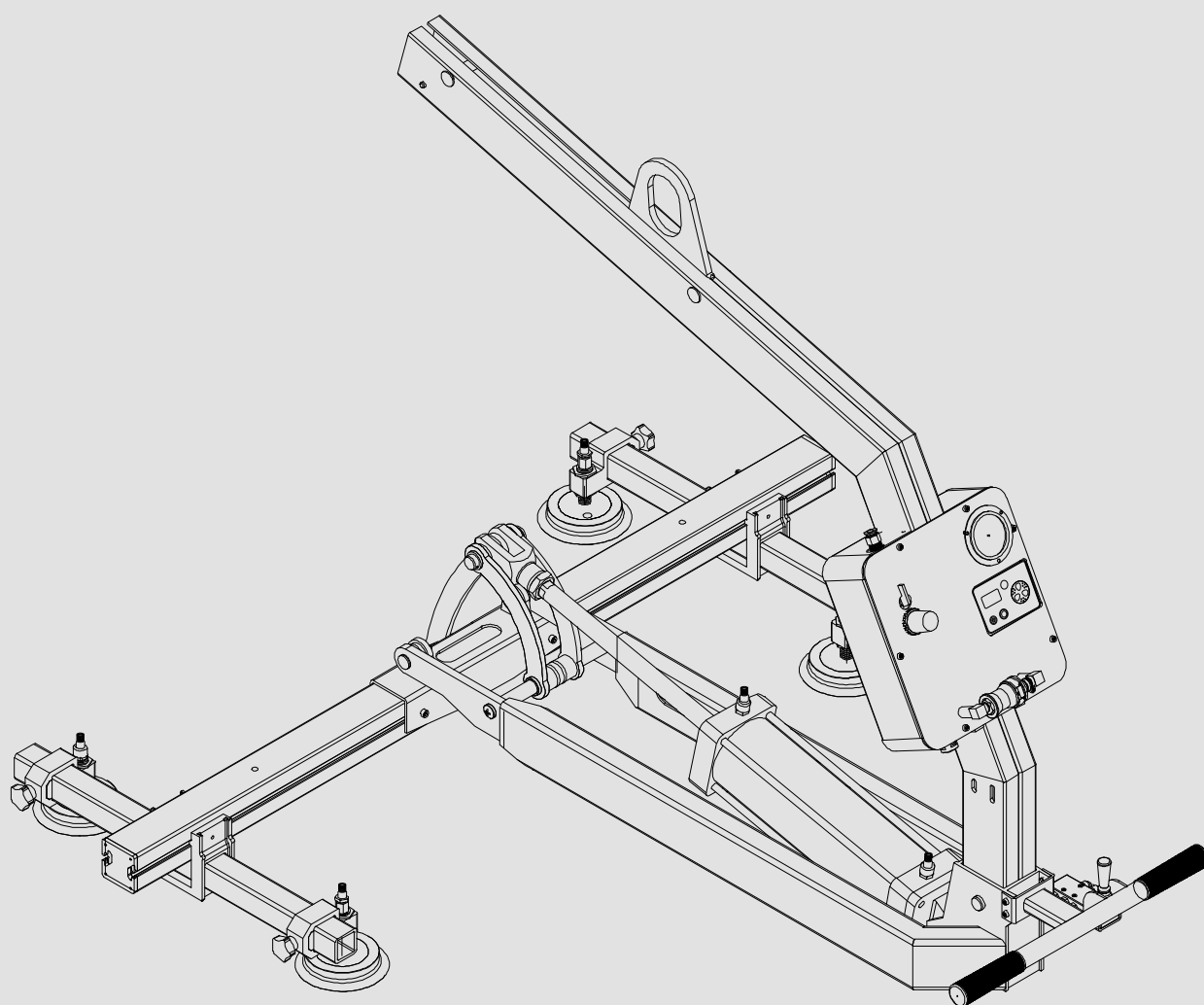


# ROTATION VACUUM LIFTER

**ARV-180**



**CREATED BY**

**AARDWOLF INDUSTRIES**  
*Marketing Department*

Published on:  
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**Dear Customer,**

Thank you for choosing the **Rotation Vacuum Lifter (ARV-180)**.

Please read the manual carefully before use and keep it readily accessible beside the 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](mailto:info@aardwolf.com.au) for assistance.

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

Best regards,

**Aardwolf Industries**



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# 01 OVERVIEW



## INTRODUCTION

The Rotation Vacuum Lifter ARV-180 offers a versatile solution for handling slabs and delicate glass panels in construction and manufacturing. Its 180-degree vertical rotation capability makes it perfect for flipping panels stacked during transportation and preparing them for installation. Equipped with advanced features such as a high-performance compressor and an audiovisual safety system, the ARV-180 ensures smooth, safe, and controlled operation. With its ergonomic design and enhanced safety mechanisms, this lifter is indispensable for efficient and secure material handling.

### Key features

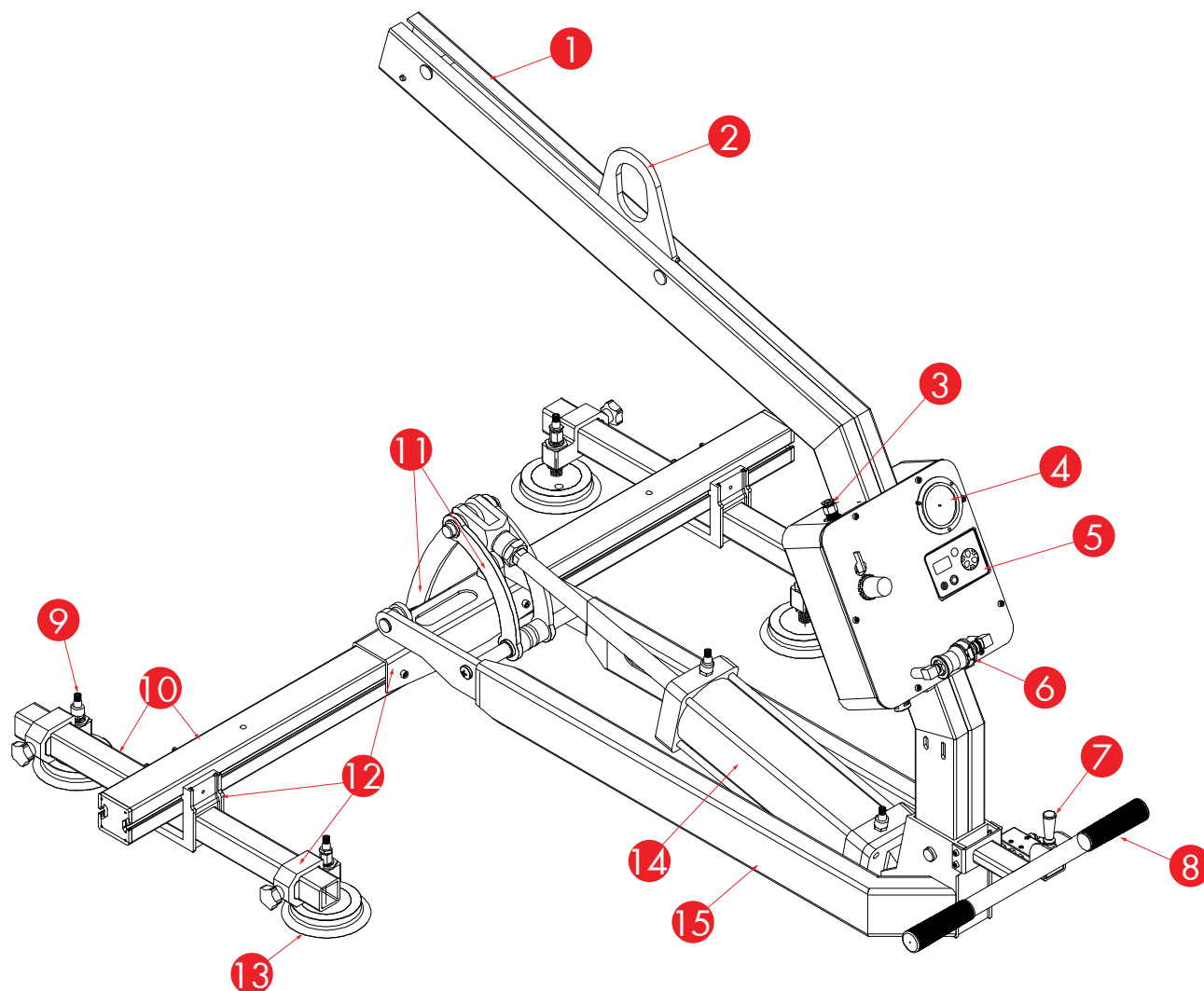


- **180° Material Rotation**  
Allows precise panel flipping for efficient handling and installation.
- **High Vacuum Performance**  
Ensures a secure grip on materials, reducing the risk of slippage and damage.
- **Ergonomic Controls**  
Designed to reduce operator fatigue and increase productivity.
- **Slide Valve for Material Handling**  
Facilitates easy lifting and release of materials, improving operational efficiency.
- **Audio/Visual Safety System**  
Enhances safety with continuous monitoring and warnings for potential risks.



## STRUCTURE

### MAIN COMPONENTS



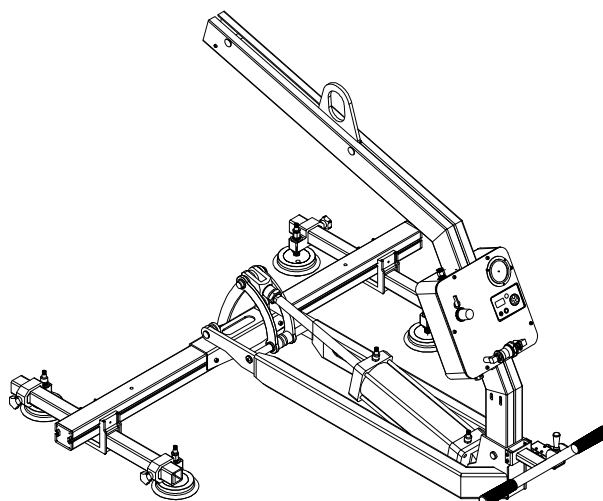
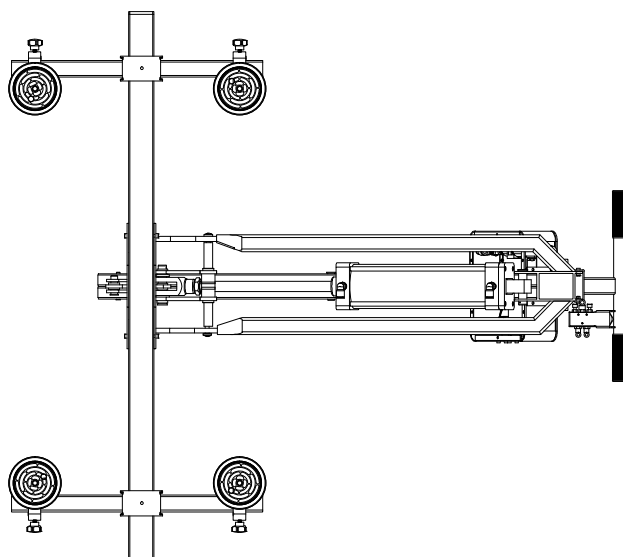
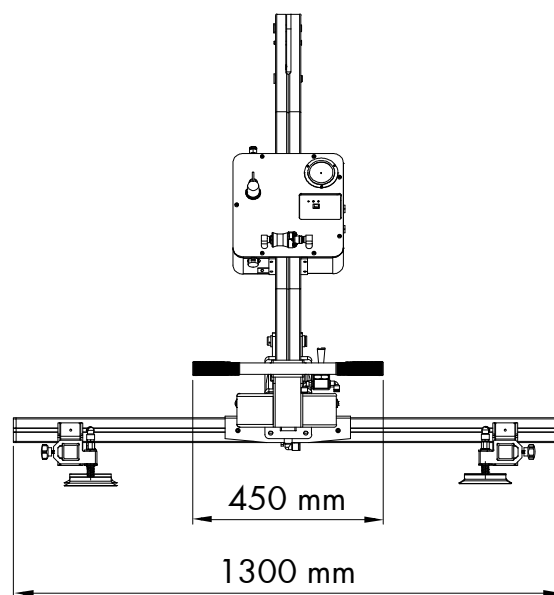
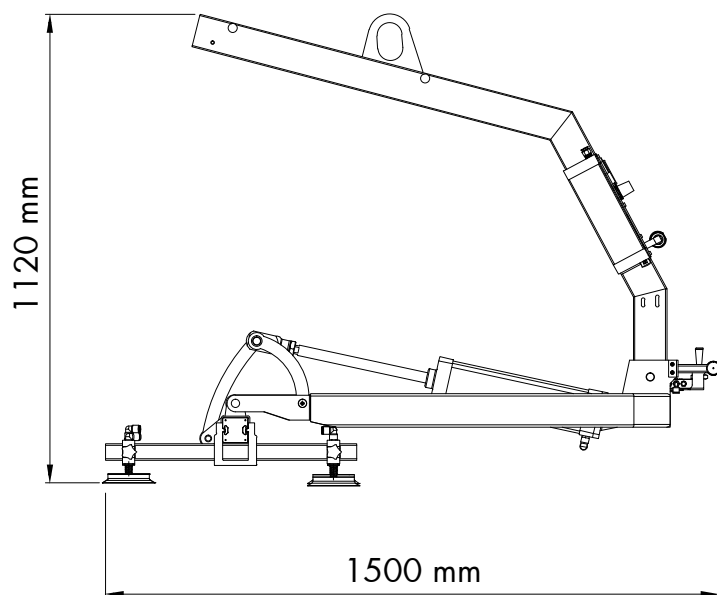
### DETAILS

- |                              |                   |                             |
|------------------------------|-------------------|-----------------------------|
| 1 UPPER FRAME                | 6 SLIDE VALVE     | 11 TORQUE ARMS              |
| 2 SHACKLE                    | 7 MANUAL VALVE    | 12 BRACKETS                 |
| 3 FEMALE TUBE FITTING        | 8 HANDLE          | 13 ROUND VACUUM PAD (4 PCS) |
| 4 VACUUM GAUGE               | 9 ELBOW MALE TUBE | 14 AIR CYLINDER             |
| 5 AUDIO/VISUAL SAFETY SYSTEM | 10 BEAMS          | 15 LOWER FRAME              |

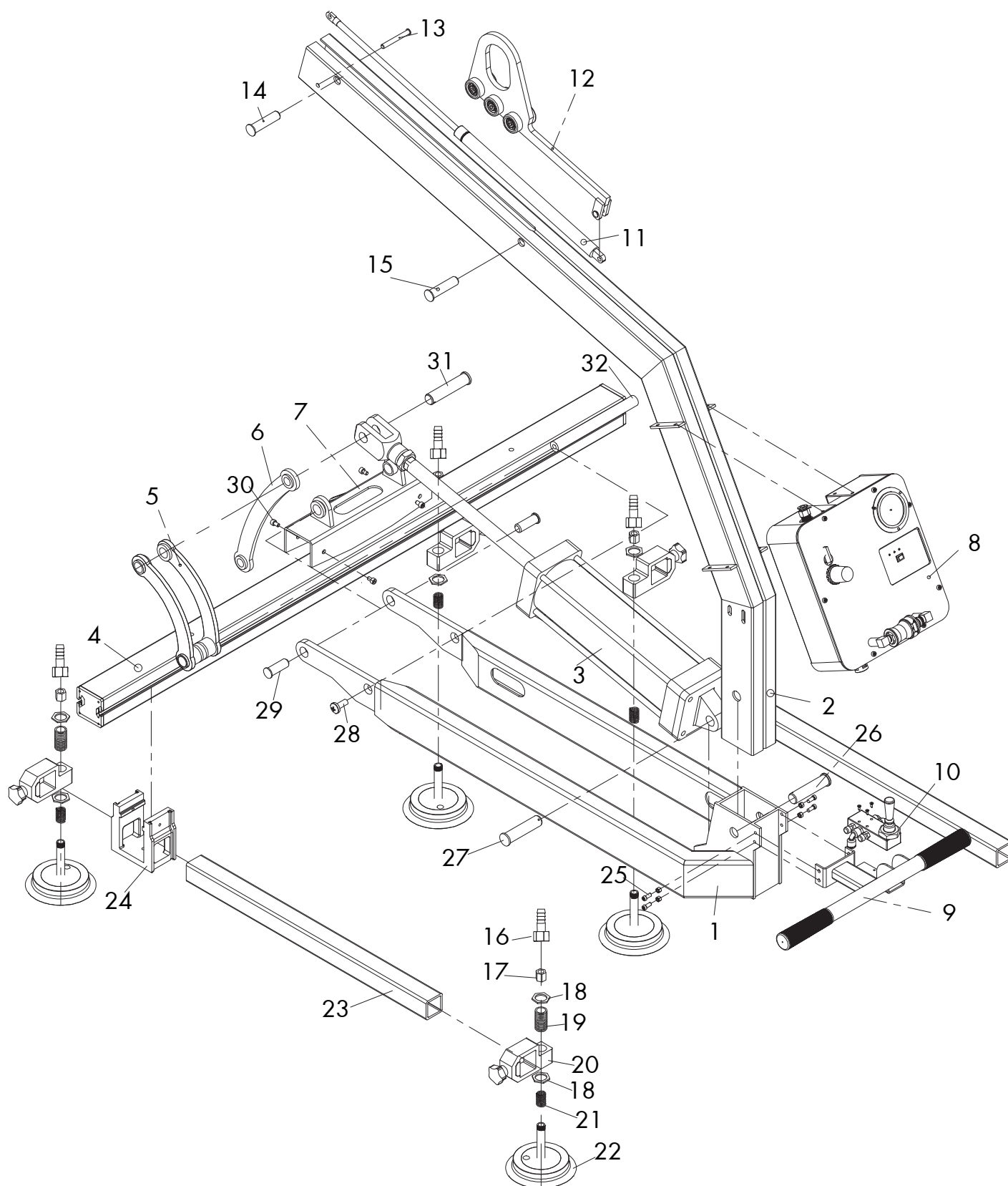


## TECHNICAL DATA

### DIMENSIONS - ARV-180



## DRAWING - ARV-180



## PARTS LIST - ARV-180

POS.	DESCRIPTION	Q'TY
1	Lower frame	1
2	Upper frame	1
3	Air cylinder bore 100-300	1
4	Beam 60x60	1
5	Double Torque arm	1
6	Torque arm	1
7	Bracket	1
8	Control box	1
9	Handle	1
10	Manual valve	1
11	Spring gas 310-160N	1
12	Shackle - wheel	1
13	Pin Ø8	1
14	Pin Ø16	1
15	Pin Ø16	1
16	Female tube fitting 16 -1/4	8
17	Joint 1/4"	4
18	Nut 21	4
19	Screw bush 21	4
20	Pad bracket	4
21	Spring	4
22	Suction pad 200 mm	4
23	Beam 40x40	2
24	Bracket	1
25	Bolt and nut	4

POS.	DESCRIPTION	Q'TY
26	Pin Ø20 (same to POS.27,31)	1
28	Screw bolt M10X25	2
29	Pin Ø16	1
30	Bolt M6	4
32	Dead axle Ø20x194	1

## SPECIFICATIONS

### ARV-180

Number of pad	4
Pad diameter	200 mm/ 8 in
Working load limit	160 kg/ 353 lb
Net weight	69 kg/ 152 lb
Gross weight	110 kg/ 243 lb
Packaging dimensions	1420 x 520 x 1210 mm 55.9 x 20.5 x 47.6 in

### BATTERY INFORMATION

Power supply	3.7V-2Ah Lipo battery
Adapter	DC 5V-1A
Standby time	720 hours
Charging cycle	1000 times
Charging time	2 hours
Non-stop working time	7 hours

### COMPRESSED AIR REQUIREMENT

Air consumption	180 liters/ minute
Supply air pressure	5 bars (72 psi)

# 02 SAFETY INSTRUCTIONS



## GENERAL

### PREPARATION

- ↘ **Training**  
The operator must be trained in all relevant industry and regulatory standards for operating the Lifter in their geographical location.
- ↘ **Manual Review**  
Before using the Lifter, the operator must read and understand this INSTRUCTION manual, including all WARNINGS.
- ↘ **Load Specifications**  
Ensure the load is a single load with a smooth, non-porous surface and does not exceed the W.L.L.

### PRE-USE CHECKS

- ↘ **Perform load Tests**  
Conduct vacuum and alarm tests to ensure the Lifter is functioning correctly.
- ↘ **Vacuum Pad**  
Check that the vacuum pad surface is clean and free from dirt and oil.
- ↘ **Obstructions**  
Ensure there are no obstructions during operation.
- ↘ **Load Surface**  
Ensure the lifting surface is clean, smooth, and free of debris or contaminants that could affect the vacuum seal.

### OPERATING INSTRUCTIONS

- ↘ **Personel**  
Only competent and authorized personnel should operate the Lifter.
- ↘ **Protective Equipment**  
Operators must always wear appropriate protective equipment.
- ↘ **W.L.L**  
Do not exceed the Lifter's W.L.L.
- ↘ **Environment Conditions**  
Avoid operating in unpleasant, poor quality, or hazardous physical environments.
- ↘ **Safe Distance**  
Keep bystanders at a safe distance during operation.



## WARNINGS

### Always

**Wear** personal protective equipment

**Use** one load per operation

**Inspect** the Lifter for damage, malfunctioning parts, or missing components before each use.

**Ensure** that the contact surfaces of the load and all vacuum pads are clean before applying the pads.

**Ensure** the load is within the specified W.L.L.

**Perform** regular inspections and maintenance as the manual outlines to ensure the Lifter is in good working condition.

**Follow** the specified operating procedures when lifting, rotating, or tilting loads.

### Never

**Lift** a load if the vacuum indicator shows inadequate pressure or audio alarm is on.

**Operate** a Lifter that is damaged, malfunctioning, or missing parts.

**Exceed** the Lifter's W.L.L or attempt to lift loads it is not designed for.

**Attempt** to lift a cracked or broken load.

**Use** the Lifter if any vacuum pad's sealing edge foam seal is cut, damaged, or contaminated.

**Remove or obscure** any warning labels on the Lifter.

**Lift** a load over people or allow people to ride on the Lifter or the load.

**Leave** a suspended load unattended or lift it higher than necessary.

**Modify** the Lifter, as modifications may compromise its safety and performance.

**Use** the Lifter in inherently dangerous environments or likely to compromise its ability to function, such as areas containing explosives or caustic chemicals.

**Release** the handle while lifting.

# 03 USER INSTRUCTIONS

## 1 Connect to Hoisting Equipment

Align and securely attach the Lifter to the hoist hook. Ensure all connections are stable before proceeding to lift.

## 2 Connect Air Hose

Carefully connect the air hose to the Lifter. Check for any air leaks or damage in the hose that could impact vacuum performance.

## 3 Position the Lifter

- Center the Lifter on the load.
- Ensure all vacuum pads will fully contact the load's surface and be evenly loaded during lifting.

## 4 Engage Suction

- Slide ON valve on the control panel to activate the vacuum system.
- Turn the alarm system ON before lifting the material. Observe the pressure gauge: the operation is ready when the needle is in the green zone, and the alarm is silent.

## 5 Rotate the Load

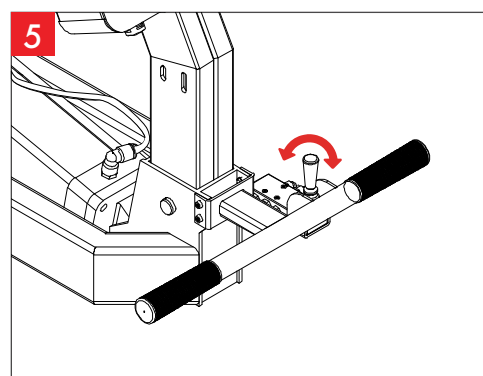
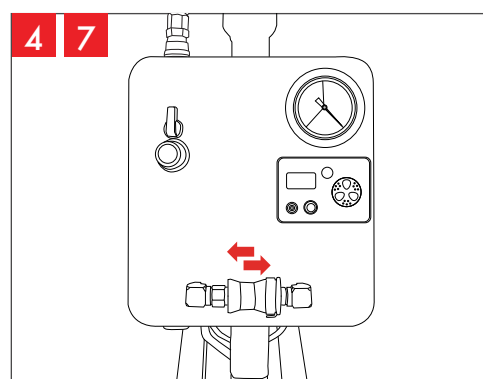
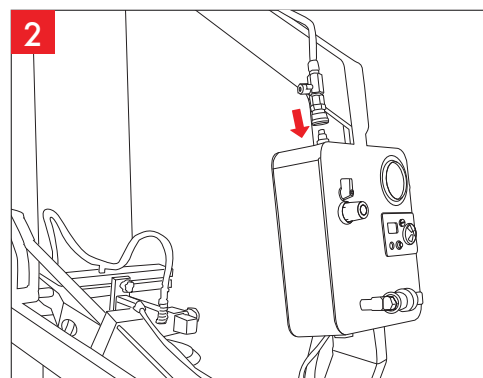
Use the Manual Valve to rotate the material up to 180 degrees carefully. This feature is useful for precise positioning, especially in tight spaces or specific installation requirements.

## 6 Lift and move the load

- Gently lift the material once the vacuum system is secure. Ensure the lifting movement is smooth and steady to maintain the integrity of the vacuum pads.
- Avoid sudden or jerking movements that could destabilize the load or disrupt the vacuum seal.
- Move the load to the desired position.

## 7 Release Load

Slide OFF valve to deactivate the vacuum system and release the load.



# 04 MAINTENANCE



## STORING THE LIFTER

### Pad Protection

- ↘ Always use the supplied covers to keep the vacuum pads clean and protected.

### Proper Storage

- ↘ Store the Lifter and its accessories in a location shielded from harsh weather conditions and harmful substances. Proper storage can extend the lifespan of the lifter and maintain its safety standards.



## VACUUM FILTER MAINTENANCE

### Clean

- ↘ Use a soft brush or compressed air to remove debris.

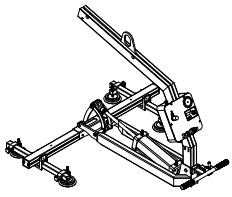
### Inspect and Replace

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

### Clean

- ↘ Turn off the vacuum system before performing any maintenance.
- ↘ Ensure the filter is dry and properly aligned before returning it to the housing.

# 05 | PREVENTIVE MAINTENANCE CHECKLIST



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

Note:

DAILY CHECKS	WEEKLY CHECKS	MONTHLY CHECKS	ANNUAL CHECKS
Inspect pads for cleanliness and any signs of wear or damage.			
Check the air filter for any buildup of dust or contamination. Clean if necessary.			
Look for signs of wear, damage, or leaks in the vacuum system and its components.			
Ensure all air hoses and connections are secure and free of leaks.			
Listen for unusual sounds or vibrations during operation that could indicate mechanical issues.			
Verify the functionality of the vacuum gauge and alarm system. It should be responsive and accurate.			
Inspect the Lifter'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													
Saturday													
Sunday													

*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 System Fails to Engage	Air compressor malfunction	Check the air compressor for any signs of failure or irregular operation.
	Load too heavy	Reduce the load. Ensure it does not exceed the lifter's maximum lifting capacity.
	Air leakage	Inspect all connections and air hoses for leaks or cracks. Check the filter unit for any leaks. Clean or replace the suction pad if necessary.
	Dirty vacuum filter	Clean the filter insert. Refer to the maintenance section on cleaning the vacuum 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.
The Lifter Does Not Release the Load	Vacuum valve malfunction	Ensure the slider valve is in the correct position to release the vacuum.
Unusual Noises or Vibrations During Operation	Mechanical wear, loose components	Inspect all mechanical parts for wear or damage. Tighten any loose bolts or connections.

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

# 07 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 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

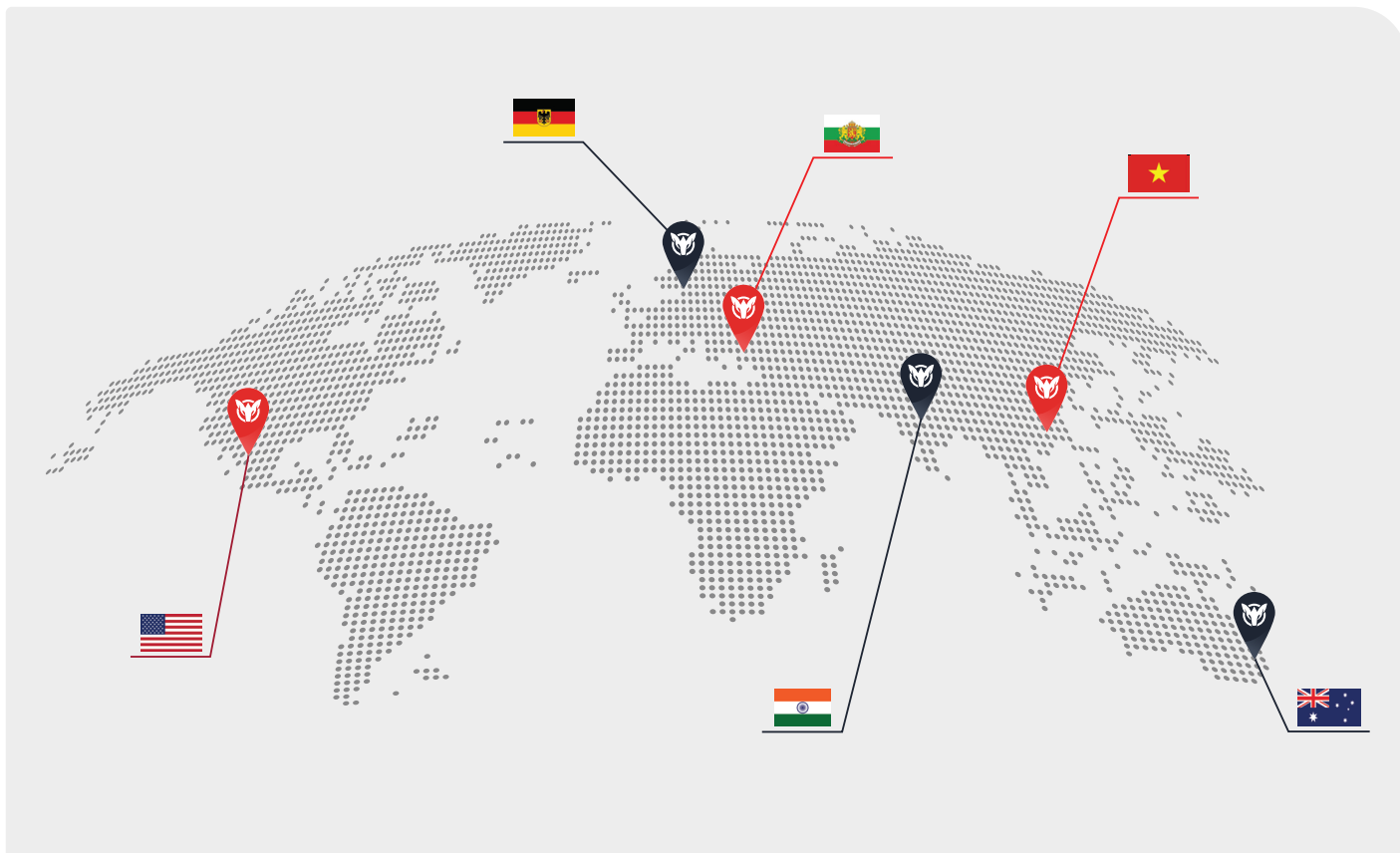
We declare that the Lifter conforms to the following standards:

- ↘ 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.*

## WE PROVIDE

Simple, Reliable, Cost Saving And  
Awesome Ideas For Your Business



## FIND THE NEAREST AARDWOLF SERVICE CENTER

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Email: [adrian@toolrange.com](mailto:adrian@toolrange.com)

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