

Power Climber® **PC3 Air Hoist**

BASIC OPERATION

SPECIFICATIONS

Wire Rope Size:
5/16" up to 8.4mm

Air Pressure: 60-110 psi

Capacity: 750-1500 lbs.

Speed: Up to 35 fpm

Weight: 88 lbs.

Air Consumption:
35-70 CFM
70 CFM Max.

Dimensions:
20.5" x 12" x 14"

Recommended Air line filter and lubricator for single hoist operation is Power Climber P/N 5430.
Recommended air hose size 3/4" typically. Always use hoist covers when working in harsh environments or environments with airborne debris.

DESCRIPTION

- ▲ Carrying Handle
- ▲ UP/DOWN Operation Handle
- ▲ Exhaust Mufflers
- ▲ Versa Valve
- ▲ Main airline connection
- ▲ Carrying Handles

WARNING: These units are intended for use with industrial compressed air systems only. They must not be used where pressure or temperature may exceed maximum operating conditions. Serious injury may result from doing so.

WARNING:

Make sure that you read the entire operator's manual before operating this hoist.
Make sure to perform ALL Daily Test Requirements before operating this hoist.
Perform all daily tests to ensure correct operation! Do not use the hoist for lifting until you have successfully completed the daily tests.

The mechanical operation of the air hoist is the same as the electric hoist. The transmission, traction sheave, safety devices and secondary brakes work the same.



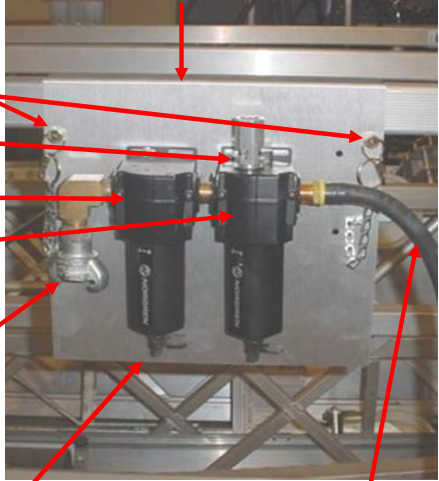


The differences between the air and electric hoist include the motor, control system and primary brake operation.

BE SURE TO READ THE COMPLETE OPERATING INSTRUCTION MANUAL AS WELL AS THIS SECTION BEFORE USING YOUR PC3A AIR HOIST. Keep this manual with the hoist at all times.

▲ = Inspection
● = Verify
■ = Perform Process

■ AIR LINE CONNECTION:
The air line from the Filter/Lubricator assembly is connected here to the hoist.

Filter/Lubricator assembly. An air line connects to the air inlet on the hoist. Secure the air line to the stage or work cage so that it cannot fall away or put a strain on the connecting fittings if it should become accidentally disconnected.

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<div style="text-align: center;">  </div> <p>WARNING: These units are intended for use with industrial compressed air systems only. They must not be used where pressure or temperature may exceed maximum operating conditions. Serious injury may result from doing so.</p> <p>Recommended Air line filter and lubricator for single hoist operation is Power Climber P/N 5430. Recommended air hose size 3/4" typically. Always use hoist covers when working in harsh environments or environments with airborne debris.</p>	<div style="text-align: center;">  </div> <p>Connecting Pins- connects filter lubricator to platform handrail or to hoist</p> <p>Site Dome- used to verify oil flow rate</p> <p>Filter- Separates water from air line</p> <p>Lubricator- Adds Mobil Almo 525 oil to air line for hoist lubrication</p> <p>Main Air line connection <input type="checkbox"/> The compressor air line is connected here.</p> <p>Drain Cock  Drain water from filter at the end of each shift</p> <p>Hoist Airline Connection  Connect this line to the hoist</p>
<p>BE SURE TO READ THE COMPLETE OPERATING INSTRUCTION MANUAL AS WELL AS THIS SECTION BEFORE USING YOUR PC3A AIR HOIST. Keep this manual with the hoist at all times.</p>	<p><input type="checkbox"/> Filter/Lubricator assembly. An air line connects to the air inlet on the hoist. Secure the air line to the stage or work cage so that it cannot fall away or put a strain on the connecting fittings if it should become accidentally disconnected.</p> <p><i>All Air Hoists are sold with a Filter/Lubricator Assembly.</i></p> <p>How the Filter/Lubricator Works The air is passed through the filter to remove liquid and solid particles from the compressed air. At the bottom of the filter bowl is a drain cock to allow collected liquids to be bled off. This should be done on a daily basis or more frequently if necessary to maintain a dry air supply. The filter bowl should be removed and the filter screen examined for dirt. Clean the screen in a cleaning solution with a brush when necessary.</p> <p>The lubricator deposits a small amount of clean oil into the compressed air supply in order to lubricate the motor. Too much or too little oil can adversely affect the performance and operation of the hoist. The oil level should be inspected frequently and the bowl filled with Almo 525 oil when needed. The oil flow rate should be inspected whenever the bowl is filled. The recommended drip rate in the sight dome is 6 drops per minute with the hoist running. Turn the adjustment screw clockwise to decrease the rate and counterclockwise to increase.</p> <p>This hoist is labeled with the following informational label</p> <div style="border: 2px solid green; padding: 10px; margin: 10px 0;"> <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p style="text-align: center;">Power Climber®</p> <p style="text-align: center;">SERIES TYPE, PC3A</p> <p style="text-align: center;">Load cap. lbs. 750/1000/1500 Carga máx. PSI Max. 60/90/110 70 CFM MAX. 4 HP.</p> <p>Model PC3A</p> <p style="text-align: center;">US Patent 5,090,666</p> </div> <div style="width: 35%;"> <p>Serial no. <input type="text"/></p> <p>Numero de serie</p> <p>Manufacturing date Fecha de fabricacion</p> <p>20 <input type="text"/></p> <p style="text-align: right;">9934/A <input type="text"/></p> </div> </div> </div> <p><input type="checkbox"/> = Inspection <input type="checkbox"/> = Verify <input type="checkbox"/> = Perform Process</p>

How the Versa Valve Works

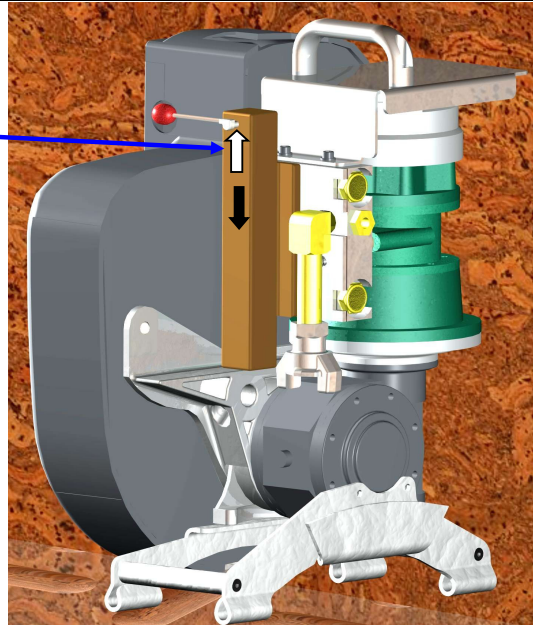
Air from the lubricator is fed into the versa valve through the hoist manifold. The handle with the red knob can be pulled upwards or pushed downwards, this will cause the hoist to travel in the direction of the handle movement. There is a label on the valve to indicate the direction of travel.

Air Motor

The air motor is an 8-Vane, 4 HP motor equipped with mufflers for exhaust.

Primary Brake / Controlled Descent

The primary brake is a disc type brake that is automatically released by air pressure for normal up and down hoist operation. The brake spring applied when the control valve is in the off position. For controlled descent operation of the hoist, the primary brake is manually held open.

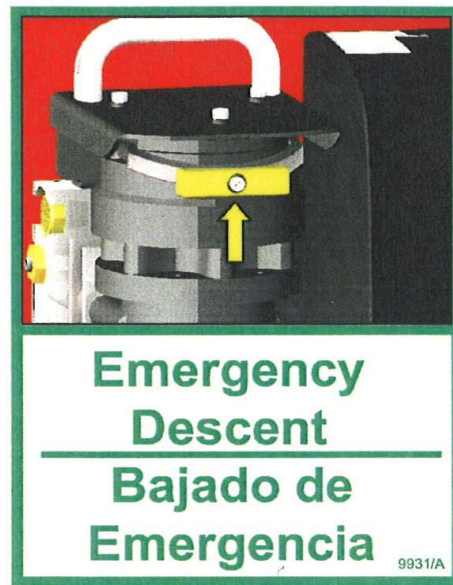


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Controlled Descent feature provides the operator with one method of self-rescue if the air compressor runs out of fuel or is shut off.

- Simply pull up on the manual brake release lever and descend to a safe landing area. Controlled descent can be stopped simply by letting go of the manual brake release lever.



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ADDITIONAL DAILY INSPECTION AND MAINTENANCE REQUIREMENTS

- ▲ √ Inspect the air compressor and hose line for leaks, kinks, blockages, or other damage.
- ▲ √ Inspect the hoses, fittings and valves on the hoist for leaks or damage.
- ▲ √ Inspect the lubricator for oil.
- ▲ √ Inspect the filter drain cock to drain water.

ADDITIONAL TROUBLESHOOTING

If the hoist will not operate, check the following:

1. Compressor is providing adequate supply of air at the proper pressure.
2. Blocked, leaking or damaged air lines, hoses or fittings.
3. Clogged Mufflers. The mufflers can become clogged with dirt or ice created by water in the air supply that freezes when exhausted from the motor. Remove the muffler and clean or replace.
- 4. Sluggish air motor. Flush the air motor with WD40® in a well ventilated area. Disconnect the air line and add several teaspoons of WD40® to the motor. Rotate the shaft by hand in both directions. Connect the air line and apply pressure slowly until all of the WD40® is exhausted from the motor.

If the vanes of the motor need to be replaced or the motor disassembled, only an experienced air motor technician should do the work. Contact your nearest Power Climber dealer for service.

- **Versa Valve-** Check handle for looseness and proper lever action.
- **Mufflers-** Hold the muffler up to the light, if you can see light through the screen without any spots, it is good. Clean or replace if necessary.
- **Filter-** Disassemble and clean with soapy water.
- **Lubricator-** Check oil level. Use Almo 525. Set drip rate at 6 drops per minute. *(DO NOT use ATF (Automatic Transmission Fluid), which is reddish i color, in tis hoist. ATF can contaminate many parts insid of this hoist, which may require extensive cleaning and certain parts to e replaced. ATF contains detergents that may not be compatible with other parts in the hoist. ATF may cause parts such as internal O-rings to swell an fail possibly affecting the performance of this hoist.) USE ONLY ALMO 525 OIL IN THE LUBRICATOR OF THIS HOIST. (This is a Mobil® oil product and is available from any of their suppliers. You can contact Mobil® at 1 (800) 662-4525 or on the internet at www.mobiloil.com)*
- **Air Pressure-** Do not exceed 100 psi.
- **Air Volume** while running should not exceed 70 CFM
- **Travel Speed** should be approximately 35 fpm. This speed will change based upon the actual load being lifted, the air pressure and the air volume being supplied to the hoist.
- **Lubricator oil drip rate** should be 6 drops per minute.

Air Hoist storage

To store a PC3A for 1 to 5 months the following steps should be taken:

1. Run hoist with the lubricator completely open to deliberately over-lubricate the air motor and all other areas where condensation can build up.
2. Spray any steel moving parts with penetrating oil and put the drive assembly into a plastic bag with some desiccant bags to absorb moisture.
3. Seal bag and put in plastic shipping container.
4. Traction housing: spray any steel moving parts with penetrating oil and put the assembly in a plastic bag with desiccant bags before placing it in the shipping container.

Procedure to put units back in service:

1. Open shipping container and remove assemblies from bag. Re-assemble and run the hoist with the lubricator completely closed. Flush out excess oil. During this procedure, it is not uncommon to see an oil mist blowing out of the mufflers.
2. When the oil mist disappears, set the lubricator to 6 drops per minute.

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