



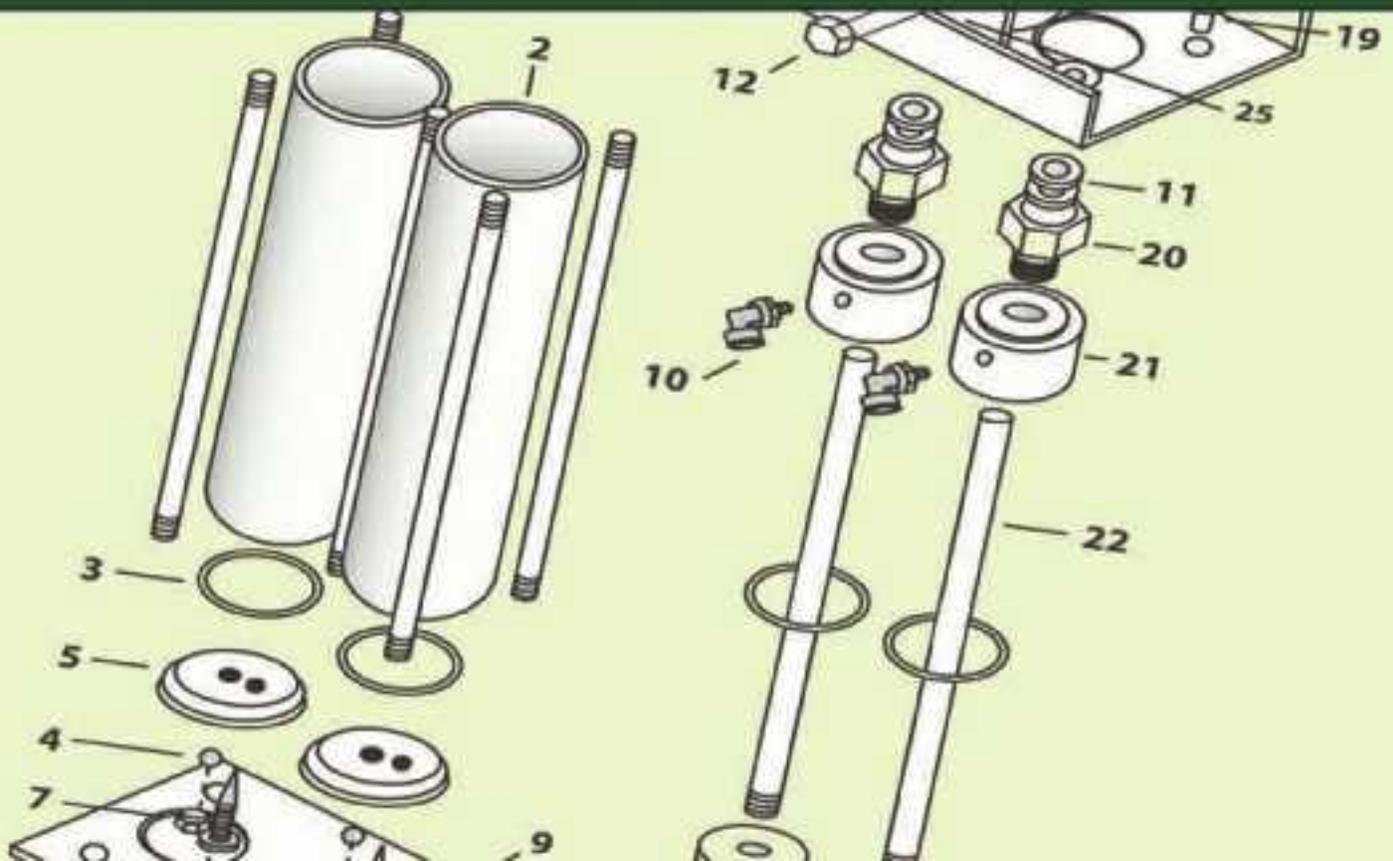
AIRLIFT DOORS, INC.

Owner's Manual

Original Model AIR OPERATOR

www.AirliftDoors.com

1-888-368-4403





WARNING

The material provided in this owner's manual is meant for reference purposes only. Only persons trained and qualified to work on Airlift Doors, Inc. products should perform maintenance and service on any products supplied by Airlift Doors, Inc.

This owner's manual only provides partial information regarding our products. Further information such as installation guides, wiring diagrams, and other technical information should be referenced to ensure safe and proper installation and maintenance of Airlift Doors, Inc. products.

Always consult a trained professional installer or service provider to properly service your equipment. Garage doors and garage door openers are extremely dangerous and improper handling of these products may result in serious injury or death if handled improperly.

Always ensure that all power is disconnected to components before you perform any service to any Airlift control box or motor.

Always shut off and drain any air supply associated with an Airlift operator before performing service on the component.

Never work on a door that is counterbalanced without referencing the installation guide or consulting the factory for proper methods to work on counterbalanced doors.

Never stand underneath a garage door to test any function of the door, opener, or safety devices.

Thank you for purchasing an Original Air Opener from Airlift Doors, Inc. We take great pride in the quality and workmanship of our products and stand behind our products 100%. If you have any questions or concerns please contact us directly and we would be glad to assist you in any way possible.

This owner's manual is meant to be an informational tool for you to operate and maintain your Original Air Opener. Further information is available on our website or by contacting us directly. Please reference the contact information below.

We greatly appreciate your business and promise to work hard to provide you with the highest level of service at all times.

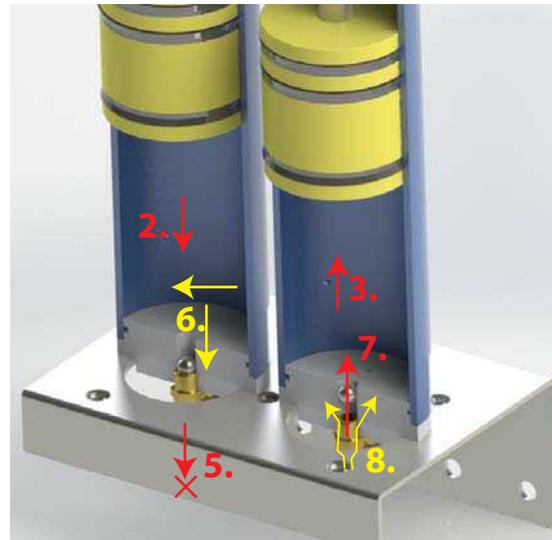
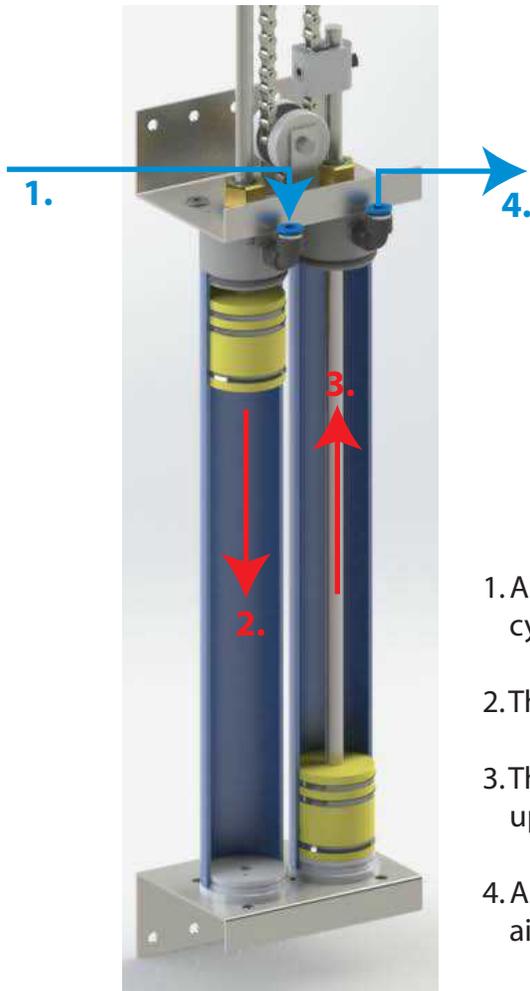
Thank you again for choosing Airlift Doors.

Airlift Doors, Inc.
1-888-368-4403
www.airliftdoors.com

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I. Basic Operation of the Standard Air Opener



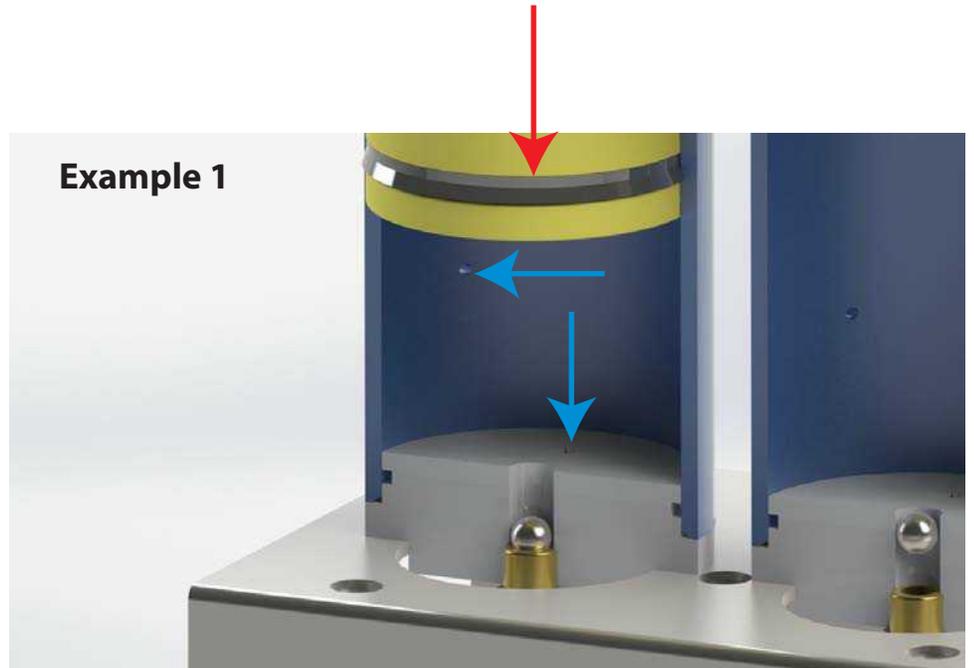
1. Air pressure is routed from the control box to the top of one cylinder.
2. The piston and piston rod in that cylinder is driven down.
3. The piston and piston rod in the opposite cylinder is pulled up by means of the chain and collar assemblies.
4. As the piston in the non pressurized cylinder moves up, the air in the cylinder is exhausted out of the air fitting at the top.

5. The check ball at the bottom of the pressurized cylinder is forced down by air pressure and seals off the breather vent in the center of the bottom cap.
6. The air below the pressurized piston is forced out of the metering screw hole and the cushion exhaust hole in the side of the cylinder.
7. In the non pressurized cylinder, the check ball is drawn up by the negative pressure created by the piston moving up.
8. Outside air is then drawn into the bottom of the cylinder through the open breather vent.
9. A cushioning, or slow down, effect is created for the last 2" of door travel when the piston travels far enough to block air from exhausting out the cushion exhaust hole. At that point, air is only exhausted out the bottom of the cylinder through the metering screw hole.
10. The amount of cushion is adjusted by screwing the metering screw in or out slightly. Screwing it in will make the opener slow down more the last 2" of travel while screwing it out will have lessen the cushioning effect.
*See the picture on the next page for further explanation.

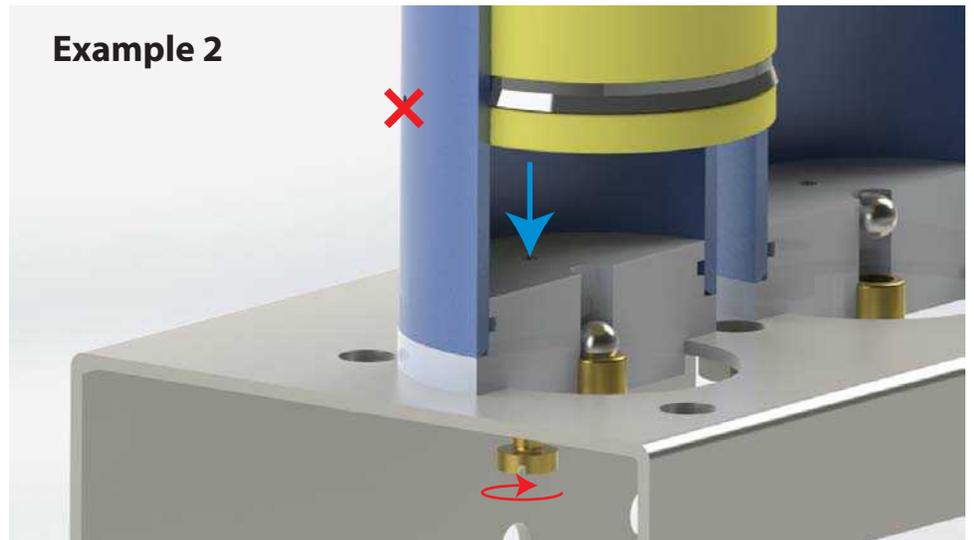
I. Basic Operation cont..

Cushioning Effect

In Example 1, the piston is traveling down, but hasn't covered the cushion exhaust hole at this point. The air being pushed out of the cylinder by the piston is exhausted through both the cushion exhaust hole and the metering screw hole.



In Example 2, the piston has covered the cushion exhaust hole. All air being pushed out of the cylinder by the piston is now forced only through the metering screw hole.



The size of the hole, and as a result the amount of cushioning effect, is adjusted by tightening or loosening the metering screw.

II. Adjusting Door Limits

The door limits are determined by where the piston rods attach to the chain. To adjust the door travel limits, you will have to loosen the chain collar on the appropriate piston rod, raise or lower the rod slightly, and re-tighten the collar.

Information regarding adjustment of door limits is continued on the next page.

II. Adjusting Door Limits

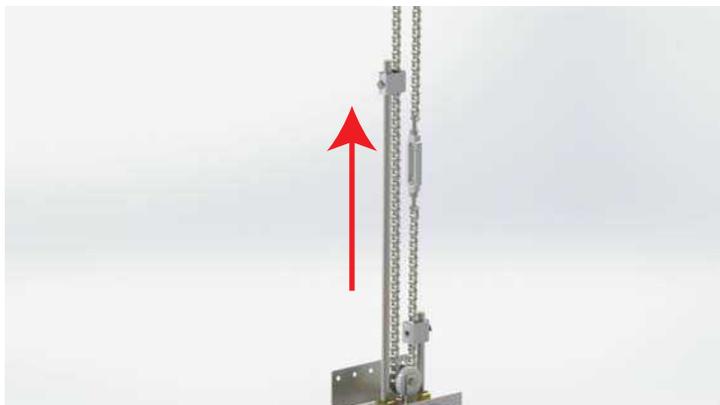
Example 1: Door is not opening far enough.



1. Start with door in the CLOSED position. This will raise the piston rod that is furthest from the wall and lower the piston rod closest to the wall.



2. Loosen the chain set screw on the chain collar that is fastened to the piston rod that is raised up.



3. Lift the raised piston rod up 1" for every 2" of door travel. Ex: If your door needs to open 6" higher, lift the raised piston rod 3".



3. Re-tighten the chain set screw on the collar while holding the piston rod in its new position.

Example 2: Door is not closing far enough

This procedure is the same as steps 1-4 above, except you will start with the door in the OPEN position on step 1.

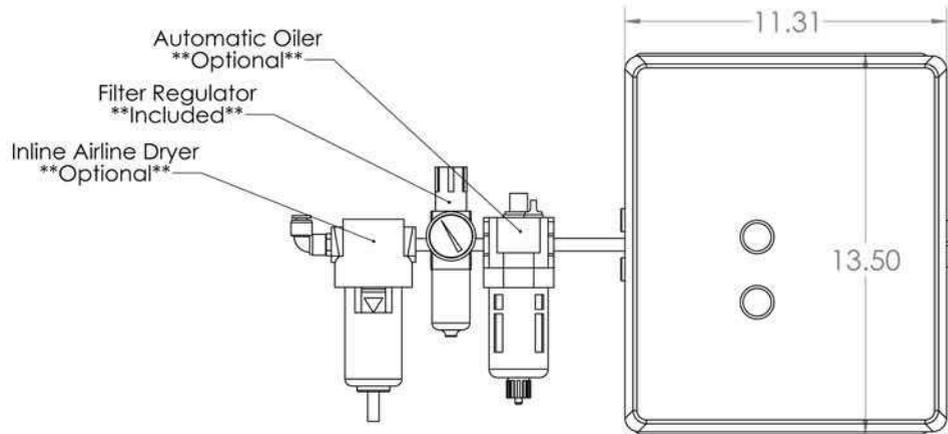
Example 3: Door is opening too far

This procedure is the same as steps 1-4 above, except you will LOWER the raised piston rod in step 3 instead of lifting it.

Example 4: Door is closing too far

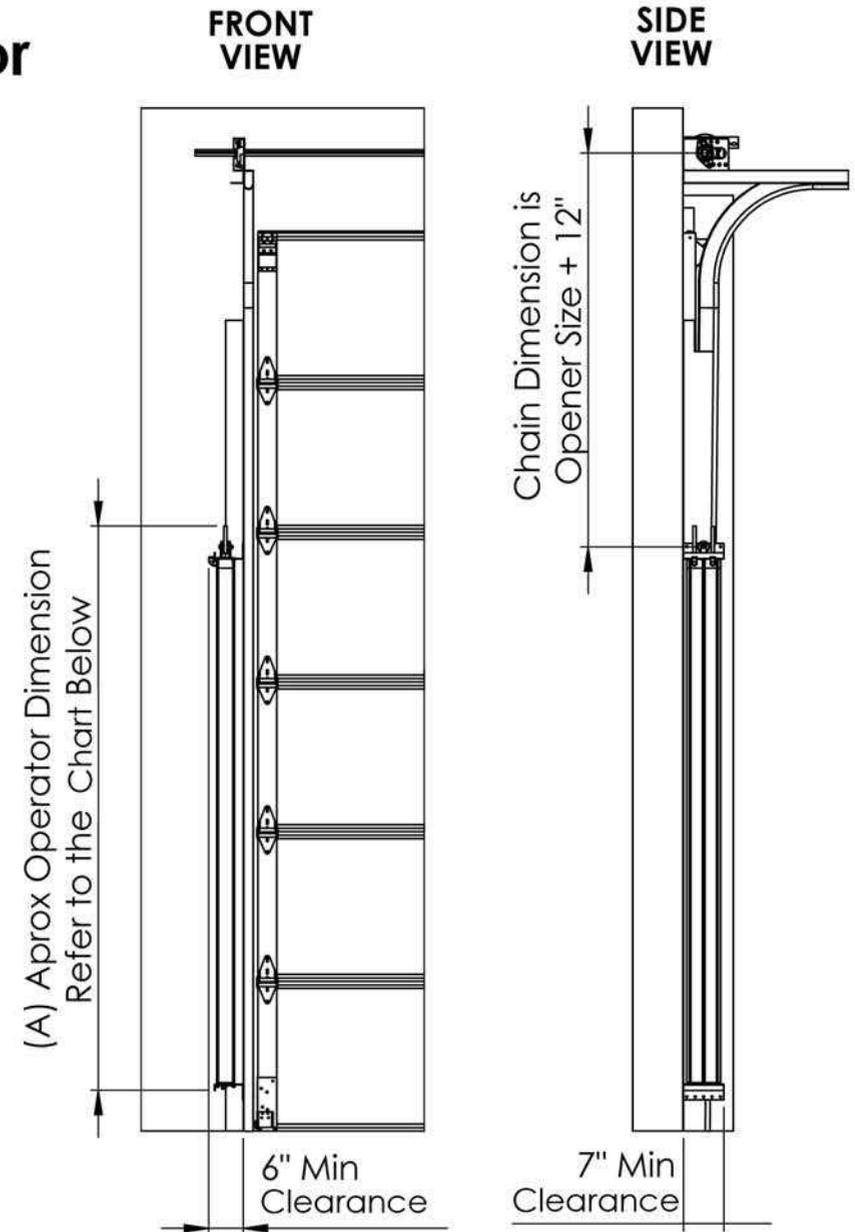
This procedure is the same as steps 1-4 above, except you will start with the door in the OPEN position in step 1 and LOWER the raised piston rod in step 3.

Airlift Doors Original Air Operator



Control Specifications

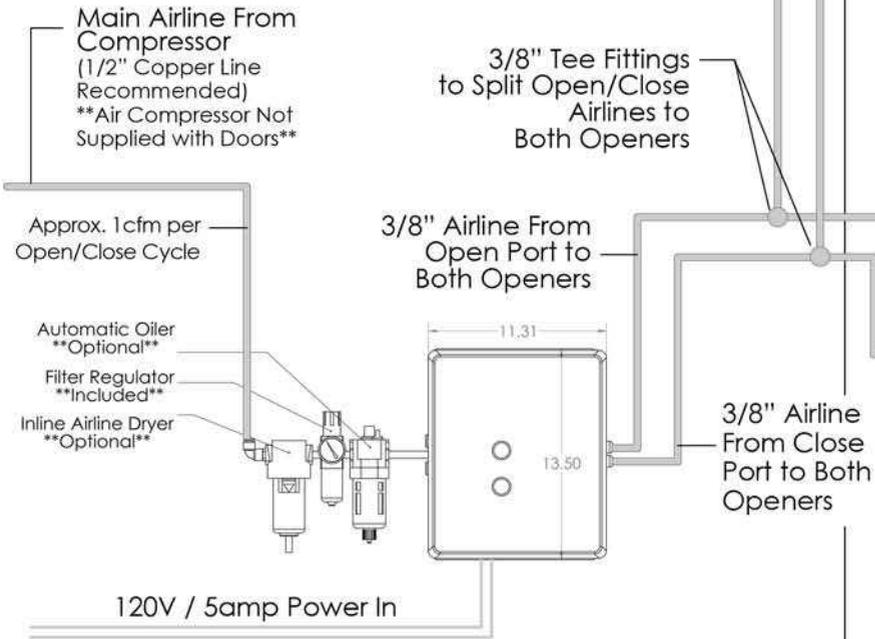
- NEMA 4 Rated Enclosure
- ETL / CETL Listed System
- 24VAC, Fused Circuitry
- Standard Open / Close / E-Open Buttons
- Ten Place Terminal Strip for Easy Wiring
- Pre-Wired Photo Eye Base
- Automatic Closing Timer Not Included
- Optional Airline Dryer, Automatic Oiler



DOOR SIZE (HEIGHT)	8'	9'	10'	11'	12'	13'	14'	15'	16'
A	58"	63"	68"	73"	78"	83"	88"	93'	98"

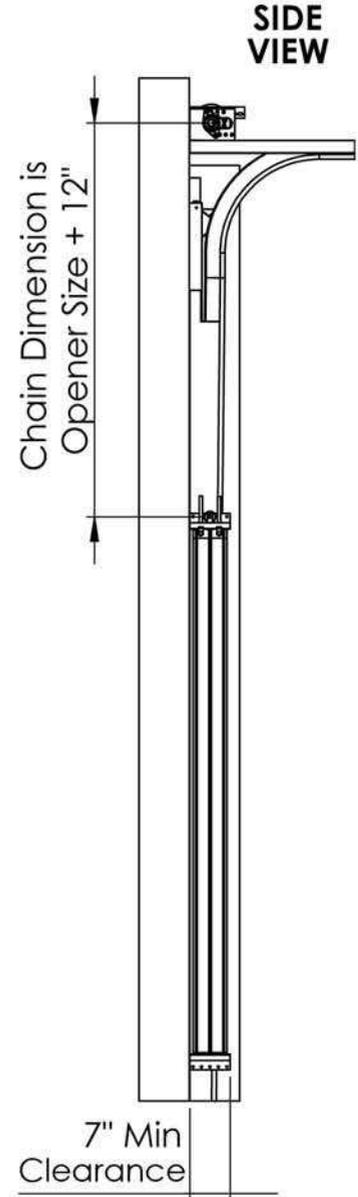
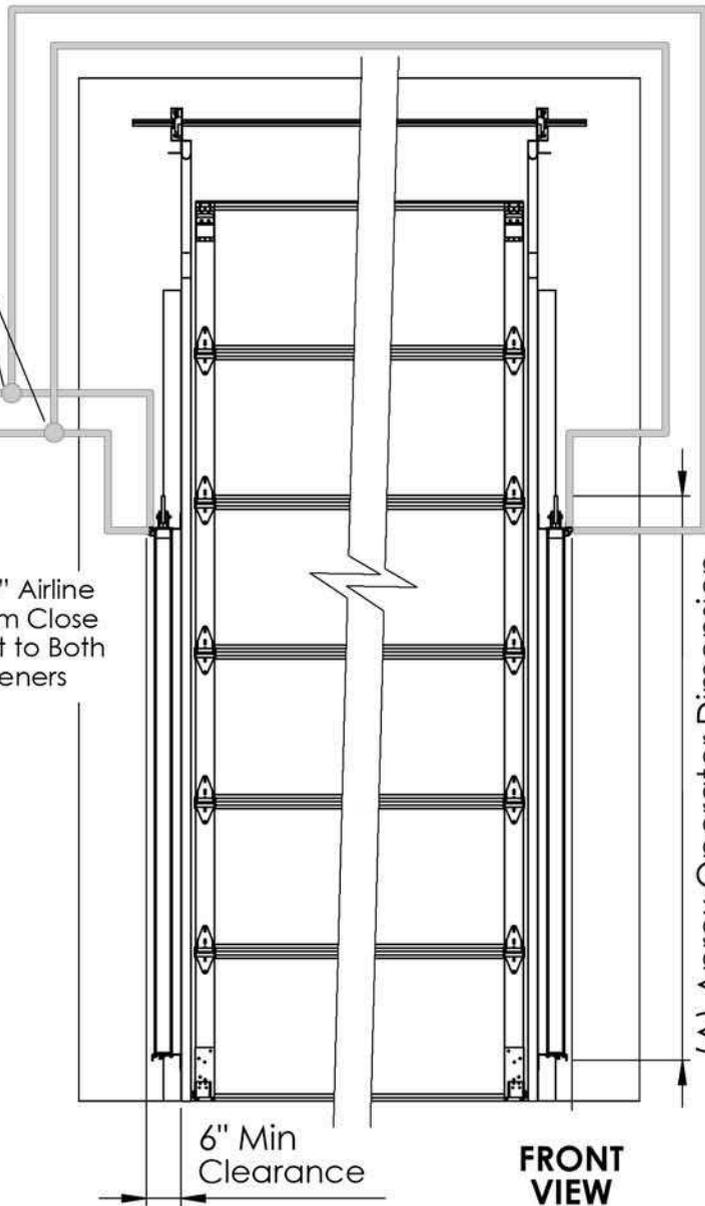
SIZE	DWG. NO.	REV
A	Original Air Operator	

Airlift Doors Original Dual Air Operators



Control Specifications

- NEMA 4 Rated Enclosure
- ETL / CETL Listed System
- 24VAC, Fused Circuitry
- Standard Open / Close / E-Open Buttons
- Ten Place Terminal Strip for Easy Wiring
- Pre-Wired Photo Eye Base
- Automatic Closing Timer Not Included
- Optional Airline Dryer, Automatic Oiler



DOOR SIZE (HEIGHT)	8'	9'	10'	11'	12'	13'	14'	15'	16'
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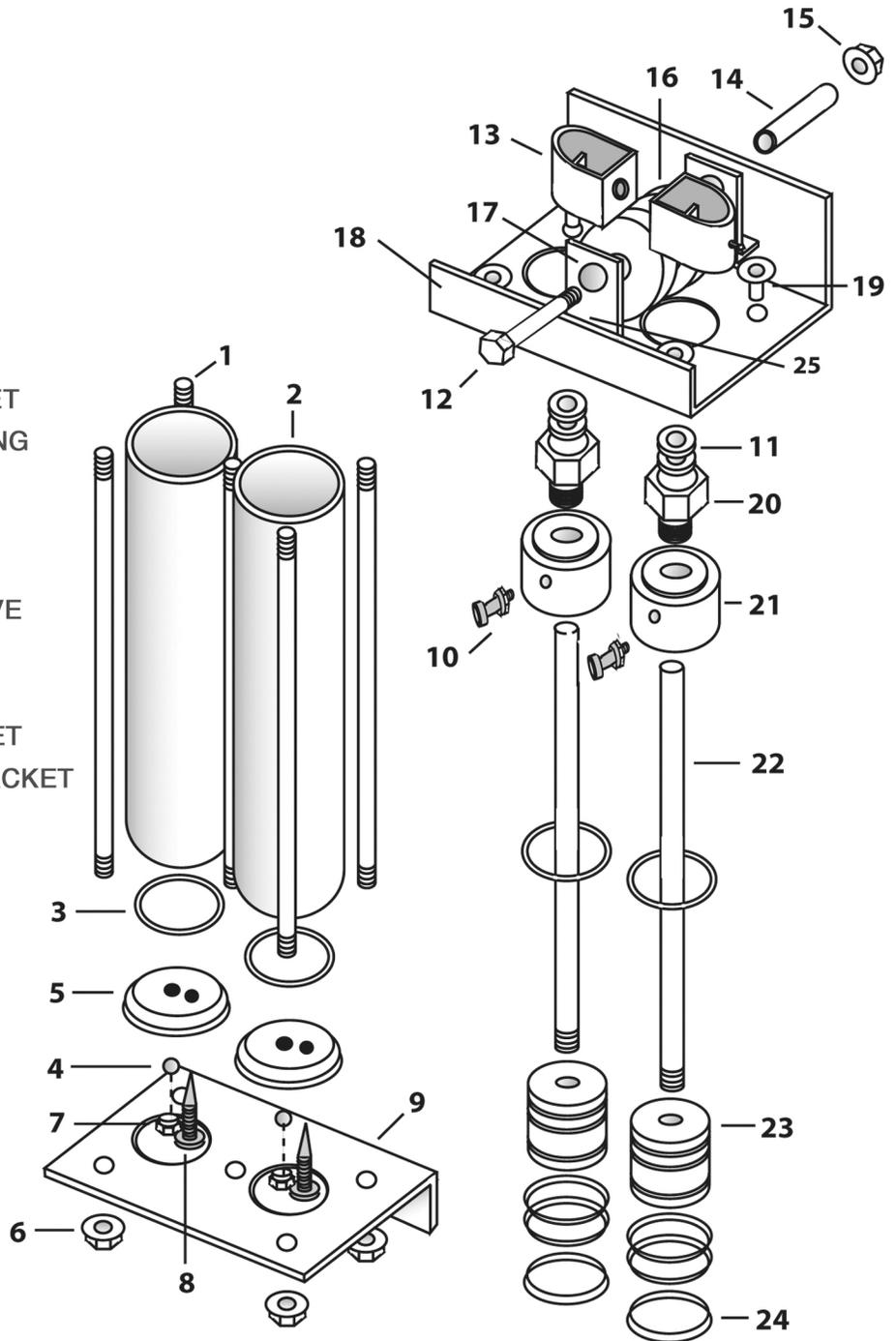
SIZE	DWG. NO.	REV
A	Dual Original Air Opener Layout	

SHEET 1 OF 1

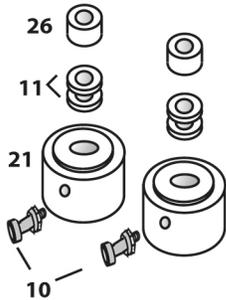
ORIGINAL AIR OPERATOR COMPONENTS

PARTS DIAGRAM

- 1- PN# O02R2401-2409 RETAINING ROD
- 2- PN# O02R2501-2509 ALUM. TUBE
- 3- PN# O02R9506 O-RING
- 4- PN# O02R9210 CHECKBALL
- 5- PN# O02R9202 BOTTOM CAP
- 6- PN# D17R2405 1/4" NUT
- 7- PN# O02R9209 BREATHER VENT
- 8- PN# O02R9211 METERING SCREW
- 9- PN# O02R9301 BOTTOM MTG BRACKET
- 10- PN# O22R1104 3/8 x 1/8 SW AIR FITTING
- 11- PN# O02R9509 PISTON ROD SEAL (2)
- 12- PN# D17R2116 CHAIN GUIDE BOLT
- 13- PN# O02R9102 PISTON ROD COLLAR
- 14- PN# O02R9405 CHAIN ROLLER SLEEVE
- 15- PN# D17R2406 1/4" LOCK NUT
- 16- PN# O02R9404 CHAIN ROLLER
- 17- PN# O02R9401 CHAIN GUIDE BRACKET
- 18- PN# O02R9302 TOP MTG. WITH L BRACKET
- 19- PN# O02R2410 RETAINING ROD NUT
- 20- PN# O02R9207 TOP CAP BRASS NUT
- 21- PN# O02R9206 TOP CAP
- 22- PN# O02R2201-2209 PISTON ROD
- 23- PN# O02R9203 PISTON BODY
- 24- PN# O02R9508 U-CUP SEAL
- 25- PN# O02R9402 BRACKET BOLT
- 26- PN# O02R9510 SEAL RETAINER



ALTERNATE TOP CAP ASSEMBLY
FOR OLD STYLE OPERATORS



Troubleshooting

**FOR ALL ELECTRICAL ISSUES INVOLVING THE OPENER,
SEE YOUR CONTROL BOX OWNER'S MANUAL

Description of Problem	Resolution
Air is leaking from around the piston rod(s).	<ul style="list-style-type: none"> - Disconnect chain collar from the piston rod. - Unscrew the brass nut at the top of the cylinder - Slide the brass nut up and off the piston rod. - Slide new brass nut on the piston rod and tighten into the top cap - Reattach chain collar to piston rod.
Door opens or closes too slowly.	<ul style="list-style-type: none"> - Reference control box owner's manual for opener speed adjustments.
Air is leaking from the bottom of one of the cylinders.	<ul style="list-style-type: none"> - If a cylinder is leaking when the door is open, run the door to the closed position. If it is leaking when the door is closed, run the door to the open position. - Remove the airline from the cylinder with the raised piston rod. - Pour approximately 4-6" of oil into the airline and plug the airline back into the air fitting. - Run the door in the opposite direction and see if the cylinder still leaks. - If the cylinder still leaks after adding oil to the airline, you will need to rebuild the cylinder with new piston u-cup seals.
Door travels too fast or too slow the last 12" of travel in either direction	<p>See the basic operation section at the front of this manual for information on adjusting the metering screws for the cushion effect.</p>
Opener doesn't open or close because both piston rods are in the down position.	<p>One of your chain collars has come loose from the piston rod.</p> <ul style="list-style-type: none"> - If the door is currently in the open position, press the close button to relieve pressure from the open cylinder and pull the door down by hand to the closed position. - Reattach the collar to the piston rod closest to the wall with the door in the closed position. - If the door is currently in the closed position, press the open button to relieve pressure from the close cylinder and push the door open by hand to the open position. - Reattach the collar to the piston rod furthest from the wall with the door in the open position.
Opener chain is loose.	<p>Drain the air from the system by turning the regulator knob until the air pressure is at zero. Press Open and Close to completely drain the air pressure from the air cylinders.</p> <p>Tighten the chain by turning the chain turnbuckle.</p>



AIRLIFT DOORS, INC.

QUARTERLY MAINTENANCE PROGRAM ORIGINAL AIR OPERATOR

Airlift Doors, Inc. recommends performing quarterly maintenance on your Original Air Operator.

Maintenance steps explained:

A. External lubrication

Lubricate the chain and piston rods with lithium grease. This is a very important step to ensure proper operation and to increase the life of the operator. These parts should be greased quarterly.

B. Chain tightening

The operator chain may become loose over time, and should be checked every month for proper tension. **Note:** Be sure to turn power off to control box and drain air out of the cylinders before performing this step. To tighten the chain, twist the turnbuckle until the slack is removed from the chain. If the turnbuckle can not be tightened further, links may need to be removed from the chain. Consult a door professional to perform this step. Chain tightening should be performed quarterly.

C. Internal :lubrication of the cylinders

If your control box has an automatic oiler to the right of the regulator set the automatic oiler for one drop of oil per each up and down cycle. Consult the control box owners manual for adjustment instructions. Depending on the amount of use, the oiler should be filled quarterly at a minimum. If your control box is not equipped with an automatic oiler, you must remove the airline from the cylinder with the extended piston rod. Add non-detergent oil or Airlift Oil (part number D24R1004) directly into the airline so that 6" of the airline is full of oil. **NOTE:** Only disconnect the airline when the piston rod is fully extended. The other cylinder is charged and may cause injury if airline is removed from the incorrect cylinder. Once oil is added, run the door the opposite direction to extend the piston rod on the other cylinder and repeat the process. This step should be performed quarterly. If you are getting oil exhausting from the ports on the control box, do not add oil or shut off you oiler as you have an excessive supply inside the system.

D. Air Compressor Maintenance

Every time you perform maintenance you should drain your compressor to reduce the amount of water contained in the system. See your air compressor manual for further information and proper drainage instructions.

Quarterly Maintenance Program For "Original" Air Openers

Year: _____

Note: Mark date in each box when maintenance is performed to keep accurate records

<u>Steps</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
A. Exterior Lubrication				
B. Chain Tightening				
C. Internal Lubrication				
D. Air Compressor				

1st Quarter Notes:

2nd Quarter Notes:

3rd Quarter Notes:

4th Quarter Notes:

Limited Warranty for the Original Air Opener

Airlift Doors, Inc. warrants to the original purchaser or original user that all Original model air openers sold by Airlift Doors, Inc. and all parts thereof are free from defects in material or workmanship under normal use and service. Airlift Doors Inc. sole obligation under this warranty shall be limited to furnishing replacement parts F.O.B Maple Lake, Minnesota for the periods specified below from the date of initial shipment by Airlift Doors, Inc.

Complete Opener	(1)	Year
Tubes, Rods, and Brackets	(10)	Year
Seals, Caps, and Fittings	(1)	Year
Chain, Sprocket, Turnbuckle	(1)	Year

These Warranties are void if the original product warranted has been damaged by accident, abuse, misuse or neglect, improper installation or service, unauthorized modifications, misapplication, or other use not arising out of defects in material and workmanship.

Warranty redemption requires verification of original purchase date and completion in full of return goods form. Returns are only accepted when return authorization number has been provided by Airlift Doors, Inc. before product is returned.

The warranties set out in this certificate are the exclusive remedy of the original owner or user in lieu of all other warranties written, oral or implied (including any warranty or merchantability or fitness for the purpose) and all other obligations or liabilities on the part of Airlift Doors, Inc. Airlift Doors, Inc. neither assumes nor authorizes any person to assume for it any other obligation or liability in connection with the sale, installation, or use of the Original Air Opener or any parts thereof.

Airlift Doors, Inc. will not be responsible for labor or shipping and handling charges for the analysis of a defective condition or for the replacement and installation of defective parts.

The warranties herein shall be null and void if the Original Air Opener is not installed by a competent contractor and/or if the Original Air Opener is not installed according to Airlift Doors, Inc. provided instructions.

In no event will Airlift Doors, Inc. be responsible for, or liable to anyone for, special, indirect, collateral, punitive, incidental, or consequential damages, even if Airlift Doors, Inc. has been advised of the possibility of such damages. Such excluded damages include, but are not limited to, personal injury, damage to property, loss of goodwill, loss of profits, loss of use, cost of cover with any substitute product, interruption of business, or other similar indirect financial loss.



AIRLIFT DOORS, INC.

RETURN GOODS AUTHORIZATION

Airlift Doors, Inc. will not accept any return goods without prior authorization. Only the original purchaser is authorized to obtain return approval. If the goods were not purchased directly from Airlift Doors, Inc. please contact the Company the goods were purchased from to process the return with Airlift Doors, Inc.

Return Goods Procedure Directions:

Please complete this form and fax it to 612-588-7660 or e-mail to info@airliftdoors.com. Upon review and approval of this form you will be contacted by your preferred contact method.

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact: _____

Preferred method of Contact: _____

Original Invoice #: _____

Item(s) being returned: _____

Part # (if known): _____

Reason for Return: _____

Return Terms and Conditions:

All pre-approved returns must have the RGA number printed on the outside of the package

All Returns must be made within 30 days of authorization.

A copy of the RGA Slip and packing slip must be included with the return when replacement items have been shipped. Airlift Doors, Inc. will provide this slip with the replacement shipment.

All items to be returned to:

Airlift Doors, Inc

RGA # _____

400 State Hwy. 55

Maple Lake, MN 55358