture.

# **05** PREVENTIVE MAINTENANCE CHECKLIST

By following maintenance checklists, you can help ensure that your vacuum lifter operates safely and effectively for a long time.

	litter operates sately and effectively for a long time.											
	DAILY CHECKS			WEEKLY CHECKS			MONTHLY CHECKS		ANNUAL CHECKS			
Note:	Inspect suction pads for cracks or worn sealing lips.	Check the air filter elements for dust and contaminants that could impair performance, clean as needed.	Look for signs of wear, damage, or leaks in the pump and its components.	Ensure all air hoses and connections are secure and free of leaks.	Test the vacuum pump to maintain suction power at the set level.	Verify the functionality of the vacuum gauge. It should be responsive and accurate.	Inspect the device's structure and vacuum system for visual damage.	Test the safety alarm and warning systems to ensure they are functional.	Inspect the entire device for cracks, cuts, corrosion or any deficiency.	Schedule a professional inspection and certification of the entire unit.	Perform a thorough load capacity test to ensure the lifter can safely handle maximum loads.	Replace any non-functional parts or those showing excessive wear.
DAY DATE		CHECKED										
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												
Sunday												
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Friday Saturday												

Note: Always refer to the specific maintenance manual provided by the manufacturer for more detailed instructions and safety information related to your particular model.



# 06 TROUBLESHOOT

PROBLEM	LIKELY CAUSED BY	ACTION REQUIRE				
Vacuum pump does not started	Out of batteries	Recharge the battery				
	Vacuum pump not started	Check the function of the vacuum pump. Ensure it is properly installed and powered on.				
	Load too heavy	Reduce the load. Ensure it does not exceed the lifter's maximum lifting capacity.				
The device does not lift or exhibits	Air leakage	Inspect all connections, air hoses for leaks, cracks, holes, or loose hose clamps. Check the filter unit for any leaks. Clean or replace the suction pad if necessary.				
reduced functionality	Dirty vacuum pump filter	Clean the filter insert. Refer to the maintenance section on cleaning the vacuum pump filter.				
	Dirty vacuum pad	Clean the vacuum pad. Refer to the maintenance section on cleaning the vacuum pad.				
	Vacuum Pad Installed Incorrectly	Reinstall the vacuum pad correctly, ensuring the nuts are neither over-tightened nor under-tightened.				

**Note**: For serious issues or additional support, please get in touch with Aardwolf Technician Support at **info@aardwolf.com.au**. Our experts are ready to assist with any complex problems to ensure your equipment operates smoothly.

# WARRANTY



#### PRODUCT CHECK AND REPORTING

Upon receiving the product, the buyer should verify, based on the spare parts list and attached spare drawings, that all spare parts are intact and not lost during shipment. Any damages or losses must be officially reported to Aardwolf Industries within eight days of purchase.



#### WARRANTY INFORMATION

The Lifter comes with a 12-month warranty from the date of purchase, following Aardwolf Industries's warranty policy.



#### WARRANTY EXCLUSIONS

#### The warranty coverage does not apply if:

- The Lifter is handled incorrectly during maneuvering.
- The user fails to comply with the instructions provided in the manual.
- The Lifter's maximum W.L.L is exceeded.
- The specifications for the load thickness are not followed.
- Damages result from inadequate maintenance and inspections.
- Damage is due to improper storage.
- Repairs are performed by the user without permission from Aardwolf Industries.
- Unofficial spare parts are used.



## **DECLARATION OF CONFORMITY**

# We declare that the Lifter conforms to the following standards:

- The Machinery Directive 2006/42/EC
- Australian Standard 4991-2004

**Note:** It is the user's responsibility to comply with state or local laws. The end user is responsible for using the equipment safely, in the manner it is designed for, and within the unit's rated capacity.





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