





# **Owners Manual**

### 1. Limited Warranty

All products are warranted to be free from defects in material and workmanship for a period of one year from the date of purchase if installed and used in strict accordance with the installation instructions. Liability is limited to the sale price of any products proved to be defective or, at manufacturer's option, to the replacement of such products upon their return. No products are to be returned to the manufacturer, until there is an inspection and a return-goods authorization.

All complaints should be directed first to the authorized distributor who sold the product. If satisfaction is not obtained or the name of the distributor is not known, write the manufacturer that appears below.

This limited warranty is expressly in lieu of any and all representations and warranties expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose. The remedy set forth in this limited warranty shall be the exclusive remedy available to any person. No person has authority to bind the manufacturer to any representation or warranty other than this limited warranty. The manufacturer shall not be liable for any consequential damages resulting from the use of our products or caused by any defect, failure or malfunction of our products. (Some areas do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.)

This warranty gives you specific legal rights and you may also have other rights that vary from area to area.

#### **Warrantor:**

#### **Diversified**

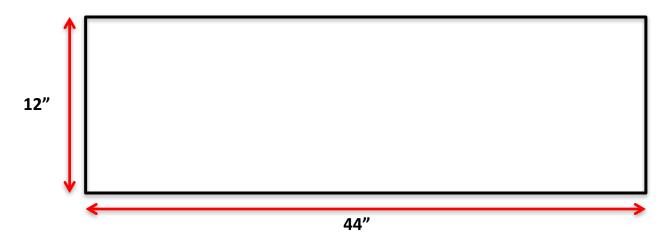
556 Industrial Way West Eatontown, NJ 07724 Tel 732-363-2333

# 2. Frame opening specifications

Our Vents are available in two sizes: (44 x 12) and (44 x 6)

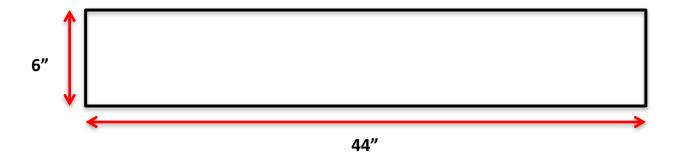
### **Large Vent** (44" x 12")

Note: framed opening can be smaller than listed dimensions, but not larger than.



### **Small Vent** (44" x 6")

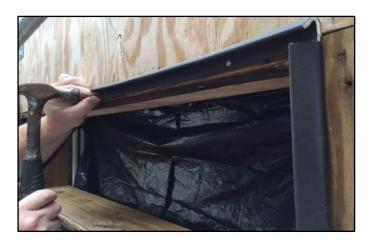
Note: framed opening can be smaller than listed dimensions, but not larger than.



#### 3. Install Picture Frame Seal

(Only for Vents <u>without</u> pre-attached "P" Seals. Skip to Step <u>5</u> for Vents with pre-attached "P" Seals)

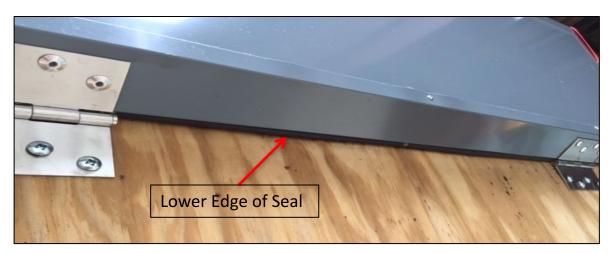
Using standard flat head roofing nails (not provided) install the seal around the vent window opening as shown. Install a nail every 6 inches around the perimeter of the seal. If installing a high quantity of Vents it is recommended to use a nail gun to quickly complete this task.





### 4. Hang Vent Door

Place the Vent Door along the lower edge of the bottom seal as shown. The lower edge of the seal should be contacting both hinges. Ensure the Vent door is centered on the window opening and install (8) Stainless Steel Hinge screws.



### 4a. Check Seal for proper installation

With the Vent in the closed position ensure both sides of the seal are compressed onto each other and appear on the sides of the Vent as illustrated in **picture #1**.

**Picture #2** shows the seal <u>incorrectly</u> installed. Re-position the seal so that when the Vent closes it compresses the seal as displayed in picture #1. This will ensure an air-tight seal to the wall.





### The Following two Steps are for Vents with Pre-attached "P" Seals

### 5. Install Top seal along Top Edge of opening

Using standard flat head roofing nails (**not provided**) install the Top "P" seal along the top of the vent window opening. Install a nail every 6 inches. (The Top "P" seal will be provided separately)



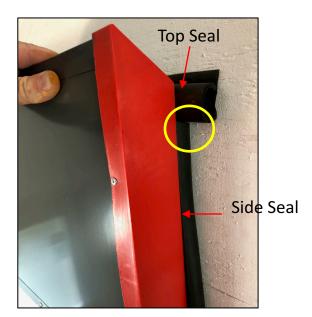
#### 5a. Secure Vent to Wall

Hold the Vent in position where the vertical **side Seals** on both sides of the Vent touch the bottom of the Top "P" Seal at both ends.

While in this position install 4 each Stainless Steel Screws (provided) into the two Hinges. It is critical that the Top seal and side seals meet to provide a proper seal when the Vent is closed and the seals compress together.

Ensure the white **Hinge Spacer** is in place while installing the screws through each Hinge.

Hinge Spacer





### 6. Install Air Baffles

**6a** Install (2) each Air Baffles to the outside of the Vent Door using the pre-drilled holes as shown. (Pic 1)

**6b** With both Baffles installed, lift the Vent Door with your hand to the closed position and ensure the baffles clear the frame of the window so the Vent may close all the way. (Pic 2) Make necessary adjustments to the Baffle position by loosening the screws and sliding in or out with the screw slots.

Pic #3 shows an Air Baffle installed on a Vent with pre-attached "P" Seals

Note: The Air Baffles should be positioned as far out as possible to ensure air does not escape through the sides of the Vent when they are partially opened.



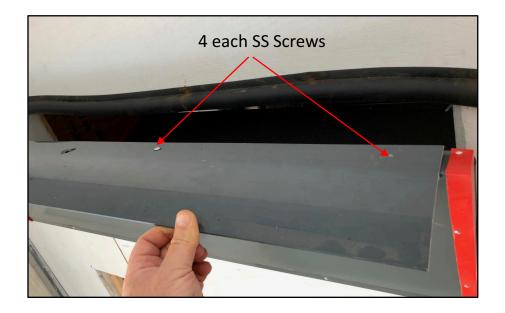




\* If installing on frame openings <u>smaller</u> than specified in Step 2, it may be necessary to trim the Air Baffles to meet your specific requirements.

# 7. Install Airflow Extender

Install the Airflow Extender as shown using 4 each self tapping SS screws (provided).





### 8. Options for Operating Vents

Our Vent System provides <u>3</u> optional operating drive systems: **Standard** cable (8a), **Torque Tube Drive** (8b,c), or by **Rack and Pinion** (8d).

### 8a Cable System

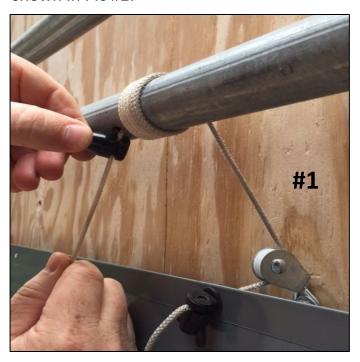
Install a standard <u>small</u> cable pulley (not provided) just above the top seal. String cord through the Vent door to the pulley as shown and then tie into your cable operating system.

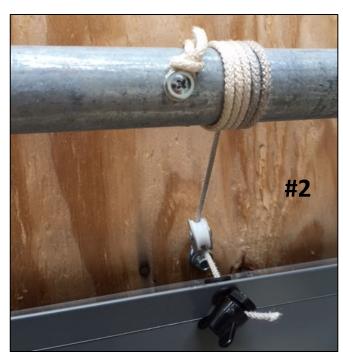


#### **8b Torque Tube Drive System**

See step 8c for Torque Tube installation. With Torque Tube installed, drill a 3/8" hole through the Tube. Wrap cord as shown around the <u>backside</u> of the Tube with a <u>minimum</u> <u>of 8 wraps</u>. Then string cord through the holes and secure with a cord lock.

**Option:** You may avoid drilling a hole through the Tube by installing with a screw as shown in Pic #2.



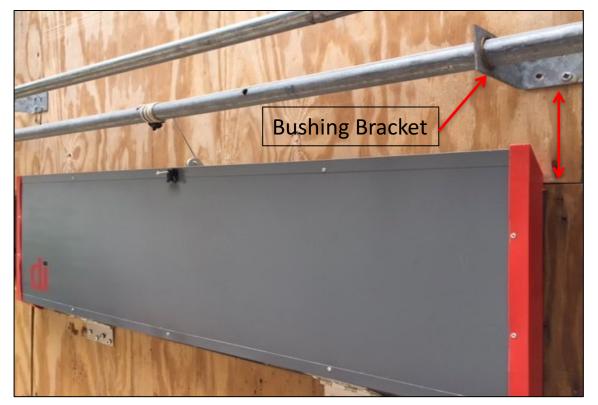


### 8c. Torque Tube Installation (Optional)

Our Torque Tube is available in 20' lengths with swaged ends to provide any required length. Install one each Bushing Bracket with each Vent. The Brackets must be placed at a framed area to ensure the attaching screws go into the frame structure. Run the Tube through the Brackets as shown. We recommend a <u>maximum</u> of 15 Ft of Torque Tube between Brackets.

Torque Tube Brackets must be a <u>minimum of 4 inches above the top of the window</u> <u>frame</u> to ensure clearance of the Vent door when opening.

Torque Tubes may also be installed along the <u>ceiling</u> if sidewall height is limited.



Minimum 4 inches

<u>Note</u>: By adding a second Torque Tube you can then Automate the Brooding Zone Vents to operate <u>independently</u>. This will require an additional Drive, but gives you the option to operate any selected Vents automatically and eliminates having to manually lock them closed at Brooding times.

### 8d. Rack and Pinion Installation (Optional)

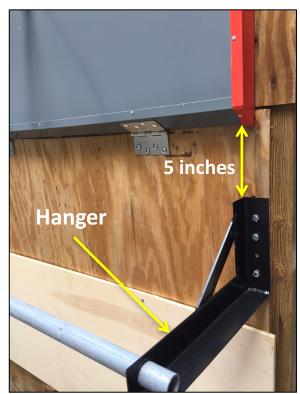
Our Rack and Pinion system provides <u>both</u> **Positive Open** and **Positive Close** force to the Vent. This is very beneficial in climates that may be susceptible to **icing or sticking seals**.



Our Torque Tube is available in 20' lengths with swaged ends to provide any required length. Install one each Torque Tube Hanger with each Vent.

The Hangers must be placed at a framed area to ensure the attaching screws go into the frame structure. Run the Tube through the Hangers as shown. We recommend a maximum of 15 Ft of Torque Tube between Hangers.

Torque Tube Hangers <u>must be positioned</u> 5 inches below the bottom of the Vent.



# 8d. Rack and Pinion Installation (Optional)

Install one each Rack Bracket to the Vent door as shown here with 4 screws. Remove and discard the outer cord grommet. Place the bracket directly over the cord hole and level with the top of the Vent. It is very important to place the bracket correctly as shown. Do Not over tighten the screws.

Slide one Pinion per Vent over the Torque Tube. Insert the Rack into the Pinion and secure with bolt and nut to the Vent attaching bracket as shown.

With the Vent fully open, mark the position of the pinion on to the Torque Tube.

Next, lift the Vent to the fully closed position. While ensuring the Pinion is the correct position by referencing your mark, tighten the Pinion down to the Torque Tube by turning 2 each Set Screws. A 4mm Allen Wrench will be required.

Reference **Step 8** for final system setup and switch positions for the di Drive unit.





# 9. Dura Drive (Torque Tube Option)

Connect the end of the Torque Tube to the di Drive shaft by installing a 3/8" Bolt (2" length, grade 8) through the Tube and then secure with nut/washer.



Only Drives sold by Diversified are to be used with the our Vent Torque Tube System. <u>Correct speeds and safety systems</u> are provided with the Dura Drives. Contact your salesman for ordering the correct Drive model for your system.

### 10. System Setup

After completion of your Vent system installation, **ensure all the Vents are manually closed tight by adjusting the cord or Rack and Pinion at each individual Vent.** With all the Vents in the closed tight position, **set your Close limit switch** on the Drive.

Now operate the Drive to the required Open position and <u>set the Open limit</u> <u>switch</u> of the Drive unit. It is very important to <u>not</u> alter the Close switch <u>setting while setting the Open switch position</u>. Test the Close position again and make individual Vent adjustments as needed.