

# INSTALL GUIDE

Magnaglide Air Opener

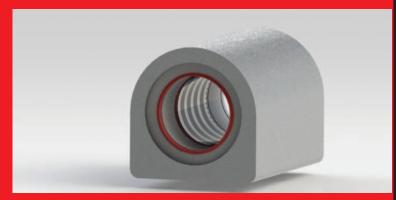
Horizontal Mount

AIRLIFT DOORS, INC.
TOLL FREE: 888-368-4403
WWW.AIRLIFTDOORS.COM











## \*\*\*\*CAUTION\*\*\*\*

Please read through these instructions before beginning installation of the air opener. Only trained professional installers should attempt installation of the Magnaglide Air Opener from Airlift Doors, Inc. Improper installation of this product could result in personal injury or death.

Some steps in the installation process require lifting 40lbs overhead while standing on a ladder or other lifting equipment. A minimum of 2 people must be used along with the proper lifting and safety equipment.

Always inspect your tools and equipment to be sure all are in proper working condition before beginning the installation.

All electrical connections for the opener controls must be installed by a certified electrician.

All compressed air connections must be installed by a certified plumber.

All components and the size of the Magnaglide Air Opener have been engineered according to measurements given to Airlift Doors, Inc. at the time of the order. No modifications must be made to any portion of the air opener, controls, or included components without first consulting with a factory representative. Failure to do so may alter the operation of the door and may create dangerous scenarios upon installation or normal operation that could result in personal injury or death.

Any modifications to the product without factory approval will void all factory warranties.

## Magnaglide Air Opener Horizontal Mount Installation Guide

#### STEP 1 - INSTALL FRONT MOUNTING BRACKET

- 1-1: Lay the Magnaglide cylinder on a flat surface.
- 1-2: Slide the front mounting bracket onto the stud on either end of the cylinder. (FIG. 1A)

  \*\*NOTE\*\* The cylinder is universal. Either end can be designated as the front or rear.
- 1-3: Fasten the front mounting bracket to the Magnaglide cylinder using a 3/4" lock washer and 3/4" nut. Tighten the nut securely. (FIG. 1B)





FIG. 1A FIG. 1B

#### STEP 2 - INSTALL REAR CEILING MOUNT BRACKET

- 2-1: Measure the distance from the top of your door torsion shaft to the ceiling.
- 2-2: Choose the correct installation method below based on the following:
  - If the distance from the top of your door torsion shaft to the ceiling is 10" or less, proceed with Option 1.
  - If the distance from the top of your door torsion shaft to the ceiling is greater than 10", skip option 1 and proceed with Option 2.

#### OPTION 1: Normal installation to a standard ceiling height

- 2-3: Slide the rear mounting bracket on the stud at the opposite end of the cylinder to which you installed the front mounting bracket. You will use the mounting hole closest to the 90 deg bend in the bracket. Be sure to orient the bracket as shown below. (FIG. 2A)
- 2-4: Fasten the bracket to the cylinder using a 3/4" lock washer and 3/4" nut. Before tightening the nut, be sure that the flat 90 deg portion of the rear mounting bracket is parallel with the top of the front mounting bracket. (FIG's. 2B & 2C)

#### STEP 2 - INSTALL REAR CEILING MOUNT BRACKET





FIG. 2A FIG. 2B



FIG. 2C

#### OPTION 2: Installation to a higher ceiling height

2-5: Fasten the rear mounting bracket to the rear extension bracket using (2) 3/8" carriage bolts, 3/8" lock washers, and 3/8" nuts. (FIG's. 2D & 2E)



FIG. 2D



FIG. 2E

2-6: Slide the rear extension bracket onto the stud at the end of the Magnaglide cylinder. \*\*NOTE\*\* You may use any of the holes EXCEPT the very bottom one. Which hole to use will be determined by how far below the ceiling the cylinder will be mounted. Estimate this distance and choose the approximate hole to use. (FIG. 2F *on next page*)

#### STEP 2 - INSTALL REAR CEILING MOUNT BRACKET

2-7: Fasten the bracket to the cylinder using a 3/4" lock washer and 3/4" nut. Before tightening the nut, be sure that the flat 90 deg portion of the rear mounting bracket is parallel with the top of the front mounting bracket. (FIG's. 2G & 2H)



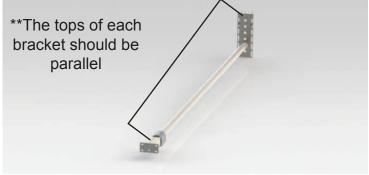


FIG. 2H

#### **STEP 3 - INSTALL PUSHER SPRING**

3-1: Remove the gray plastic pusher knob, the 3/4" nut, and the 3/4" lock washer from the pusher cylinder. (FIG's. 3A & 3B)





FIG. 3A FIG. 3B

#### STEP 3 - INSTALL PUSHER SPRING

3-2: Slide the small diameter pusher rod through the hole in the rear mounting bracket that is directly beneath the Magnaglide cylinder. (FIG. 3C)



FIG.3C

3-3: Fasten the pusher cylinder to the rear mounting bracket using the 3/4" lock washer and 3/4" nut. Finish by threading the plastic pusher knob on the end of the pusher rod. (FIG. 3D)



FIG.3D

#### **STEP 4 - INSTALL CARRIAGE BRACKET**

4-1: Fasten the carriage bracket to the bottom of the carriage using (4)  $5/16'' \times 1/2''$  bolts and 5/16'' lock washers. (FIG. 4A)



FIG.4A

#### **STEP 5 - INSTALL AIR FITTINGS**

5-1: Install a 3/8" 90 deg. air fitting into the threaded holes at each end of the cylinder. (FIG. 5A)



FIG.5A

#### STEP 6 - PREPARE DOOR FOR OPENER INSTALL

- 6-1: Close the door and lock it down by using the slide lock (if installed) or by placing a vice grip on the door track just above one of the rollers.
- 6-2: Measure the door opening width and mark the center of the opening on the header just above the torsion shaft.
  - \*\*NOTE\*\* On single center stile doors, this mark should line up with the center stile. On doors with an even amount of center stiles, you may either install a support in the center of the top section, or you may offset the opener right or left so it is in line with one of the stiles.

#### STEP 7 - MOUNT OPENER TO WALL & CEILING

7-1: Using two people lift the opener and position the front mounting bracket on your center mark. (FIG. 7A)



FIG. 7A

7-2: Fasten the front mounting bracket to the wall using wood lags or concrete anchors. \*\*NOTE\*\*

The bottom of the front mounting bracket can be mounted anywhere from 1" to 6" above the shaft.

DO NOT mount the front mounting bracket more than 6" above the shaft. (FIG. 7B)



FIG. 7B

7-3: Fasten the rear bracket to the ceiling using wood lags or concrete anchors. Be sure you do not force the cylinder to the ceiling and cause it to bend. The cylinder should remain relatively level after you fasten the rear bracket to the ceiling. Add the extension bracket or adjust the position of the cylinder in the extension bracket if necessary. (FIG. 7C)

#### STEP 7 - MOUNT OPENER TO WALL & CEILING



FIG.7C

#### **STEP 8 - CONNECT OPENER TO DOOR**

8-1: Mount the door connection bracket to the center stile of the door using self tapping screws. Align the top mounting hole of the bracket with the top pre-drilled hole in the center stile. (FIG's. 8A & 8B)



- 8-2: Push the carriage all the way forward towards the door.
- 8-3: Fasten the straight operator arm to the carriage bracket on the bottom of the opener. Be sure to use the end of the straight arm with the single hole. Fasten the arm to the center hole of the carriage bracket using a 3/8" x 1-1/4" bolt and 3/8" lock nut. Do not tighten the nut. The arm must be free to rotate around the bolt. (FIG's . 8C & 8D)



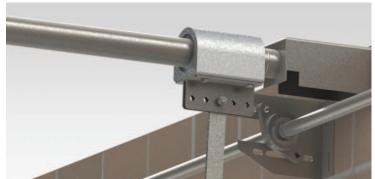


FIG. 8C FIG. 8D

#### STEP 8 - CONNECT OPENER TO DOOR

8-4: Next, align the multiple hole section of the "J" arm to the holes in the straight arm. Adjust the "J" arm so the 90 deg "J" portion is aligned with any of the holes in the door connect bracket. (FIG. 8E)



FIG. 8E

8-5: Once you have all the mounting holes for the straight arm and "J" arm aligned and the door connect bracket is aligned, fasten the arms together using (2) 3/8" x 1" bolts, 3/8" lock washers, and 3/8" nuts. (FIG. 8F)



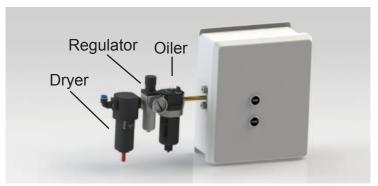
FIG. 8F

8-6: Finally, fasten the "J" arm to the door connect bracket using a 3/8" x 1-1/2" bolt and 3/8" lock nut. (FIG. 8G)

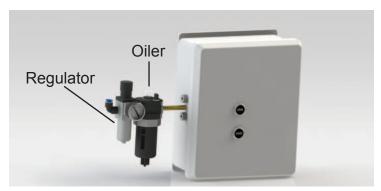


#### STEP 9 - INSTALL CONTROLS AND AIRLINE

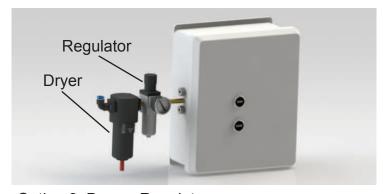
- \*\*NOTE\*\* The following control instructions pertain only to installations with individual door control boxes. If installing multi-door control boxes or other non-standard control configurations, please consult the factory @ 1-888-368-4403 for information and instructions relating to your exact installation.
- \*\*NOTE\*\* These instructions assume that a main airline has already been plumbed from the air compressor to either side of the door.
- 9-1: Fasten the air regulator and any other accessories (air dryer, automatic oiler) to the main air inlet on the left side of your control box.
  - \*\*NOTE\*\* It is important to install the regulator and any accesories in the correct order. Please see the different configurations below and match your installation accordingly.



Option 1: Dryer - Regulator - Oiler



Option 2: Regulator - Oiler



Option 3: Dryer - Regulator



Option 4: Regulator

- 9-2: Mount the control box approximately 4' above the floor on the wall to which the main airline has been plumbed. (FIG. 9A)
- 9-2: Open the control box panel and run a 3/8" poly airline from the top outlet port of the valve to the front air fitting on the Magnaglide cylinder. (FIG's. 9B & 9C)
- 9-3: Run a second 3/8" airline from the bottom outlet port on the valve to the rear air fitting on the Magnaglide cylinder. (FIG's. 9D & 9E)
- 9-4: Connect your main airline to the air fitting on the left side of the air regulator attached to the control box. (FIG. 9F)

### **STEP 9 - INSTALL CONTROLS AND AIRLINE**



FIG. 9A





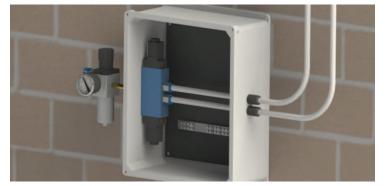


FIG.9D FIG.9E





FIG.9F

#### STEP 10 - INSTALL FLOW CONTROLS

- 10-1: Thread a brass flow control into each of the female threaded bushings on the left side of the control box. (FIG. 10A)
  - \*\*NOTE\*\* For shipping the flow controls are generally packed in a separate, smaller cardboard box. This box will be packed in the larger box that the control boxes were shipped in.
- 10-2: Loosen the round thumb screw on each flow control approximately 3/4 of the way out. (FIG. 10B)



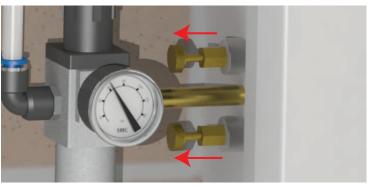


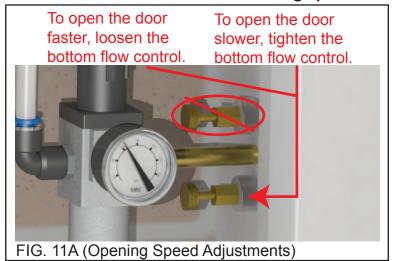
FIG. 10A FIG. 10B

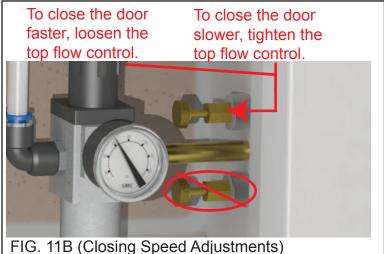
#### STEP 11 - ADJUST AIR PRESSURE AND TEST OPENER



- \*\*When adjusting the initial air pressure, be sure all personnel and equipment are clear of the door. The door may open when air pressure is first added to the regulator. The regulator is shipped from the factory with adjustment knob set at 0 psi.
- 11-1: Increase the air pressure on the regulator by lifting up slightly on the top adjustment knob and turning the knob clockwise. Adjust the air pressure in the range of 40 80 psi.
- 11-2: Run the door open and closed to test for smooth operation.
- 11-3: See figures 11A and 11B for instructions on how to adjust the speed of the opener.

  \*\*Recommended closing speed is no more than 12" per second.





\*\*IMPORTANT\*\* All control boxes supplied by Airlift Doors, Inc. require the use of a safety device to reverse the travel of the opener should the door opening become occupied by an obstruction. Only safety devices compatible with Airlift Doors controls may be used. Please note that without a compatible safety device installed, the opener will be unable to close.