

GARBECK AIRFLOW INDUSTRIES

Keeping America Cool



Model GB180 Whole House Fan
Installation / Operating Guide

Garbeck Airflow Whole House Fan Installation Instructions (GB 180)

Congratulations on your purchase of the Garbeck Airflow 180 Whole House Fan. Installing the fan is simple, and most do-it-yourselfers should have no problem by following these instructional guidelines. If you are not comfortable using basic hand and power tools, Garbeck suggests using a contractor to perform the installation. In addition, local codes may require a licensed electrician to perform the necessary 110 volt wiring. It is recommended you check with the local authorities if there is any question.

Box Contents

Check that all parts are included in the box.

- Model 180 (1100) Fan Enclosure
- (1) Insulating tape (attached to fan)
- (4) Wood Screws, (4) Sheet Metal Screws and angle brackets (for attaching fan to joists)
- (1) Grill and grill attachment screws
- Installation Instructions and Warranty
- Wireless Remote Control Transmitter

Fan Location

When choosing a location for your new fan, a few things should be considered. Since heat normally rises it is best to locate your new fan in the ceiling of a second floor hallway or other high, centrally located spot in the house. Garbeck fans are designed to provide maximum air flow and minimum noise. However at night when most houses are quiet the fan noise will be audible and may be a distraction. Therefore it's best not to place the fan in a bedroom or other occupied room. Hallways and stairwells usually are the best choice. Low speed can also be used during sleeping hours to minimize the noise.

Make certain there is enough clearance in the attic space to accommodate the fan with the door fully extended. A minimum of 22 inches from the top of the attic ceiling joist is required.

The location should be such that there is adequate exhaust area out of the attic. The Garbeck Airflow 180 requires approximately 2 square feet of venting. Anything less will restrict the airflow, and reduce the efficiency and cooling capacity of the fan. See chart below to calculate. Most houses are built with louver vents, ridge vents, soffit vents (under eaves), or a combination of the three.

Calculate your Attic Venting

- *Louver Vents (usually located in gables):* multiply (Length in inches x Width in inches x 0.5) / 144 for total square footage of venting. Example, a 12" square louver provides $12 \times 12 \times 0.5 / 144 = 0.5 \text{ ft}^2$ of venting.
- *Ridge Vent:* multiply (total Length in inches x 0.13) / 12 for total square footage. Example, a 20 foot section of ridge vent will provide $(240 \times 0.13) / 12 = 2.6 \text{ ft}^2$
- *Soffit Vent:* multiply (Length in inches x Width in inches x 0.5) / 144 for total square footage. Example, a 20 foot section of soffit vent will provide $(240 \times 0.5) / 12 = 2.6 \text{ ft}^2$

Tools & Supplies Needed

- (2) lengths of framing to match existing framing
- Screw driver or screw gun
- Sheetrock saw or similar
- Wire Cutter / Stripper, 110 V Outlet box and Receptacle for electrical install

Installation

A. Garbeck fans are designed to fit on either standard 16" on center spaced or 24" on center spaced ceiling joists. Two pieces of 2 x 8 (or 2 x 10, 2 x 12, etc.) stock will be required to build a box to support the fan. The final dimensions of the fan box should be approximately 22.5" x 14.5". Cut the stock framing accordingly and nail or screw into place. This is what the fan box should look like.



B. The supplied insulating gasket must be placed between the top of the joists and the fan box. Cut each gasket strip to the proper lengths. Remove the adhesive backing from the insulation gasket and place on top the floor joists, approximately in the center of each. It is important to cut and position the gasket to provide as close to an air tight seal as possible.

C. Set the fan on top of the gasket and position each hold down bracket at a corner of the fan box, adjacent to a ceiling joist. Use the supplied wood screws to secure each bracket to the joist. Then use the supplied sheet metal screws to secure each corner mount bracket to the fan box, making certain the fan is sitting flush on the insulating gasket. Check that all bolts are secure. Depending on the fan location it may be necessary to re-locate or modify the mount brackets. Brackets can be bent or modified, and re-positioned as needed for your specific installation.



D. Use a sheetrock saw or equivalent to cut a hole in the ceiling the same size as the fan box (22.5" x 14.5"). To insure that the grill fits properly, do not cut the hole beyond these dimensions.

E. Attach the grill with the supplied screws.

F. Wiring:

All Garbeck fans run off of 115VAC power. Two AC line cords are attached to the fan electrical box. Plug these into standard 115 volt electrical outlets. It is recommended that an outlet is positioned close to the fan (within reach of the 6 ft line cords). Installation of this outlet should be done by a licensed electrician.

With the line cords plugged in, power is applied to the remote control circuit and the fan is ready for operation. Use the remote control to turn the fan on (#2) and to change between low and high fan speed (#1). The remote control is also used to power off the fan when not in use. Both line cords should be unplugged during installation or when servicing the whole house fan. Also note that during a power outage, Garbeck fans will automatically close to prevent undesirable heat or cooling loss.

Garbeck Whole House Fans are **not** for use with solid state speed controls (like rotary dial or slide switches used to control ceiling fan speed).

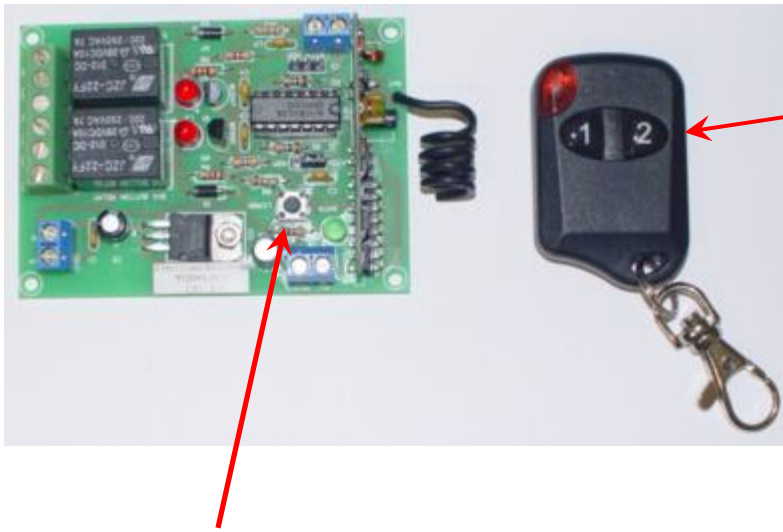
Maintenance

Garbeck fans require no maintenance, other than periodic cleaning of dust from the air inlet grill. Make certain not to place anything on top of the fan lid, as this will impede the opening of the lid when the fan is powered on.

Programming the Remote Control

The wireless remote control has been pre-programmed at the factory, and your new fan should be ready to use without having to go through these steps. However in the event the remote requires re-programming (after battery change, adding a second transmitter, or after replacing a lost or damaged handheld transmitter), follow these steps.

1. On The fan box, remove the power box access panel by loosening the two screws.
2. Locate the remote control circuit card inside the box.
3. Press the #1 button while simultaneously pressing the LEARN button located on the circuit card. You only have to do this briefly for under a second. But note it takes about 15 seconds for the two units to internally connect and recognize each other. Wait the full 15 seconds until the two units have connected. Do not press the LEARN button again. Just wait 15 seconds.
4. Test the unit by pressing #2 button for power on / off, and the #1 button for high low speed selection.



Learn Button

Remote

#1: High / Low Speed

#2: Power On / Off

Operating the Fan

Your new fan is ready to operate. First, make sure to open at least one window in the house. Pressing the #2 button on the remote transmitter will turn on the fan and simultaneously open the insulated fan lid. Pressing the #1 button will toggle the fan between high speed and low speed operation. It is common to use high speed initially to provide a quick transfer of air, then change to low speed during quiet, sleeping hours. Pressing the #2 button again will power off the fans and close the lid.

Make certain not to place any items on top of the fan, as that will impede the operation and could possible damage the unit.

Thank you for Choosing Garbeck Whole House Fans!

Garbeck Airflow Industries

Middletown, CT USA | info@garbeck.com | www.garbeck.com