

INSTALLATION INSTRUCTIONS FOR DUCTED WHOLE HOUSE FANS

Fan Models: CX1401, CX1801

Read all warnings and instructions before beginning to install this fan.

WARNING – TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- a) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- b) Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- c) When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- d) **WARNING – TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THIS FAN WITH ANY SOLID-STATE SPEED CONTROL DEVICE.**
- e) Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- f) Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

CAUTION

DOUBLE CHECK FAN BLADES ARE SECURE TO HUB PRIOR TO INSTALLATION. BLADES CAN BE DAMAGED DURING SHIPMENT AND CAN BECOME A HAZARD UPON ACTIVATION OF MOTOR!

1. **This unit has an unguarded propeller. Do not use in locations readily accessible to people or animals.**
2. **For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.**
3. **Carbon monoxide is an odorless, colorless gas that can kill. It may be drawn into the house by operating this fan if your fuel-burning equipment is not properly maintained, or if you lack adequate attic space.**

INSTALLATION INSTRUCTIONS

VERY IMPORTANT

Please read before attempting installation

The damper assembly box is designed for horizontal installation only—the dampers will not function in the vertical position.

The damper assembly box is designed to fit in between 16 inch on center or 24 inch on center ceiling joists.

The damper assembly box requires a rough opening to be cut that is **14-½" x 22-½"**.

CX1401- Adequate for 533 sq. ft. house. Requires a minimum of 310 sq. in. of Net Free Exhaust Area

CX1801- Adequate for 930 sq. ft. house. Requires a minimum of 535 sq. in. of Net Free Exhaust Area

**When measuring vents for NFA, remember that louvers and screens cut down considerably on the available free air — this can be factored in by measuring the length by the width of the open vent area and dividing the resulting surface size in half.*

DO NOT OVERSIZE YOUR FAN! Additional installation of exterior vents may be required to provide sufficient Net Free Exhaust Area (NFA) for your fan to operate safely and effectively. Remember – bigger is not always better with Whole House Fans. A smaller fan that operates efficiently will always be preferable to a fan that is too big for its application.

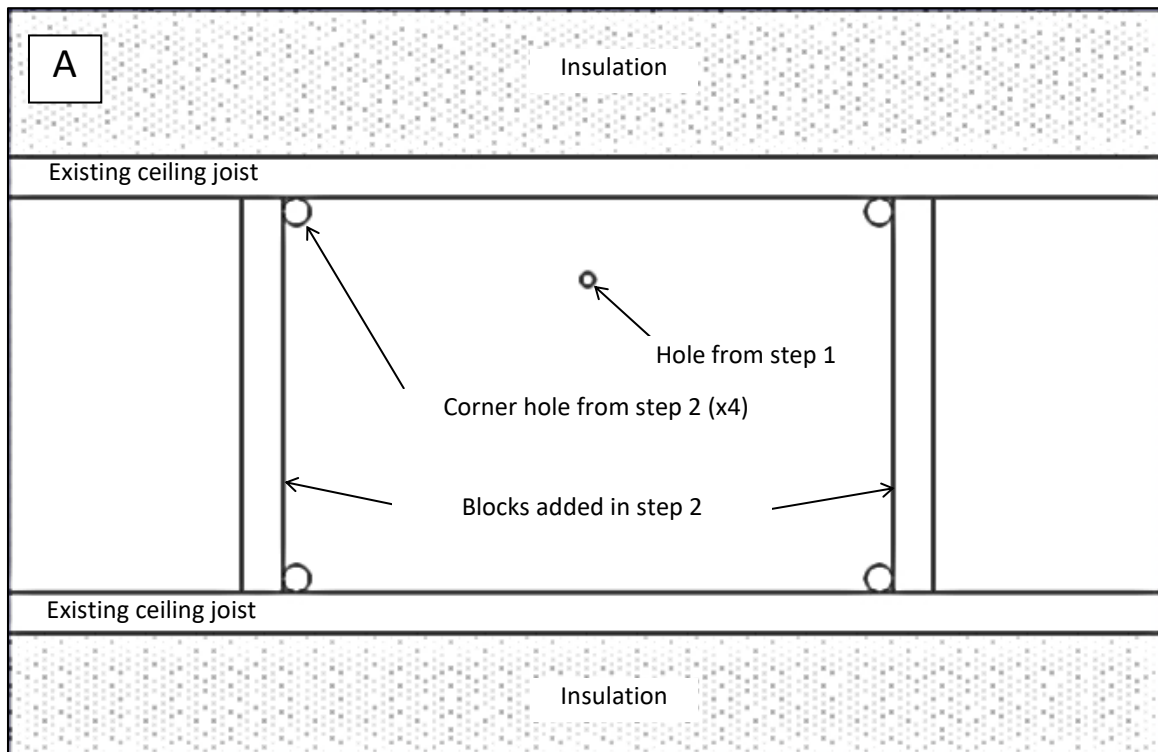
Tools Needed	Materials Needed
<ul style="list-style-type: none">• Drill• Small drill bit (3/32" recommended)• Gloves• Eye protection• 12 foot tape measure or longer• Pencil or marker• Circular saw for cutting lumber• Drill bit for driving screws• Hammer• 24" long straight edge or construction level• Keyhole or saber saw• 3/8" drill bit• Wrenches for hex head bolts and nuts• Phillips screwdriver• Slotted screwdriver• Needle-nose pliers	<ul style="list-style-type: none">• 36 inch length of wire for location marking (unfolded coat hanger works well)• 2x4 or larger lumber for framing• 3-1/2" wood screws or nails• 2" wood or drywall screws• 14/2 minimum, two-conductor wire with ground• 14/3 minimum, three-conductor wire with ground• UL recognized double gang wiring junction box• UL recognized wire connectors (wire nuts)

Parts Included	
<ul style="list-style-type: none"> • Fan, hanging bracket, duct and transition assembly • Damper assembly box • Intake grille and mounting screws • Rafter bracket 	<ul style="list-style-type: none"> • 5/16" x 2-1/2" bolt • 5/16" x 3/4" bolt • 2 - 5/16" locknuts • 4 - 5/16" flat washers • Nylon bracket spacer • Foil tape

If you are missing any of the above parts that are supposed to be included please contact our Customer Service department and we will assist you. (800) 433-1626

Step 1 (In the living space):

- Find a spot where you would like to install the damper assembly, drill a small hole in the middle of this location in the ceiling material and feed a wire through to mark it in the attic space above.



Step 2 (In the attic):

- Find the wire that was fed through the ceiling below and check for wires, pipes and other obstructions around the area where the product will be installed. If anything is in the way of the installation you may have to choose a different location for the damper assembly to be installed.
- Pull back the insulation material to allow for a well visible work space.

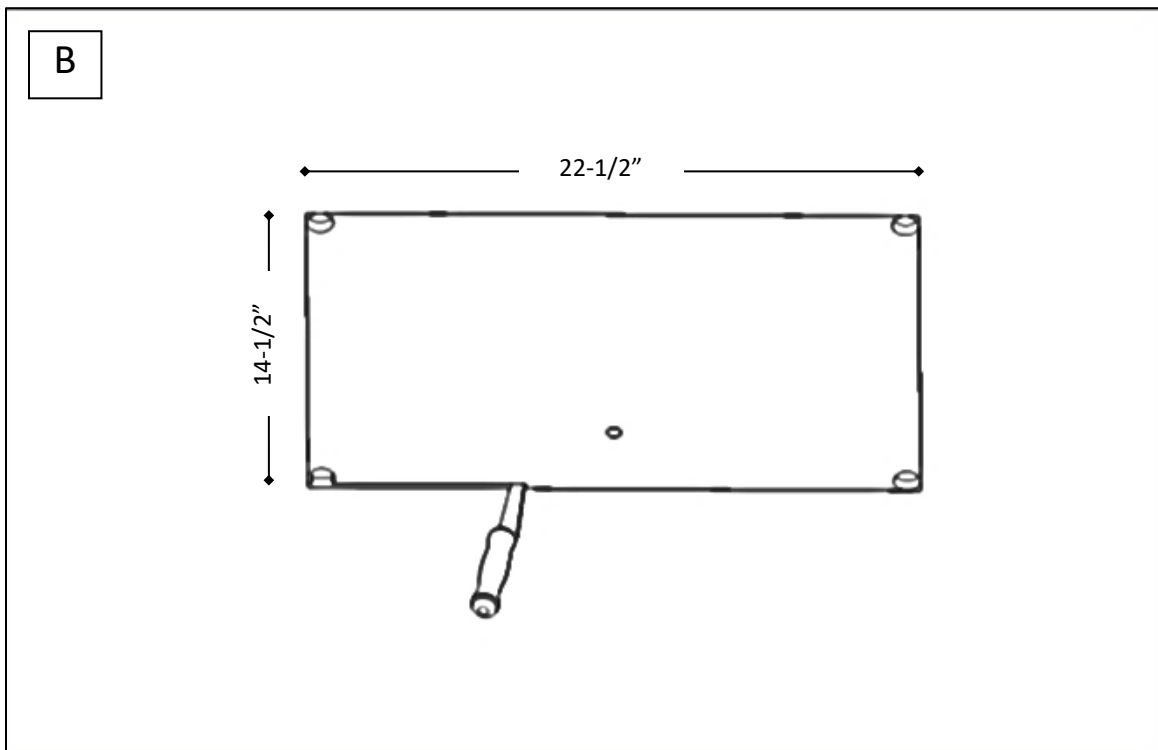
IMPORTANT: Ensure that the distance between the ceiling joists members is at least 14-½ inches. Also ensure there is an acceptable fan mounting location 10 feet or less from the location where the wire is being used to mark the location of the damper assembly box installation.

If there are obstructions to the installation, the distance between the joists is less than the minimum of 14-½” or the closest fan mounting location is further than 10 feet you will need to choose a different location to install the damper assembly box.

- Mark a 14-½” x 22-½” rectangle on the back side of the ceiling material. Center this rectangle around the wire that has been used to mark the center of the hallway.
- Drill a small hole in each corner of the rectangle to use as guides for cutting the ceiling material from the living space below as shown in Figure A.
- Optional, but recommended: Measure the exact length between the two ceiling joists between which you have marked the rectangle. Cut two pieces of lumber, 2x4 or larger, to fit in between the two ceiling joists. Place these pieces of lumber flush with the ceiling material in the attic and running in between the two ceiling joists. Fasten these pieces of lumber to the ceiling joists using screws or nails to create a wooden “frame” around the rectangle that you have drawn.

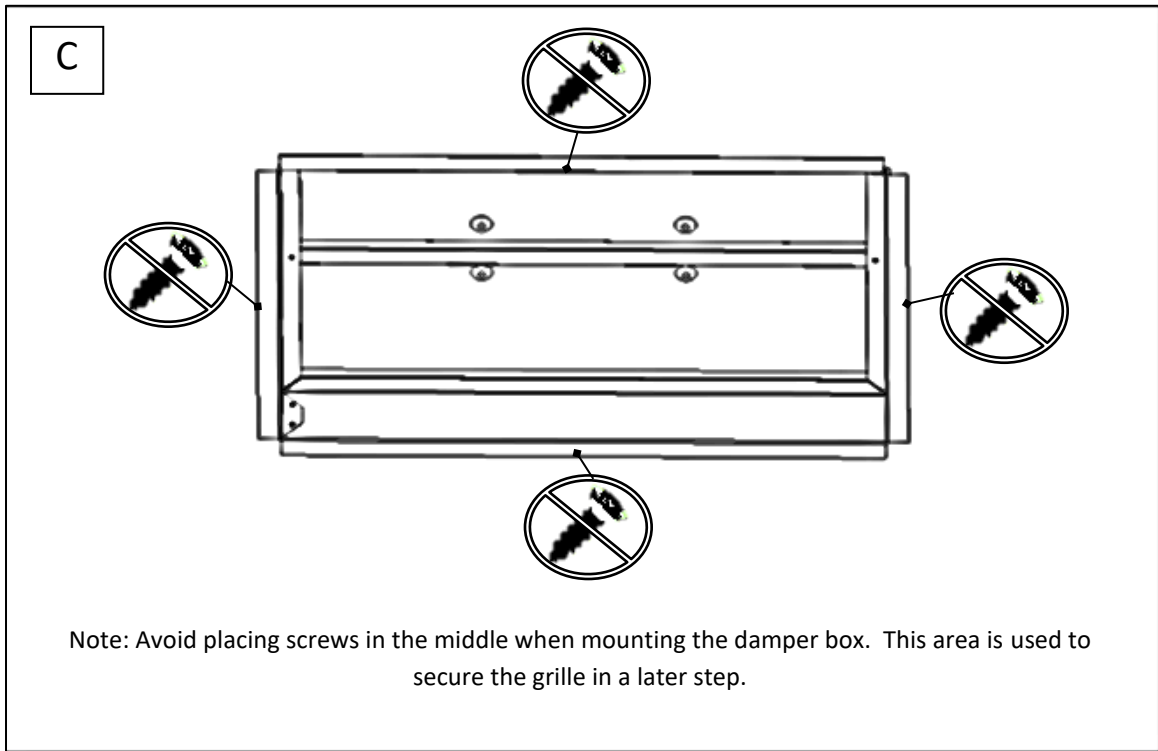
Step 3 (Living space):

- In the living space below use a straight edge to mark a rectangle on the ceiling by connecting the four small holes that were drilled at the corners in the attic previously as shown in Figure B.
- Re-measure this rectangle to ensure that it measures the necessary 14-½” x 22-½”. Make any adjustments needed to allow the damper box to fit properly.
- Cut along the rectangle drawn on the ceiling using a keyhole saw or saber saw.



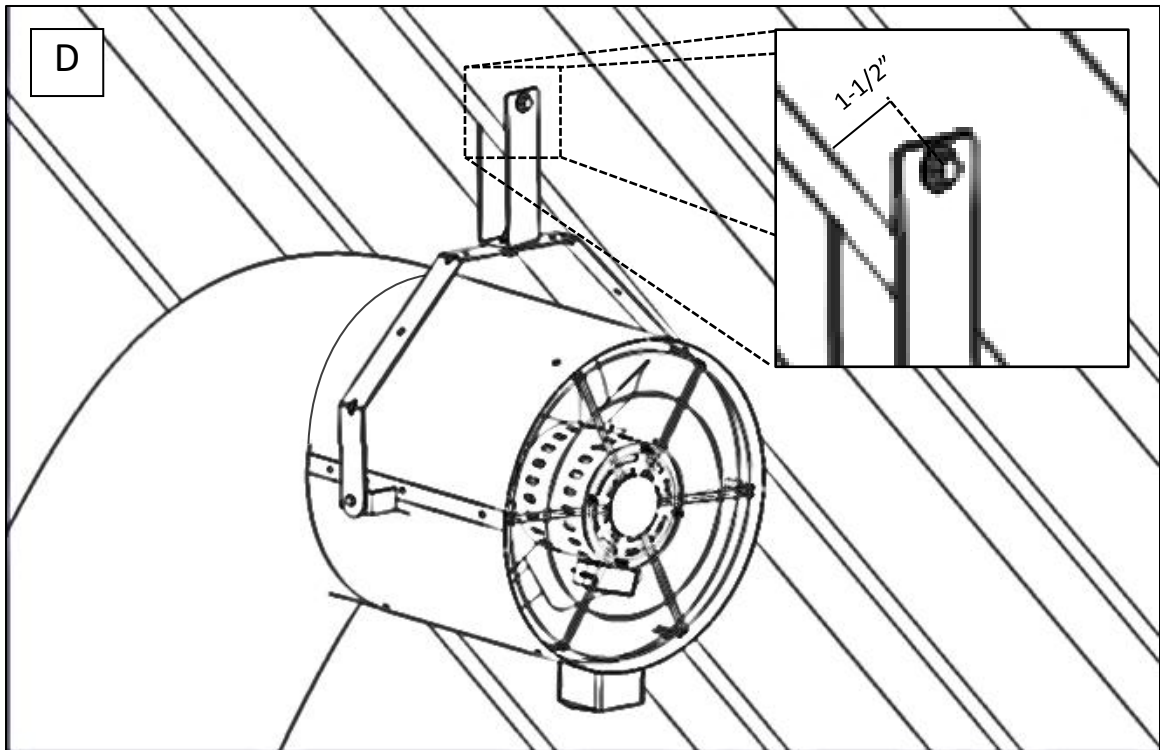
Step 4 (Living space):

- Slide the damper box assembly up into the hole and secure it to the ceiling structure using a minimum of a two inch (2") long wood or sheetrock screws. Be sure to avoid installing these screws toward the middle of the damper assembly flanges as the intake grille will screw in at the middle of the damper box flanges as shown in Figure C. These screws will pass through the ceiling material and into the wooden ceiling joists or lumber in the attic above ensuring a secure installation of the damper box.



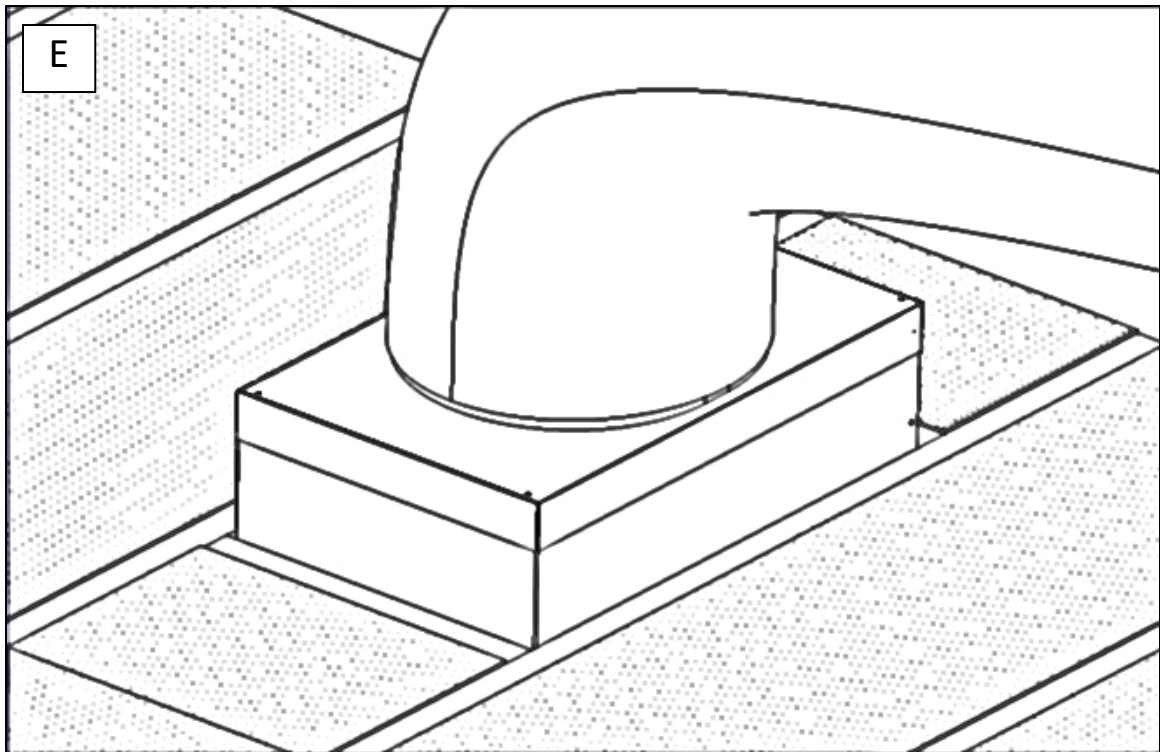
Step 5 (Attic):

- Determine to which roof rafter the fan will be mounted. The location of the fan installation will need to be less than 10 feet away from the damper box assembly due to the length of the provided duct. The further away from the damper box assembly the fan can be installed the quieter the apparent operation of the fan will be in the living space below.
- Using a 3/8" drill bit, drill a hole in the location chosen. This hole needs to be 1-1/2" up from the long, flat edge of the rafter as shown in Figure D.
- Attach the rafter bracket to the top of the fan hanging bracket using the provided 5/16" x 3/4" bolt, lock nut and washers.
- Attach the rafter bracket to the rafter where the hole was drilled using the provided 5/16" x 2-1/2" bolt and lock nut as shown in Figure D.
- Ensure all nuts and bolts are tight on the mounting components of the fan.
- If possible, manually spin the fan blade to ensure there are no obstructions that may have occurred during shipping, handling or installation.



Step 6 (Attic):

- Extend the duct and duct transition down to the damper assembly box.
- Fit the duct transition over the top of the damper assembly box. Ensure that it sits flush against the top of the damper assembly box as shown in Figure E.
- Use the provided foil tape to seal the seam between the duct transition and damper assembly box to prevent air leakage when the unit is running.



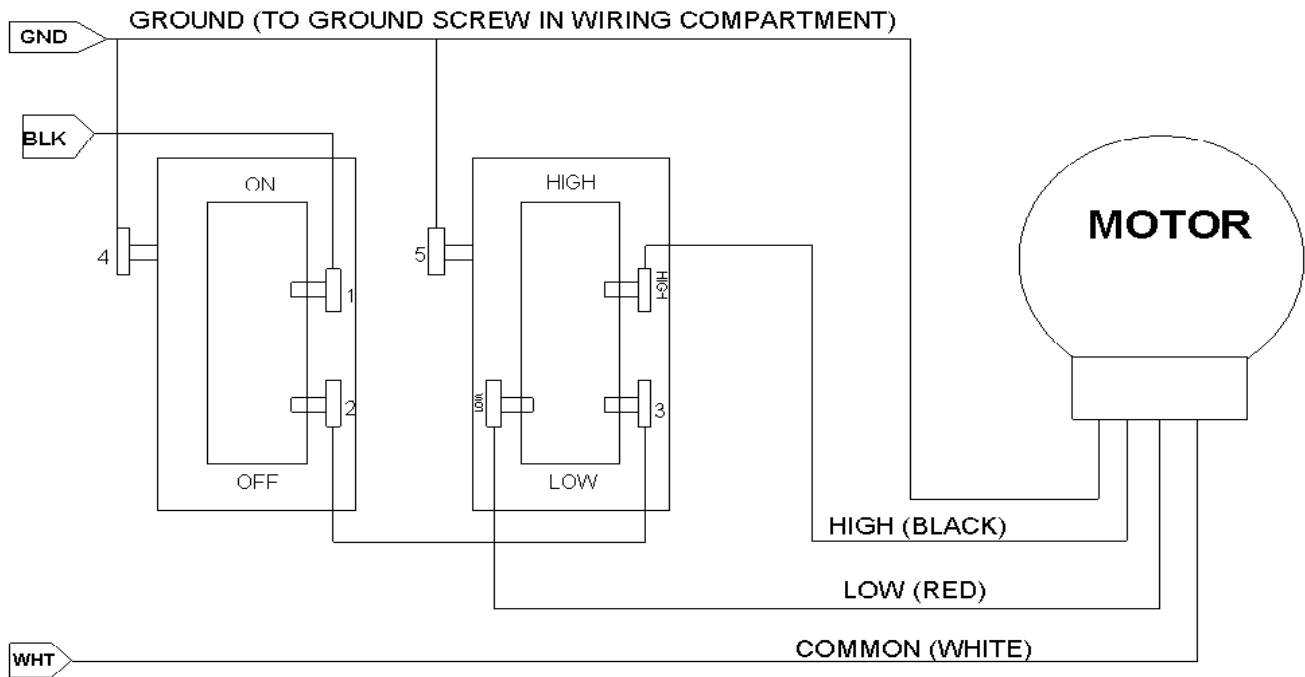
Step 7 (Living space):

NOTE: All electrical wiring supplied and installations must meet or exceed the requirements of local electrical and fire codes. Wire to 120 Volt, 60 Hz circuit only, using a minimum of 14/2, two-conductor wiring with ground for the primary wiring run. A minimum of 14/3, three-conductor with ground may be used to wire in between the switches and the fan unit.

- Disconnect the power supply or switch OFF the appropriate circuit breaker.
- Choose a location on a wall that is close to the fan for installing the switches. Cut the appropriate hole in the wall to install the UL listed double gang wiring junction box (not provided).

Step 8 (Attic): see wiring diagram on next page

- Open the wiring box on the side of the fan by removing the two screws on the face plate. Keep these screws to re-close the wiring box after wiring is completed.
- Run a length of three-conductor wire in between the fan wiring box and the location in the living space below where the switches will be installed. There should also be the two-conductor wire run from the power supply panel or breaker box to the switch location.
- Connect the fan High speed (Black) to the Black wire of the three-conductor wire using a wire connector.
- Connect the fan Low speed (Red) to the Red wire of the three-conductor wire using a wire connector.
- Connect the fan Common (White) to the White wire of the three-conductor wire using a wire connector.
- Loosen the Ground screw in the fan wiring box and loop the Ground wire (Bare Copper) around the Ground screw and tighten down on to the Ground wire.
- Tighten the screws on the cable clamp attached to the side of the fan wiring box to prevent the three-conductor wire from pulling loose of the fan wiring box.
- Re-close the wiring box by reapplying the face plate and fastening it into place with the original screws.



Step 9 (Living space):

NOTE: Ensure that power supply is disconnected or turned OFF before connecting the primary wiring run. Install the provided switches in a UL listed double gang wiring junction box.

- Connect the incoming power supply wire (usually Black) to the top right terminal of the On/Off switch (1).
- Connect the bottom right terminal of the On/Off switch (2) to the bottom right terminal of the High/Low switch (3) using a jumper wire (not provided).
- Connect the wire from the High speed motor lead (Black) to the top right terminal of the High/Low switch (HIGH).
- Connect the wire from the Low speed motor lead (Red) to the bottom left terminal of the High/Low switch (LOW).
- Connect the incoming common wire (usually White) to the wire from the common lead (White) of the motor.
- Connect the incoming ground wire (usually bare copper) to the grounding screws on each switch (4&5) and to the ground wire connected to the ground screw in the fan wiring box marked with a ground symbol.
- Install the switches in the UL listed double gang wiring box and install the provided switch plate cover over the switches.

Step 10 (Living space):

- Turn power ON at the power supply panel or breaker box for the fan.
- Test the fan by switching the unit ON using the On/Off switch. Change the speed setting using the High/Low switch. Ensure that the damper doors open and close when the fan is ON and OFF respectively.
- Install the intake grille to the bottom side of the damper assembly from the living space below using the provided white-headed screws.

Operating Instructions

Whole House Fans cool your home by pulling in fresh, cooler air from outside through open windows and doors. For best results in a multi-story home, windows should be opened on alternate levels for most efficient cooling. **NEVER operate fan without open windows or doors.**

CAUTION: If your home has a fireplace, be sure that the flue damper is closed to prevent chimney soot from being drawn into the house by the fan. **DO NOT operate the fan when a fire is burning in the fireplace.**

Common Installation Issues

Motor Stops after 10-20 Minutes

- Insufficient intake or exhaust Net Free Air. Open more doors and windows or increase the amount of ventilation in the attic.

Unit is Noisy

- Moving the fan further into the attic will reduce the apparent noise.
- Make sure all screws and bolts are tightened.
- Verify Exhaust NFA. Inadequate NFA will result in the unit working harder and making more noise.

Not Enough Airflow

- Verify NFA intake and exhaust requirements are being met. Lack of airflow can be the result of lack of fresh air and lack of ventilation to expel the air. Try channeling the air by opening only doors and windows in a certain area to funnel the wind flow.

Fan Does Not Start on Low Speed

- Verify that the fan will start on High Speed. Switch to Low Speed from the High setting. For additional troubleshooting, please contact our customer support team.

VENTAMATIC, LTD.

LIMITED WARRANTY

This warranty is underwritten by Falco Insurance Company and is extended to the original retail purchaser of this model or, if this unit is purchased and requires installation by a building contractor, to the original owner of the home. No subsequent purchaser of the unit or of a home in which it is installed is entitled to any of the benefits of this warranty.

This product is warranted against defects in materials and workmanship for the time period listed by model number below, from the date of original retail purchase. No other parts or components are warranted. There is no warranty for defects caused by abuse, faulty installation, or the like.

CX1401, CX1801

Limited 10-Year

Repairs or replacement parts supplied under this warranty are warranted only for the period of this warranty; that is, for the time period stated by model number above, from the date of the original retail purchase of the unit.

In the event of a defect or malfunction, we will replace or repair the defective part or component only and return the new or repaired part to you freight prepaid.

You must bear all other expenses incurred in obtaining repairs, including labor required for field repair or replacement, and the cost of shipping the defective part to us. You must also bear the cost of repair to or replacement of any part or component and the shipping charges incurred for the repair or replacement and return to you of any part or component not covered by this warranty, including parts or components damaged by you.

The company reserves the right to demand and receive written evidence of the date of purchase before undertaking its obligations under this warranty. The right to demand and receive written evidence of date of purchase extends to all licensed dealers of Ventamatic, Ltd. products.

You should, therefore, retain your sales slip and attach a copy of it to the warranty claim.

To start a warranty claim you must:

Contact Ventamatic, Ltd.

An RGA (Returned Goods Authorization) form is required for returns to the factory to ensure your return can be processed efficiently and quickly. Please contact Ventamatic, Ltd. toll-free at 800-433-1626 or via web at www.MYMAXXAIR.com to obtain an RGA and follow the instructions given.

There is no informal dispute settling mechanism available in the event of a controversy involving this warranty.

Any and all implied warranties which may exist terminate upon the expiration of this warranty from the time period listed by model number above, from the date of the original retail purchase. Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you.

Ventamatic, Ltd. is not liable to you for incidental or consequential damages arising out of defect or malfunction of a unit or its installation or out of any alleged breach of this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation may not apply to you.

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

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