

Installation & Maintenance



AXC BATHROOM VENTILATION KIT

SAFETY INSTRUCTIONS

NOTICE AXC in-line duct fans are not explosion proof and should not be used when a potentially explosive situation exists. Do not use where temperatures will exceed 140 F/60 C.

- 1. Ensure that the electrical service to the fan is locked in the "OFF" position. Do not re-establish power supply until fan and activation device are completely installed.
- 2. AXC fans are not suitable for outdoor use.
- 3. This unit has rotating parts! Safety precautions must be exercised during installation, operation and maintenance. Turn centrifugal impeller by hand to make sure it rotates freely.
- 4. For general ventilation use only. Do not use to exhaust hazardous or explosive materials and vapors.
- 5. To reduce the risk of fire, electric shock, or injury to persons observe the following:
 - a. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the factory.
 - b. A qualified person(s) must perform installation work and electrical wiring in accordance with all applicable codes and standards, including fire-rated construction.
 - c. The combustion airflow needed for safe operation of fuel burning equipment may be affected by this unit's operation. Follow the heating equipment manufacturer's guidelines and safety standards as published by the National Fire Protection Association (NFPA), the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE), and local code authorities.
 - d. When cutting or drilling into walls or ceilings, take care not to damage electrical wires or other hidden utilities.
 - e. Ducted fans must always be vented to the outdoors when used to exhaust moist/humid air.
- 6. Check voltage at the fan to see that it corresponds to the motor nameplate.

CONTROLS

AXC fans are suitable for use with a standard on/off switch. Continental Fan also offers the following:

| Part # | Description |
|--------|-------------|
| Part # | Description |

DT60 Digital Timer 10 – 20 – 30 – 60 Minutes CT100V Spring Wound Timer 0 – 1 Hour

DHS120V Dehumidistat

VSC3 Variable Speed Control – 3 amp – 3 Wire

PLS120V ON/OFF Switch w/Pilot Light

BACKDRAFT DAMPER

A spring operated backdraft damper (optional) is recommended to prevent the entry of cold air into a bathroom through the exhaust duct. It should be installed just above the grille collar, and may be mounted at any angle provided the damper blades are allowed to swing freely in the airflow direction.

FAN INSTALLATION

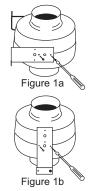
WARNING Disconnect and lock out power supply before performing any installation work. Working on or near energized equipment could result in death or serious injury.

STEP 1. FAN LOCATION

For optimum performance, the AXC in-line duct fan should be mounted near the termination of the duct, close to an outside vent. Allow sufficient access to the fan for recommended maintenance.

STEP 2. INSTALL FAN

Attach mounting brackets to the fan housing as shown in Figure 1a or Figure 1b. Please note the airflow direction arrow located on the box cover. Secure the fan to a support at the selected location. The fan may be mounted in any position; however, vertical orientation is recommended to reduce condensation build-up in the fan. The terminal box should be positioned for easy access.



STEP 3. EXHAUST GRILLE LOCATION

Select a location that will facilitate the rapid collection and dissipation of bathroom air. For larger bathrooms, it is recommended that two exhaust grilles be installed: one near the shower, and the other above the toilet. If two grilles are used, both exhaust ducts should be directed to a Y-fitting (included in all DX Kits), resulting in a single duct run to the fan.

NOTE: It is recommended running the fan run for 15-20 minutes after a shower to remove excess humidity, and minimize mold and moisture damage.

STEP 4. INSTALL EXHAUST GRILLE

Place the exhaust grille collar(s) in the selected location and trace around the inside of the collar. Cut a circular hole along the traced outline. Mount the collar flange flush with the ceiling and secure by screwing from the front and sliding collar clamp over the rear of the collar. Once the collar is securely mounted, snap the grille into place. Using an adjustable grille, (capable of 100% shut off), allows for airflow to be regulated as desired.

STEP 5. CONNECT DUCT

Rigid duct is recommended to optimize fan performance. If using flex duct, it should be stretched as smooth as possible. Connect duct to the inlet and outlet ends of the fan housing by means of mounting clamps or duct tape, and seal to prevent air leakage and loss of fan performance. Secure duct to collar by means of the plastic clamp supplied with the collar. Alternately, metal gear clamps or duct/foil tape may be used.

NOTE: For duct runs in unheated spaces, insulated duct is recommended to reduce the effects of condensation. To minimize condensation at the exhaust grille, the duct should run horizontally before connecting to the grille collar.

STEP 6. CONNECT WIRING

Refer to wiring diagram below. Reattach all electrical box covers before applying power.

TROUBLESHOOTING

WARNING Only qualified personnel should work on electrical equipment. Working on or near energized equipment could result in death or serious injury.

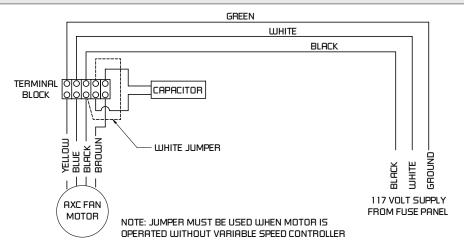
- 1. If the fan fails to start, consult wiring diagram to ensure proper connection.
- 2. Check the incoming supply for proper voltage.
- 3. Ensure that the electrical service to the fan is locked in the "OFF" position.
- 4. Use a meter to test for continuity across the fan motor leads.
- 5. If the motor leads show continuity, rewire the fan.
- 6. Turn on the electrical supply and restart.
- 7. If fan fails to start, please contact factory.

RECOMMENDED MAINTENANCE

WARNING Disconnect and lock out power supply before performing any maintenance. Working on or near energized equipment could result in death or serious injury.

- 1. Fan bearings are sealed. No additional lubrication is necessary.
- 2. Periodic inspection, based upon usage, should be performed to ensure that the fan impeller is not obstructed. The fan should be inspected a minimum of every six (6) months.
- 3. Excessive fan noise or vibration may indicate an obstructed impeller.
- 4. To inspect and clean impeller:
 - a) Remove the duct from the fan inlet and remove any obstruction from the impeller.
 - b) Reconnect the duct to the fan.
 - c) Turn power supply on.

WIRING DIAGRAM



AXC Bath-I&M-1602