

# INSTALLATION & OPERATION MANUAL



## Atlas AEZWL-2 180 lb. Capacity Pneumatic Portable Wheel Lift



**Atlas Automotive Equipment**  
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**Read this entire manual before operation begins.**

Record below the following information which is located on the serial number data plate.

Serial No. \_\_\_\_\_

Model No. \_\_\_\_\_

Date of Installation \_\_\_\_\_

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# General Information

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This manual has been written to be used by shop technicians in charge (operator).

The operating instructions are considered to be an integral part of the machine and must remain with it for its whole useful life.

Read every section of this manual carefully before operating the lift.

The company is not liable for possible problems, damage, accidents, etc. resulting from failure to follow the instructions contained in this manual.

Only skilled technicians shall be allowed to carry out lifting, transport, assembling, installation, adjustment, calibration, settings, extraordinary maintenance, repairs, overhauling and dismantling of the lift.

**The manufacturer is not responsible for possible damage to people or objects if said operations are carried out by unauthorized personnel or the lift is improperly used.**

Any use of the lift made by operators who are not familiar with the instructions and procedures contained herein shall be forbidden.

For a proper use of this manual, the following is recommended:

- keep the manual near the lift, in an easily accessible place.
- keep the manual in an area protected from the damp.
- use this manual properly without damaging it.
- Any use of the machine made by operators who are not familiar with the instructions and procedures contained herein shall be forbidden.

This manual is an integral part of the lift: it shall be given to the new owner if and when the lift is resold.

Operators must not be under the influence of sedatives, drugs or alcohol when operating the machine.

# **Declaration Of Warranty And Limitation Of Liability**

The manufacturer has paid proper attention to the preparation of this manual. However, nothing contained herein modifies or alters, in any way, the terms and conditions of manufacturer agreement by which this lift was acquired, nor increase, in any way, manufacturer's liability to the customer.

## **To The Reader**

Every effort has been made to ensure that the information contained in this manual is correct, complete and up-to date. The manufacturer is not liable for any mistakes made when drawing up this manual and reserves the right to make any changes due the development of the product, at any time.

# Description

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## 2.1 Description

This pneumatic mobile lift is suitable for lifting motor wheel having maximum weight 80 kg / 176 lbs. All mechanical parts such as columns, carriages and lift arms have been built in steel plate to make the frame stiff and strong while keeping a low weight. The operation is described in detail in chapter 4.

This chapter describes the lift's principal elements, allowing the user to be familiar with the machine. As shown in figure 1, the lift is composed of a single post (1), a carriage (2) driven through a chain by means of a pneumatic cylinder built inside the post, two arms (3) with the rollers for convenience to rotate the wheel to the desired position. Raising/lowering motion is carried out by operation of a pneumatic switch (4) placed on the rear side of the post. With the handle (5) and four universal castors (6), the lift can be moved in any direction easily.

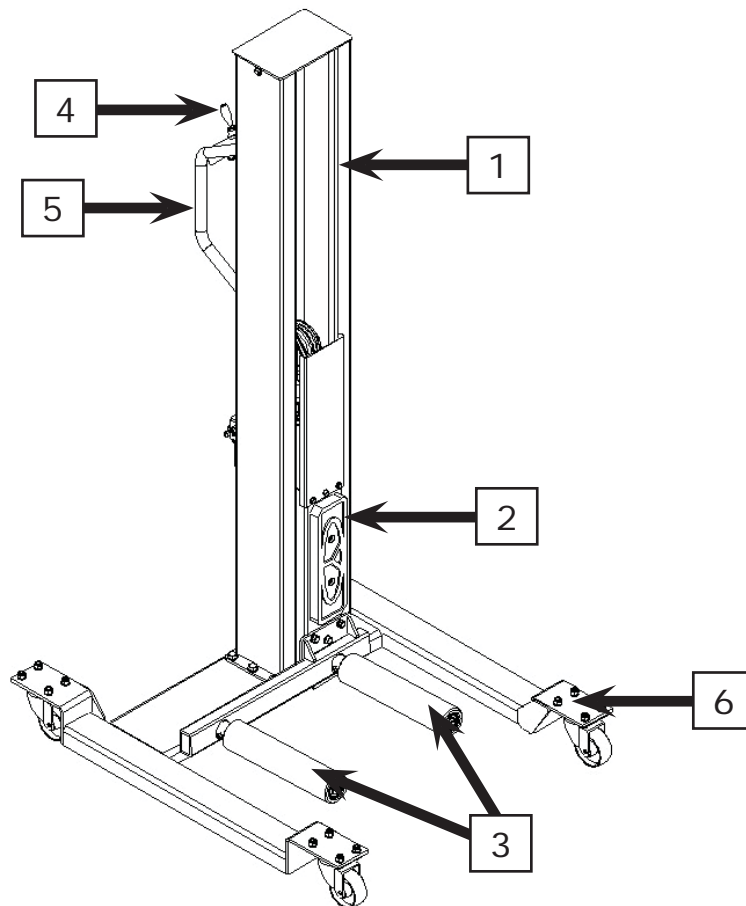
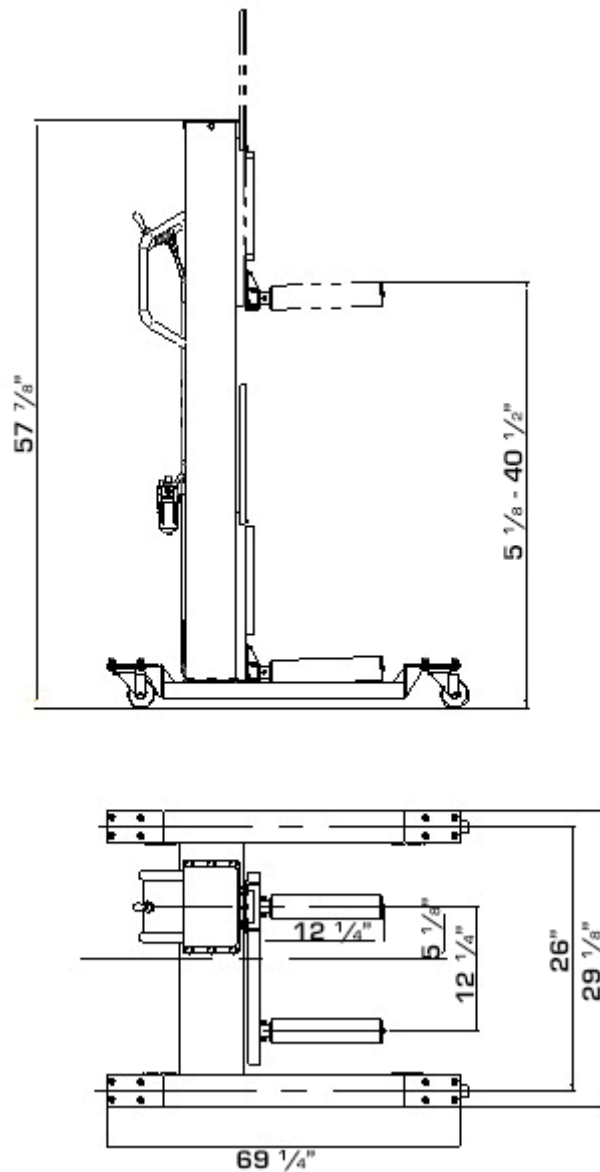


Figure 1

## 2.2 Specification

<b>Lifting capacity</b>	<b>180 lbs</b>
Max. lifting height	40 1/2"
Min. lowered height	5 1/8"
Arm length	12 1/4"
Distance between two arms	12 1/4"
Overall height	57 7/8"
Required compressed air pressure	8bar – 10bar
Weight	175 lbs
Packing dimension	57 7/8"(L) x 15 3/4"(W) x 17 1/4"(H)



**Figure 2**

# Operation And Use

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## 3.1 Parts Assembly

- Remove the components and the installation accessories from the package;
- Check that the lift is in perfect condition, making sure that no parts are damaged or missing referring to the exploded drawings attached to this manual;
- Assembly the lift referring to the parts breakdown attached on this manual;
- Make sure all screws are tightened properly.

## 3.2 Pneumatic Line Connection

The pneumatic supply at site (to which the pneumatic system of the lift is connected) must be connected to the supplied lubricator.

For the connection of the pneumatic lines proceed as follow:

- Mount the lubricator on the rear of the post;
- Connect the pneumatic lines pre-assembled to the lubricator;
- Connect the servicing unit to the pneumatic supply at site;
- Check the pneumatic control operations for proper performance.



**The pressure in the pneumatic line must be kept around 6 bar – 8 bar.**



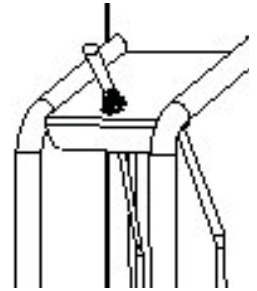
### 3.3 Pneumatic Line Connection



**Never operate the lift with any person.  
Never exceed the rated lifting capacity.  
Never try to raise the lift over the rated lifting height!**

To operate the lift, do as follows:

- Move the lift close to the wheel to be lifted;
- Put down the switch lever (ref. fig. 3) to let the lift lower at the minimum height;
- Place the wheel on the arms properly;
- Raise the lift by putting up the switch lever (ref. fig. 3);
- Rest the lift at a desired height by releasing the switch lever;
- Place the wheel onto the tire changer or the wheel balancer carefully;
- Move the lift out of the working space.



**Fig. 3**

# Maintenance

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**Only trained personnel who knows how the lift works, must be allowed to service the lift.**

To service properly the lift, the following has to be carried out:

- use only genuine spare parts as well as equipment suitable for the work required;
- follow the scheduled maintenance and check periods shown in the manual;
- discover the reason for possible failures such as too much noise, air blow-by, etc.

Refer to documents supplied to carry out maintenance:

- exploded views with all data necessary for spare parts ordering
- list of possible faults and relevant solutions.

## 4.1 Ordinary Maintenance

The lift has to be properly cleaned at least once a month. Use self-cleaning clothes.

- Be sure the rod of the pneumatic cylinders is always clean and not damaged since this may result in leakage from seals and, as a consequence, in possible malfunctions.
- Check the sliders are greased properly.
- Check the chain is greased properly.



**The use of water or inflammable liquid is strictly forbidden**

## 4.2 Periodic Maintenance

Every 3 months	Pneumatic circuit	<ul style="list-style-type: none"><li>• check oil level in the lubricator reservoir; refill with oil, if needed;</li><li>• check the circuit for air leakage.</li></ul>
Every 6 months	Air valves	<ul style="list-style-type: none"><li>• Check the reason for failure of valves</li></ul>
Every 12 months	General check	<ul style="list-style-type: none"><li>• verify that all components and mechanisms are not damaged</li></ul>

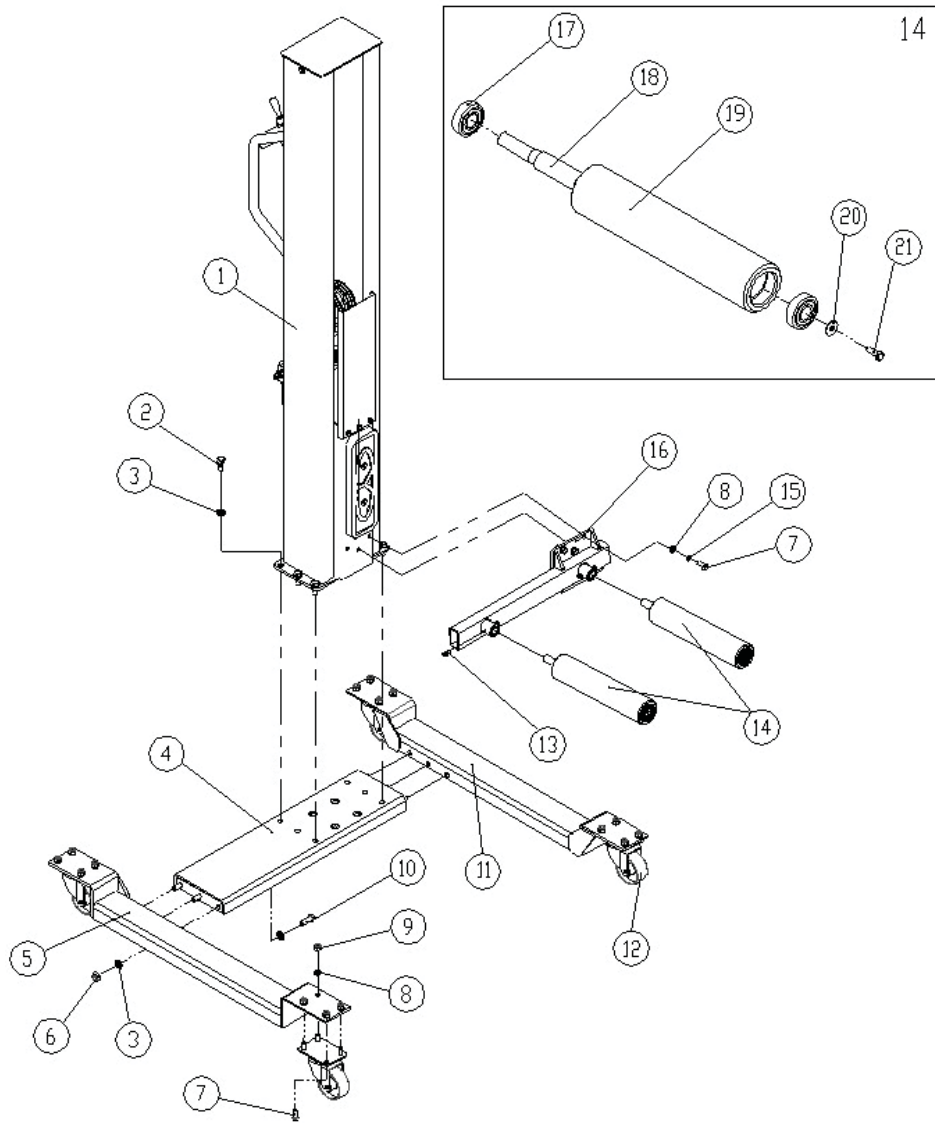
# Troubleshooting

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A list of possible troubles and solutions is given below:

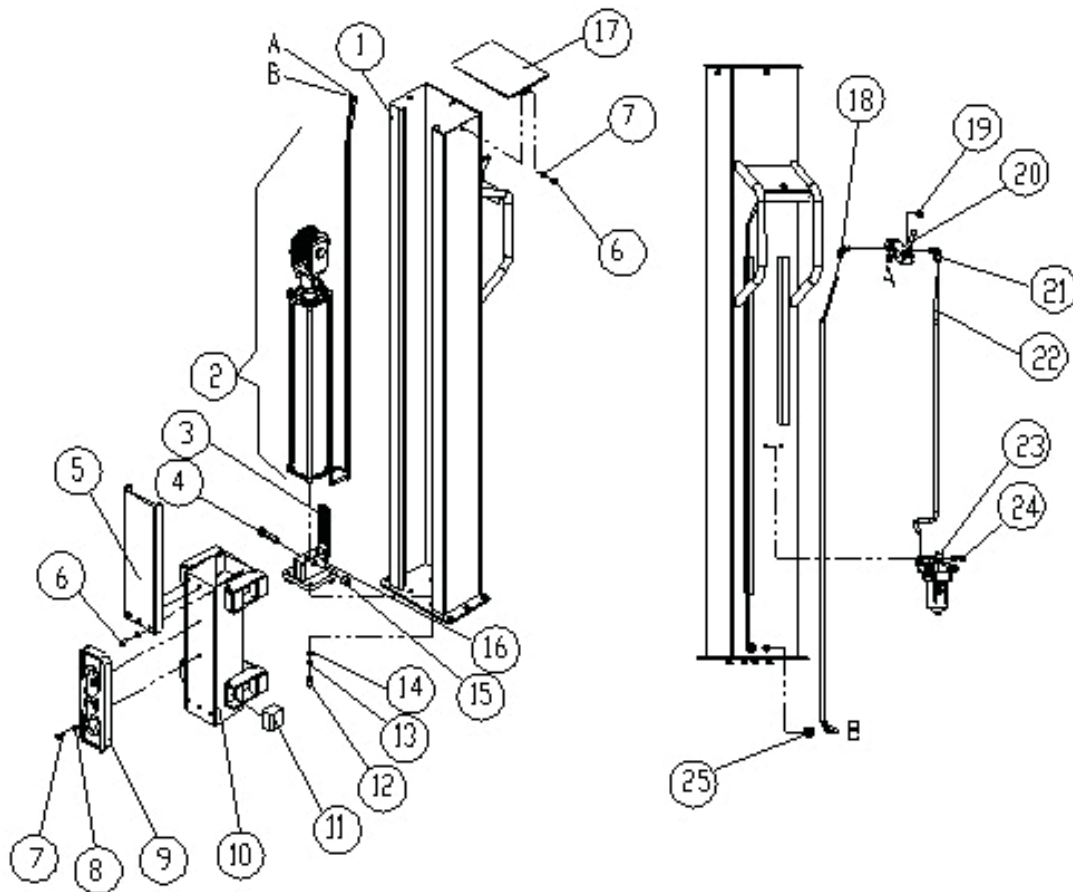
<b>Trouble:</b>	<b>Possible Cause:</b>	<b>Solution:</b>
The lift does not raise	The air supply is not fed.	Feed the air supply.
	The air pressure is not sufficient.	Regulate the air pressure higher.
	The air leakage in the circuit.	Check proper connections the hoses (replace if damaged).
	The seal in the cylinder is faulty	Check and replace if necessary.
	The air valve is faulty	Check and replace if necessary.
The lifting capacity is not sufficient	The air pressure is not sufficient.	Regulate the air pressure higher.
	The air leakage in the circuit.	Check proper connections the hoses (replace if damaged).
	The seal in the cylinder is faulty	Check and replace if necessary.
The lift does not lower	The air valve is faulty	Check and replace if necessary.
The lift does not stop in standing position	The air leakage in the circuit.	Check proper connections the hoses (replace if damaged).
	The seal in the cylinder is faulty	Check and replace if necessary.
The lift does not raise smoothly	The slider (s) damaged.	Check and replace if necessary.

# Parts Breakdown



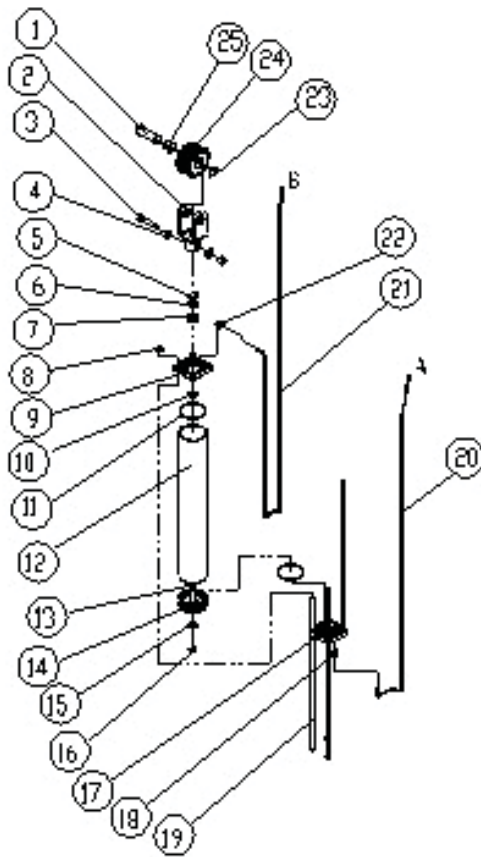
Item	Part number	Description	Item	Part number	Description
1	YCW2-2002000	Column assembly	12	0511028	Caster 3"
2	0201064	Screw M10X25	13	0202024	Screw M6X12
3	0205011	Washer D.10	14	C03C300000	Wheel arm unit
4	C03C010100	Base	15	0208006	Locking washer D.8
5	YCW2-2401200	Left foot	16	C03C020100	Arm support
6	0204005	Nut M10	17	0214016	Bearing 6203
7	0201042	Screw M8X20	18	C03C030002	Arm shaft
8	0205008	Washer D.8	19	C03C030001	Arm roller
9	0204004	Nut M8	20	0205009	Washer D.8
10	0201049	Screw M10X30	21	0201026	Screw M8X16
11	YCW2-2401300	Right foot			

Figure 4 – General Assembly



Item	Part number	Description	Item	Part number	Description
1	YCW2-2402100	Column	14	0205008	Washer D.8
2	YCW2-2002100	Pneumatic cylinder	15	0204007	Self-locking M12
3	0215015	Chain 1500	16	YCW2-2402200	Cylinder support
4	0201077	Screw M12X45	17	YCW2-2402400	Post cover
5	YCW2-3002004	Chain protection	18	0306046	90° union 6-1/8
6	0201010	Screw M6X12	19	0306087	Silencer 1/8
7	0202032	Screw M6X16	20	0307109	Control valve
8	0205006	Washer D.6	21	0306045	90° union 8-1/8
9	XSZ-8-802-2	Rubber pad	22	0306097	Rilsan hose 8X5 L=680
10	YCW2-2403000	Carriage	23	YCW2-2002200	Lubricator
11	YCW2-3002001	Slider	24	0202030	Screw M6X10
12	0201042	Screw M8X20	25	0508010	Cable relief D.16
13	0208006	Locking washer D.8			

**Figure 5 – Column Assembly**



Item	Part number	Description	Item	Part number	Description
1	YCW2-3002003	Pulley shaft	14	YC1-4198856	Piston
2	YCW2-2404000	Pulley bracket	15	0205013	Washer D.12
3	0201081	Screw M12X60	16	0204007	Self-locking nut M12
4	0205013	Washer D.12	17	YC1-3015023	Back flange
5	0211004	Seeger D.30	18	0306046	Union 6-1/8
6	YC1-4398146	Washer	19	YCH-3008334	Special screw
7	C00AQ35009	Seal 20X30X7	20	0306101	Rilsan hose 6X4 L=1200
8	0204025	Flange nut M8	21	0306101	Rilsan hose 6X4 L=1800
9	YC1-3015024	Front flange	22	0306036	90° union 6-1/8
10	0606004	O-ring 20X2.75	23	0212004	Seeger D.25
11	0606007	O-ring 75X3.55	24	YCW2-3002002	Pulley
12	YCH-3008833	Cylinder liner	25	0210008	Self-lubricating bush
13	YCH-3006649	Cylinder shaft			

**Figure 6 – Cylinder Unit**