BROAN®

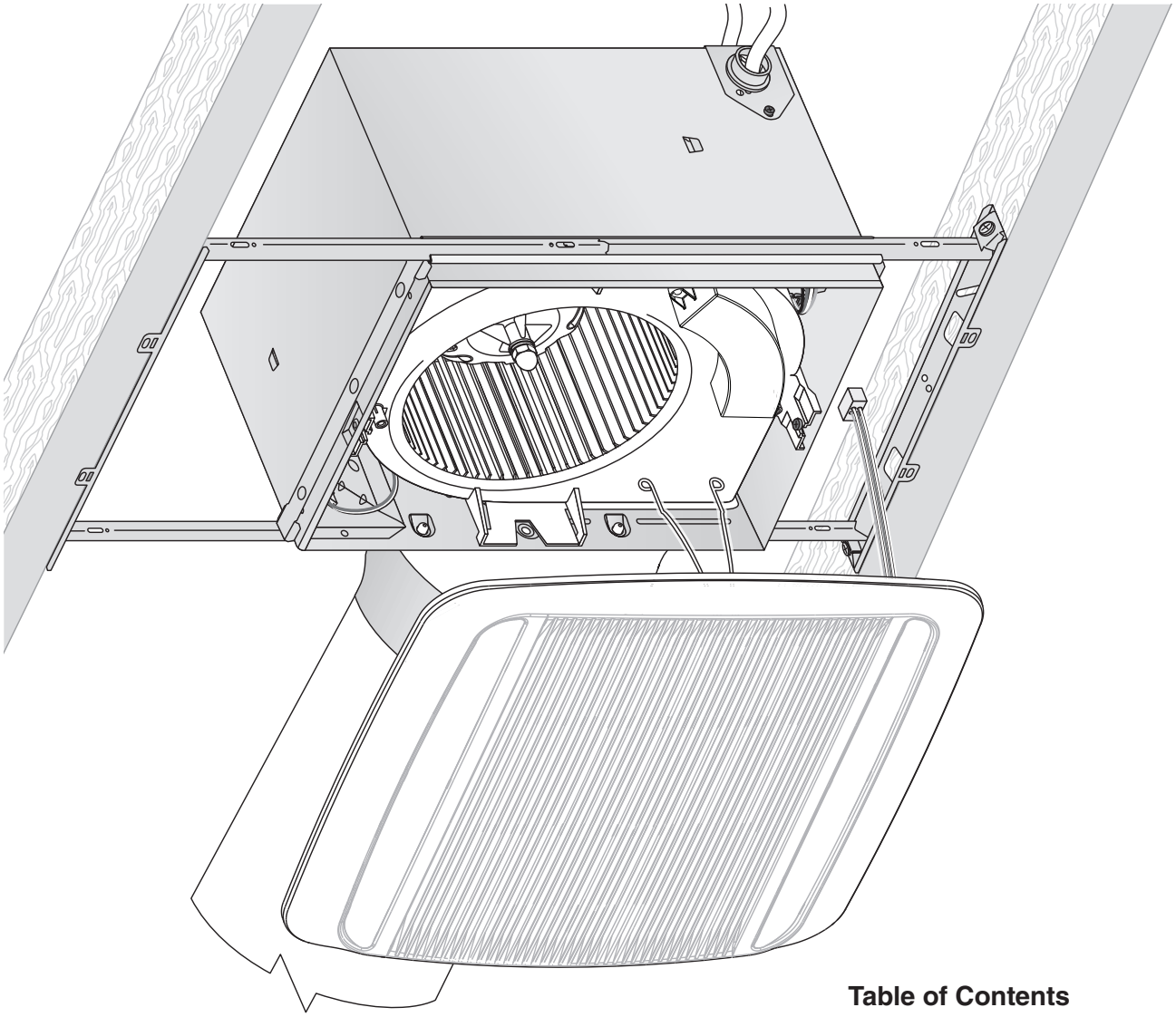
ULTRA

READ AND SAVE THESE INSTRUCTIONS

Installer: leave this guide with homeowner.
Register your product online at **www.broan.com/register.**

RB80L1 ▪ RB110L1

ULTRA Pro™
Ventilation Fan with Dimmable Light
with ULTRA*Quick*™ Installation Technology
INSTALLATION GUIDE



Easy installation in both new construction and retrofit

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WARNING

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

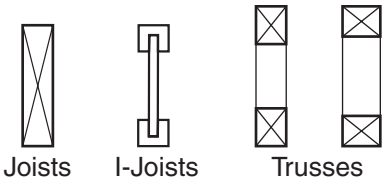
1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty.
2. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power 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.
3. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. 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.
5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Ducted fans must always be vented to the outdoors.
7. Use only ON/OFF switch, mechanical timer or relay-switched control.
8. Acceptable for use over a tub or shower when connected to a GFCI (Ground Fault Circuit Interrupter) - protected branch circuit.
9. This unit must be grounded.

CAUTION

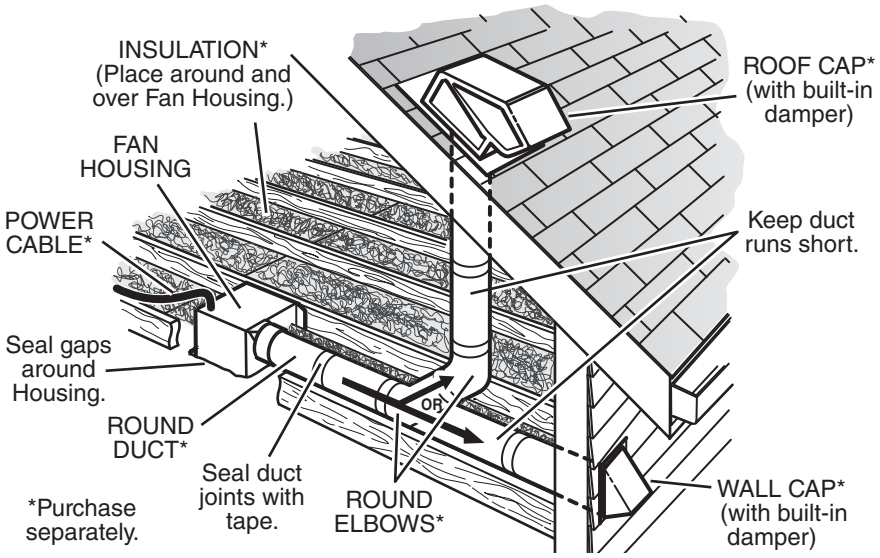
1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. This product is designed for installation in ceilings up to a 12/12 pitch (45 degree angle). Duct connector must point up. **DO NOT MOUNT THIS PRODUCT IN A WALL.**
3. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
4. Please read specification label on product for further information and requirements.

Typical Installation

- Installation is the same for:



- Fits in 2" x 8" ceiling construction.
- Infinitely adjust the fan position between joists from 14" to 24" on center.
- Do not install this fan in a ceiling thermally insulated to a value greater than R40.



The ducting from this fan to the outside of the building has a strong effect on the air flow, noise and energy use of the fan. Use the shortest, straighest duct routing possible for best performance, and avoid installing the fan with smaller ducts than recommended. Insulation around the ducts can reduce energy loss and inhibit mold growth. Fans installed with existing ducts may not achieve their rated airflow.

6-inch round rigid metal duct is recommended for best performance.

New Construction Installation

Tools needed

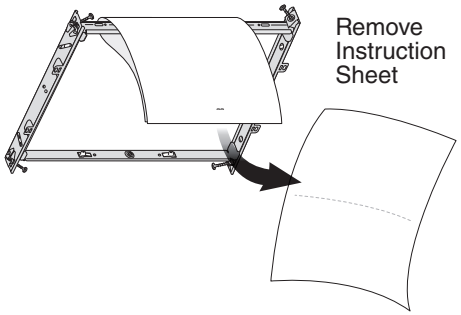
- Power screwdriver with a Phillips bit
- Phillips screwdriver
- Flathead screwdriver
- Pliers
- Wire insulation stripper
- Wire cutter

Materials needed

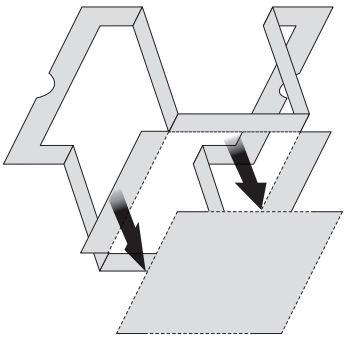
- 6" round metal ducting recommended for best performance. Use of other ducting is acceptable but may impact performance.
- Roof cap or wall cap (built-in damper recommended)
- Tape to seal duct connections
- Electrical wiring and supplies per local code requirements

1 Remove Packaging

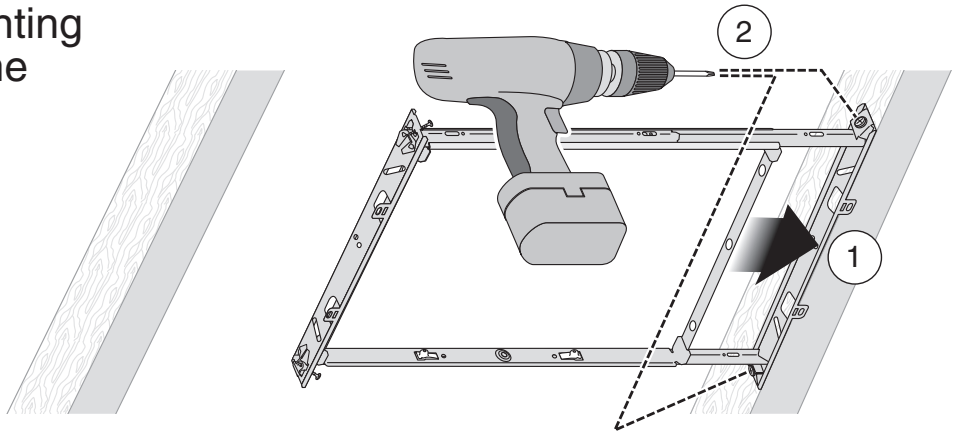
Parts Bag holds Knockout Plate and six (6) screws

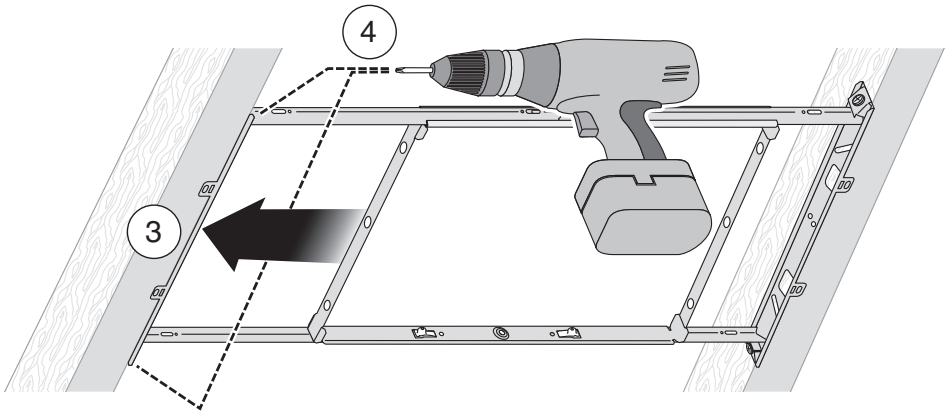


Punch out Mask from packaging. See Step 6.



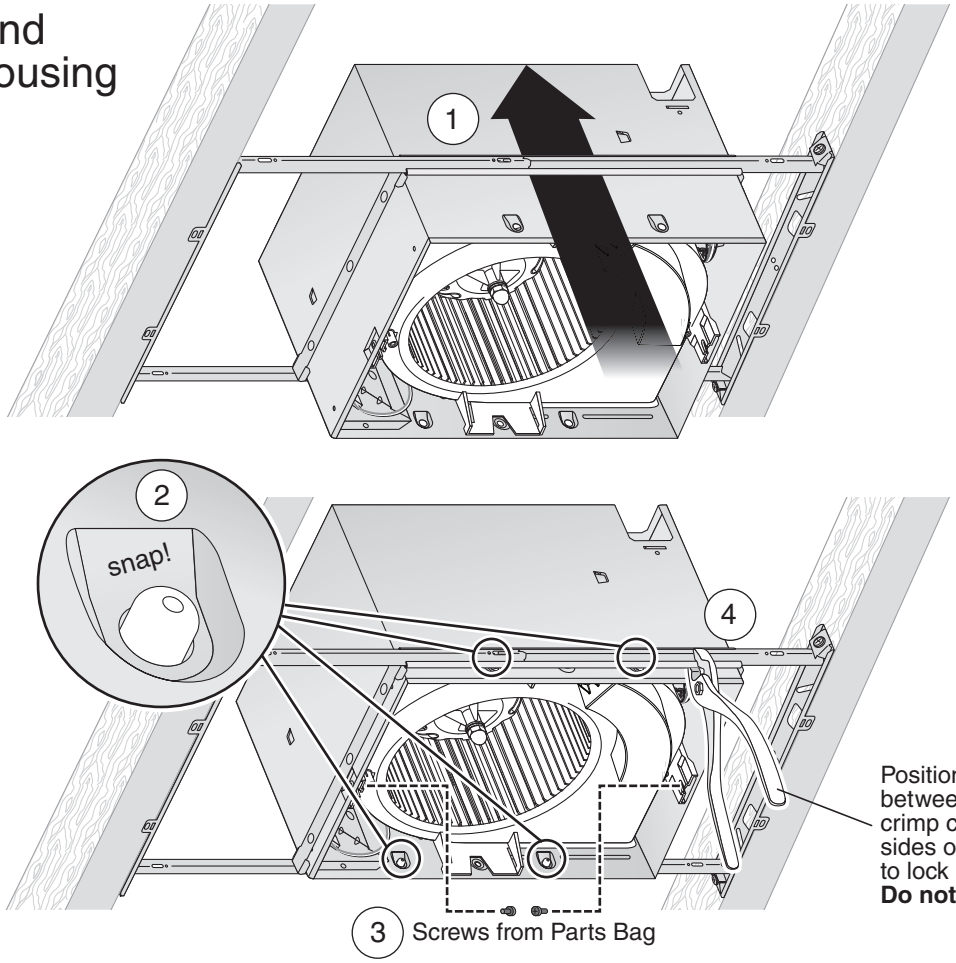
2 Install Mounting Frame



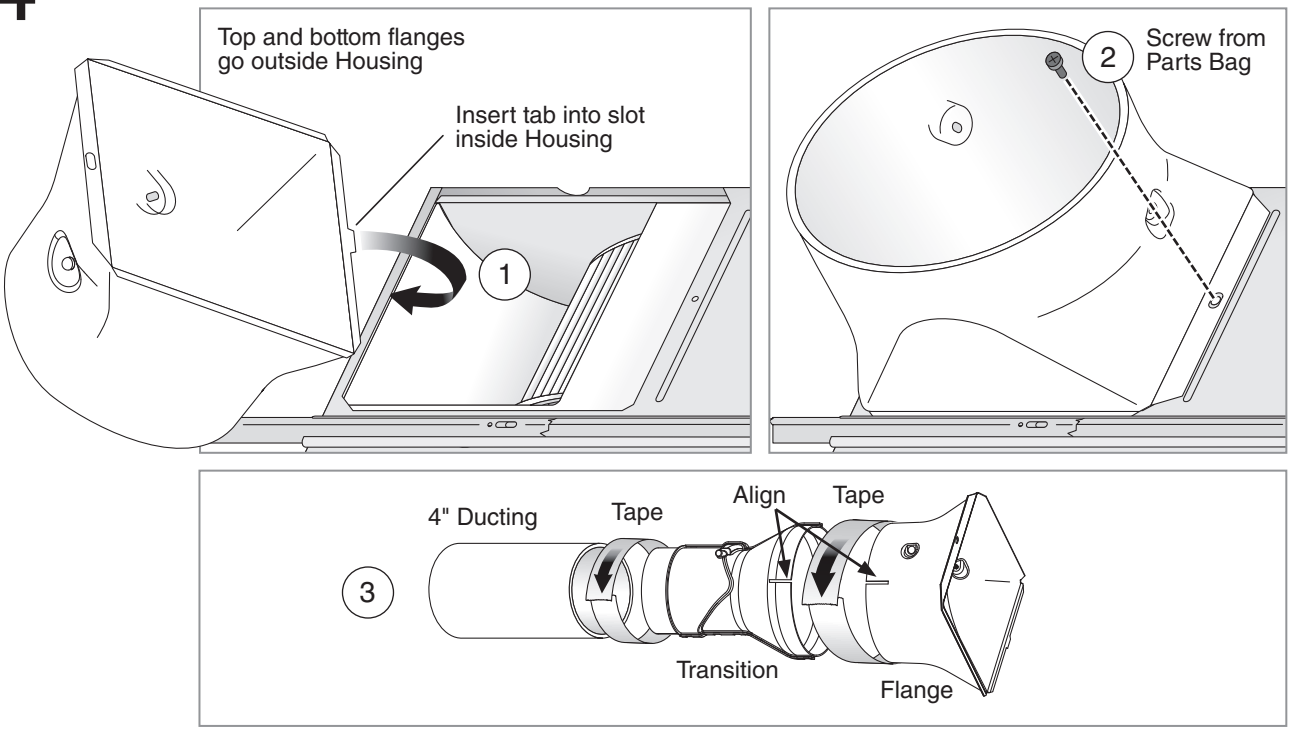


New Construction Installation

3 Snap-in and Secure Housing



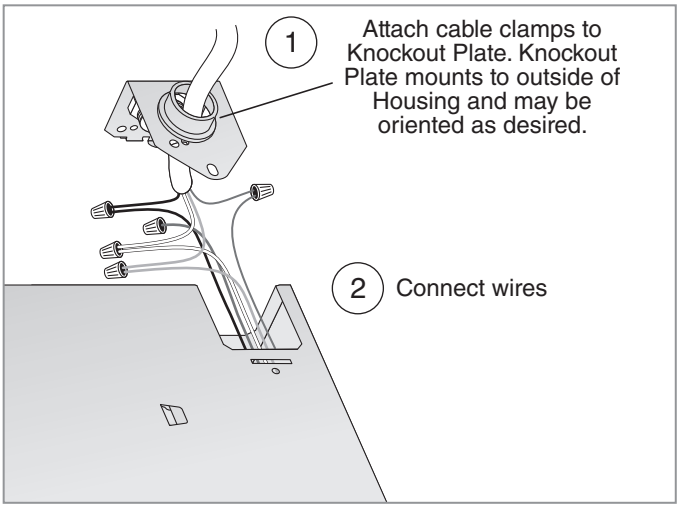
4 Attach Flange, Transition and Ducting

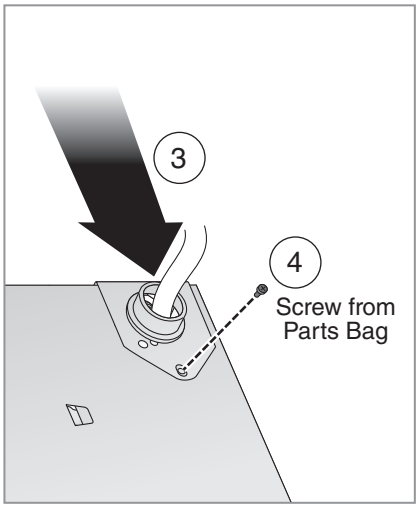


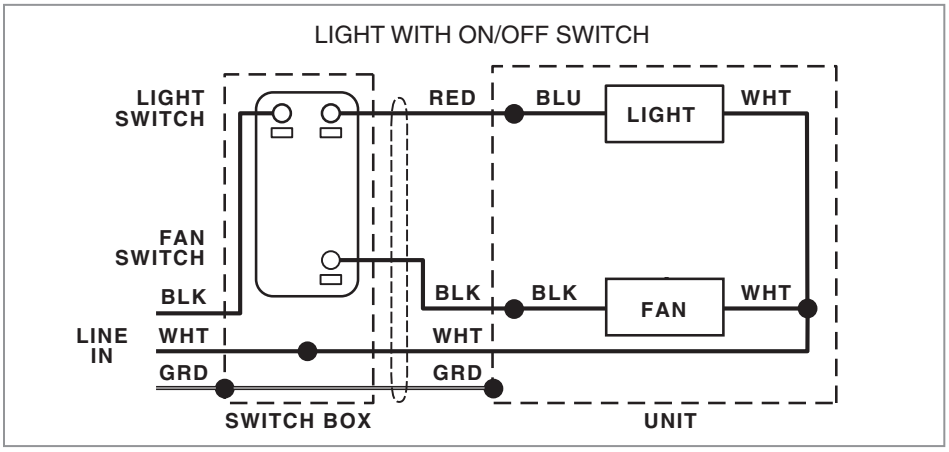
New Construction Installation

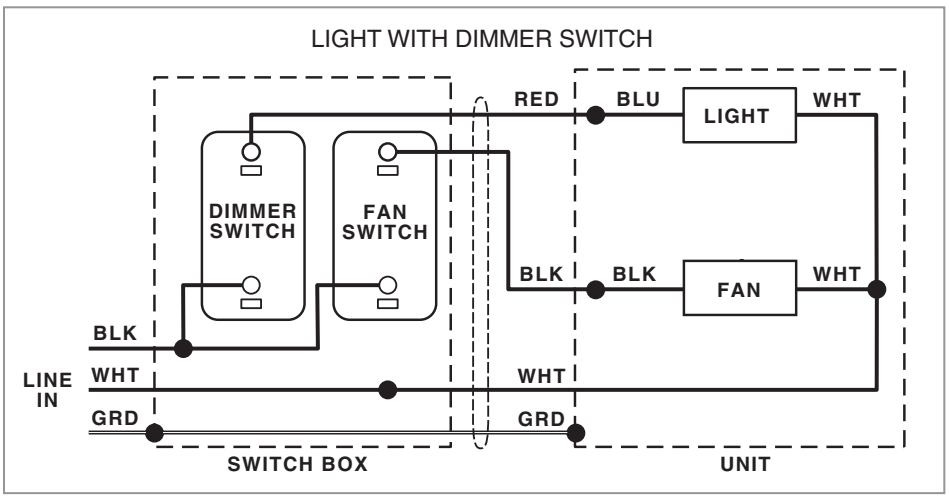
5 Connect Wires and Install Knockout Plate

- Run 120VAC electrical wiring to the installation location.
- Use proper UL-approved connectors to secure wiring to the Knockout Plate provided in Parts Bag.
- Connect wires as shown in wiring diagram.





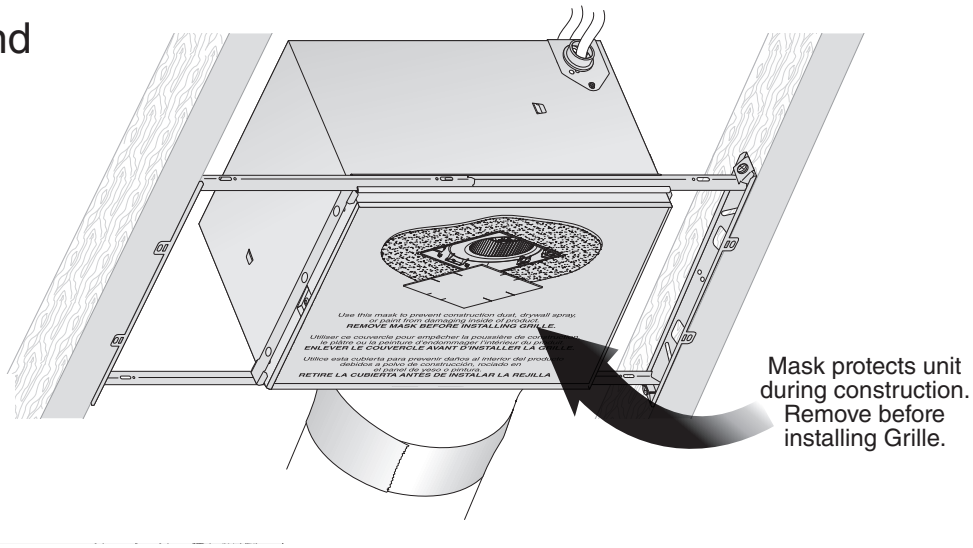




New Construction Installation

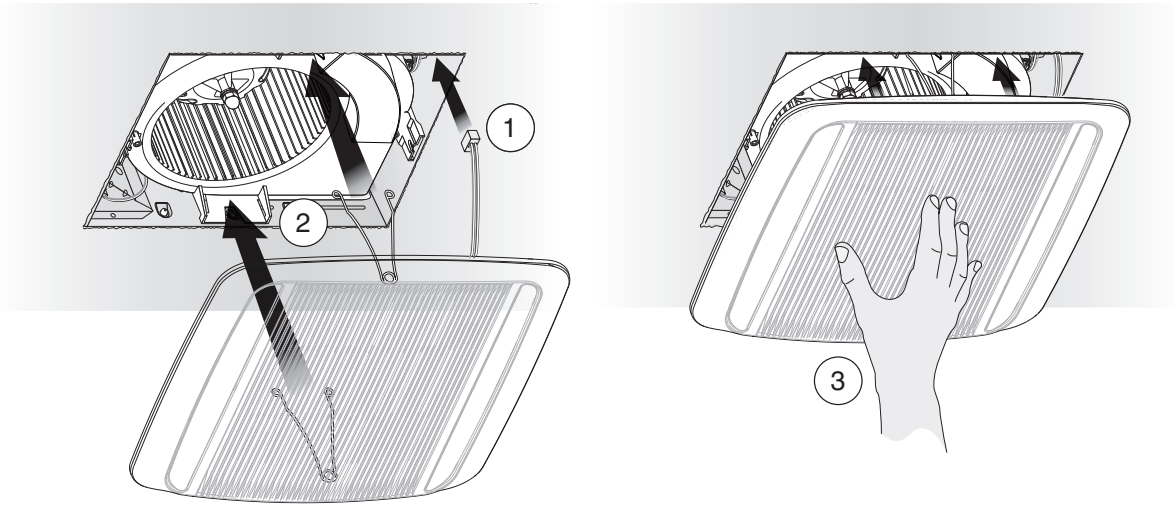
6 Insert Mask and Finish Ceiling

- Install ceiling material.
- Cut out around Housing.



Mask protects unit during construction. Remove before installing Grille.

7 Install Grille



See Page 12 for Operations, Cleaning and Maintenance, and Troubleshooting.

Retrofit Installation

Tools needed

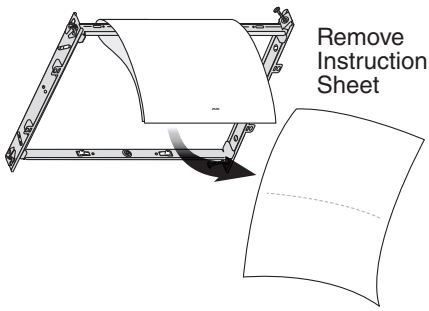
- Power screwdriver with a Phillips bit
- Phillips screwdriver
- Flathead screwdriver
- Pliers
- Wire insulation stripper
- Wire cutter
- Ruler
- Pencil
- Drywall saw
- Claw hammer or pry bar
- Utility knife

Materials needed

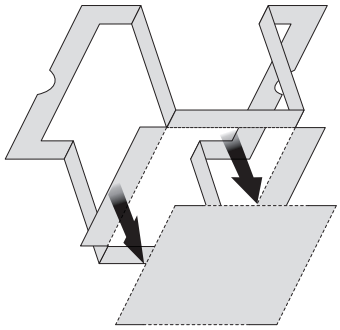
- Tape to seal duct connections
- Existing rigid duct will require the addition of a short length of flexible duct
- Electrical wiring and supplies per local code requirements

1 Remove Packaging

Parts Bag holds Knockout Plate and six (6) screws



Punch out Mask from packaging. See Step 12.

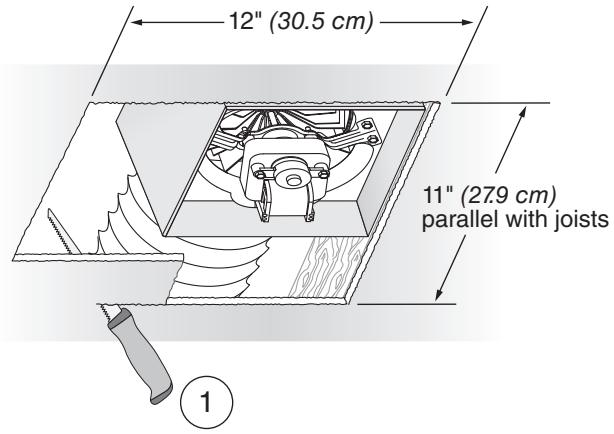


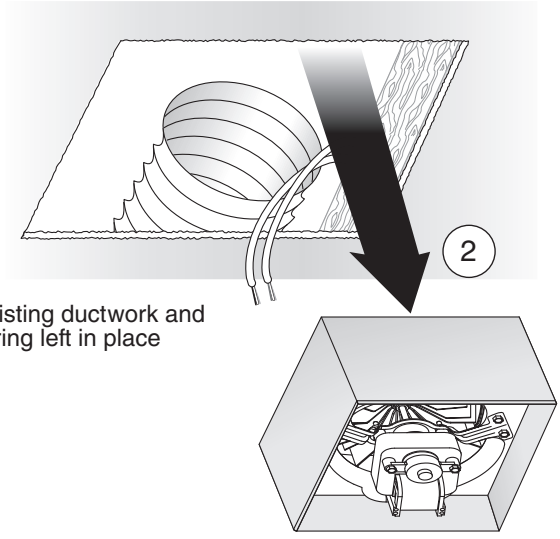
2 Switch Off Power

WARNING

Before removing existing fan, 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.

3 Enlarge Ceiling Opening and Remove Existing Fan





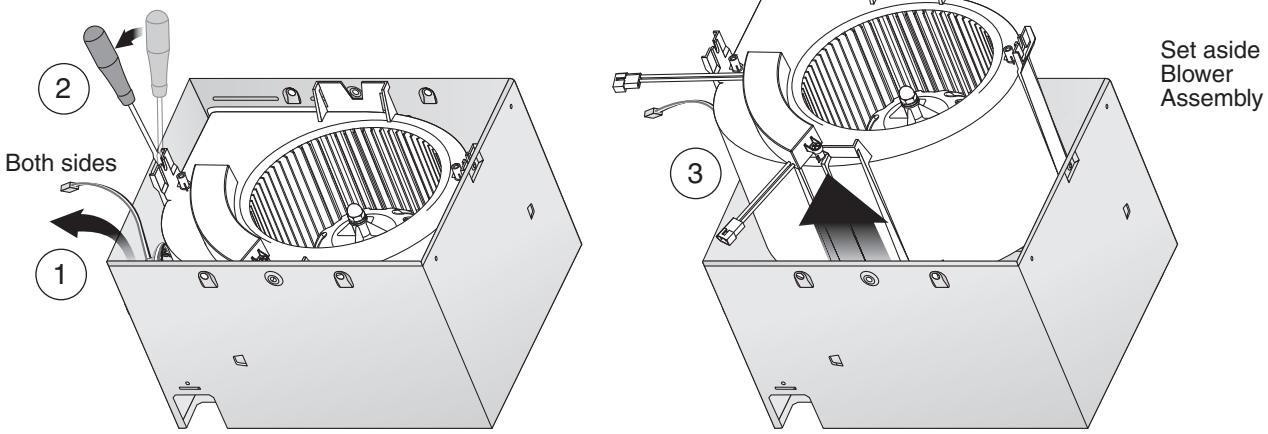
Existing ductwork and wiring left in place

4 Examine Wiring

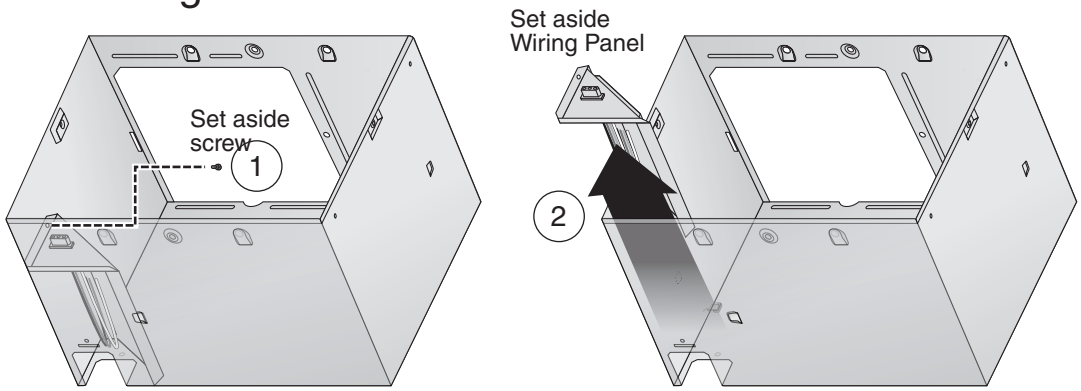
Examine the existing wiring to make sure it is not damaged. If any damage is found, **DO NOT CONTINUE INSTALLATION** of this product. Contact a qualified person(s) for repair.

Retrofit Installation

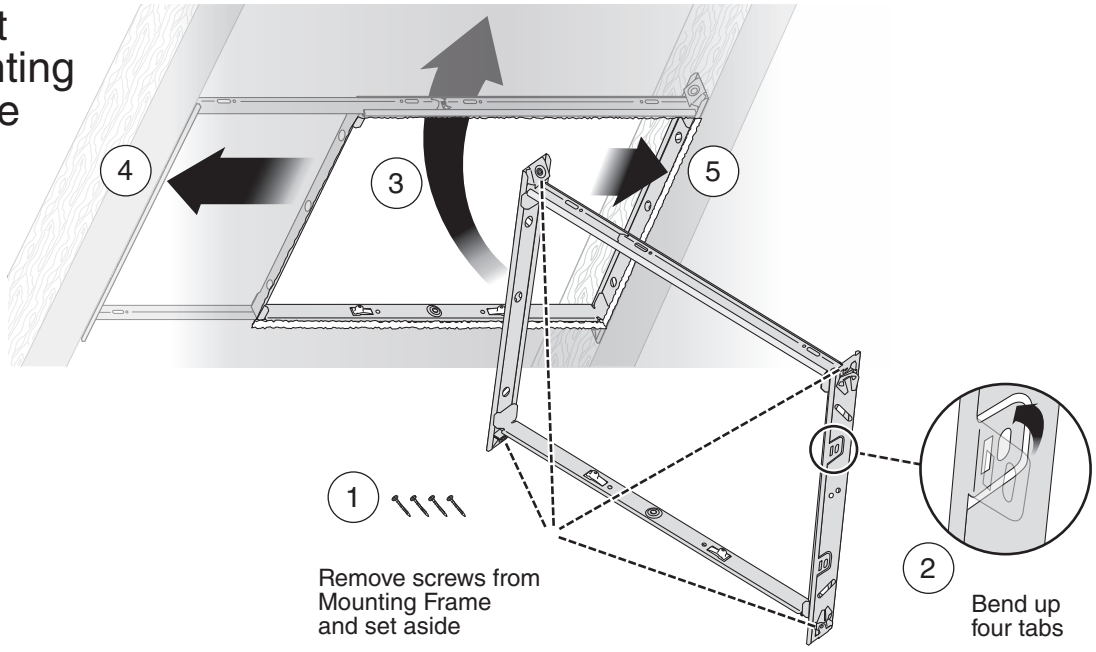
5 Remove Blower Assembly



6 Remove Wiring Panel

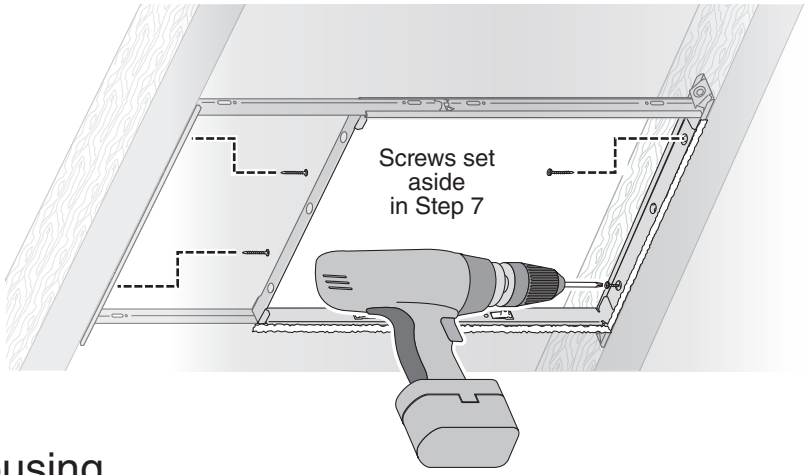


7 Insert Mounting Frame

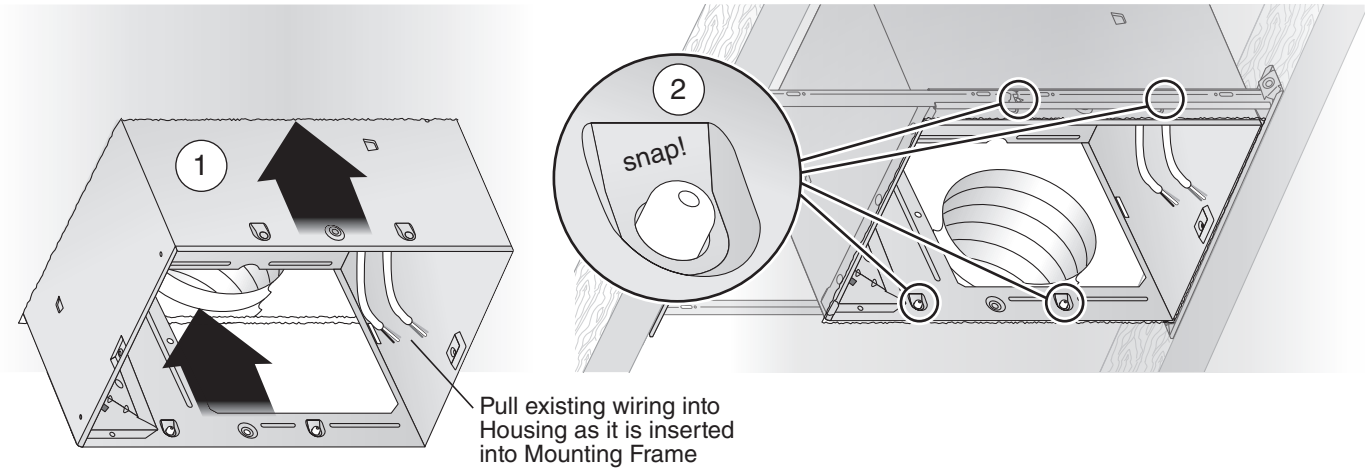


Retrofit Installation

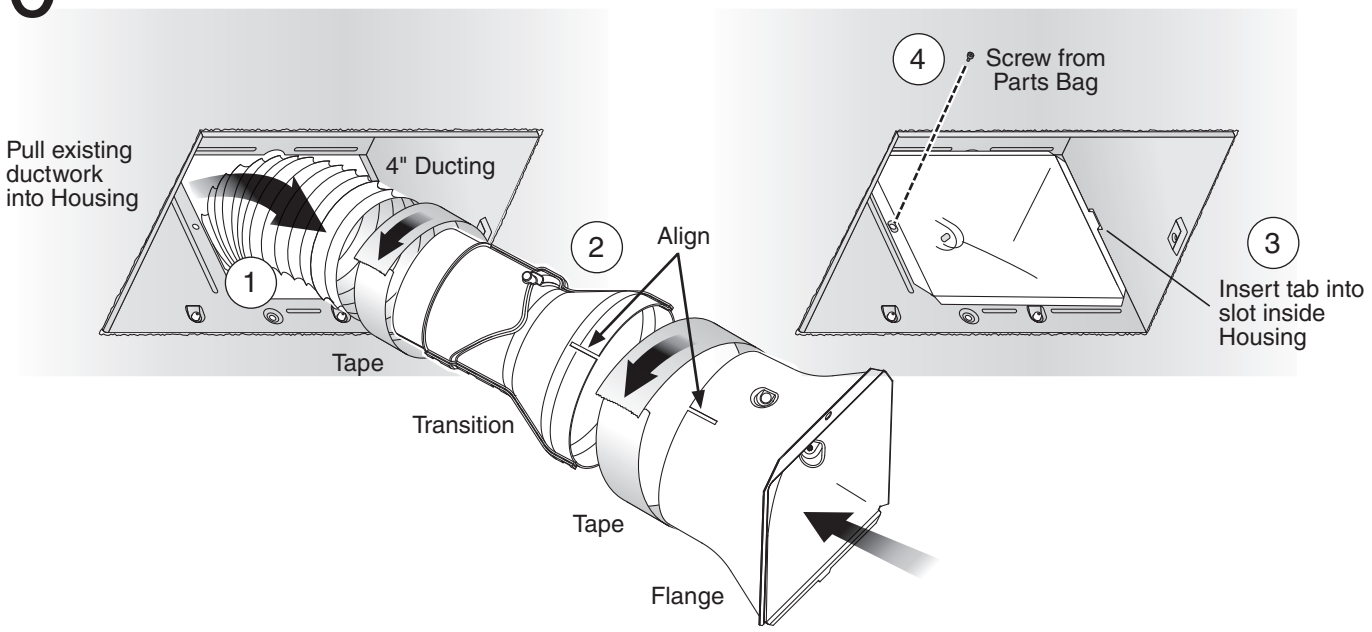
8 Secure Mounting Frame



9 Snap-in Housing



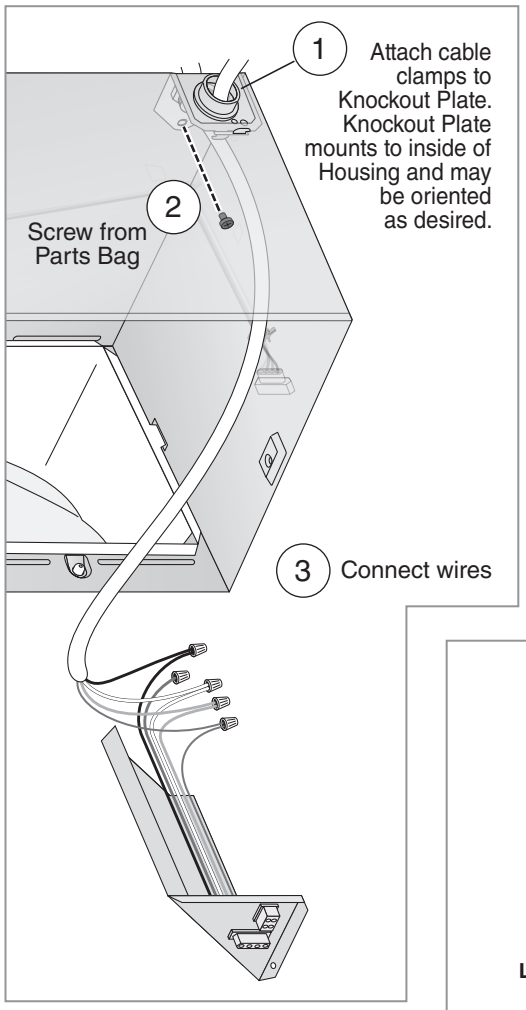
10 Attach Flange, Transition, and Ducting

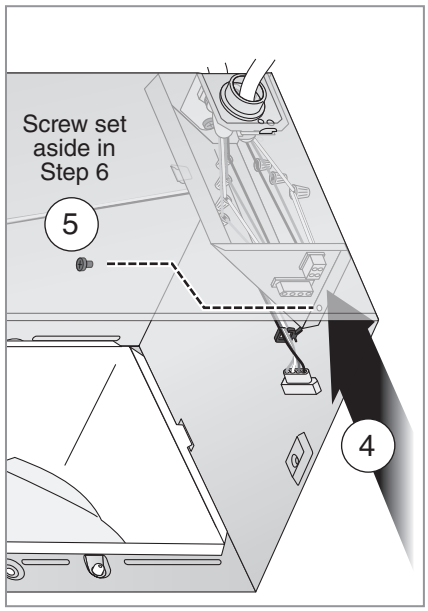


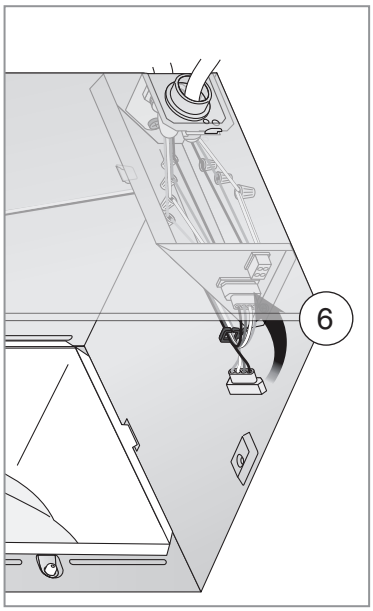
Retrofit Installation

11 Install Knockout Plate, Connect Wires and Reinstall Wiring Panel

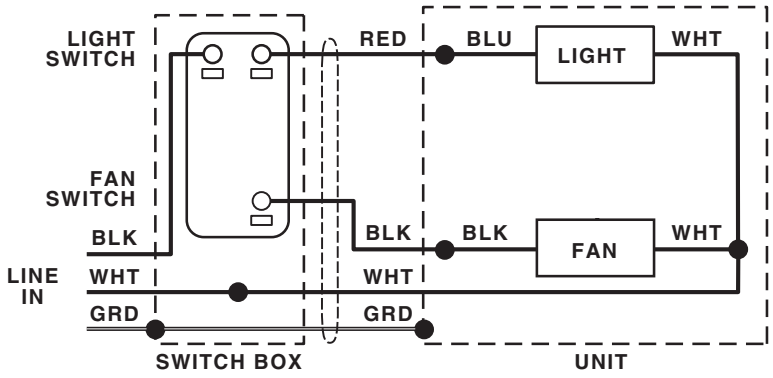
- Use proper UL-approved connectors to secure wiring to the Knockout Plate provided in Parts Bag.
- Connect wires as shown in wiring diagram.



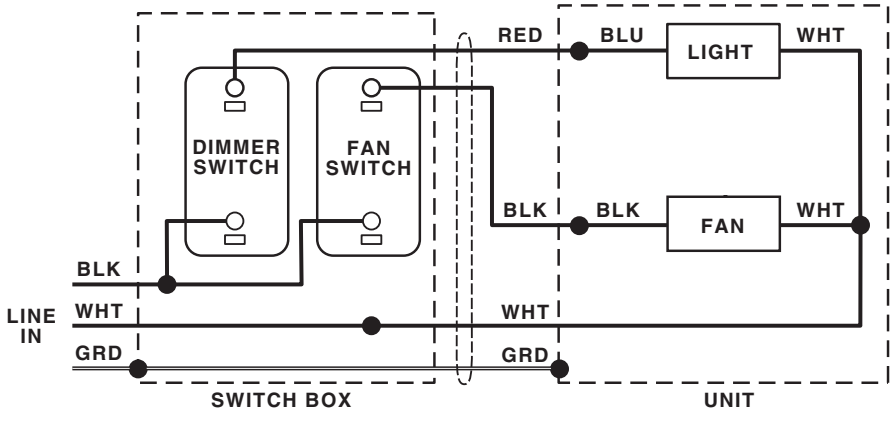




LIGHT WITH ON/OFF SWITCH



LIGHT WITH DIMMER SWITCH

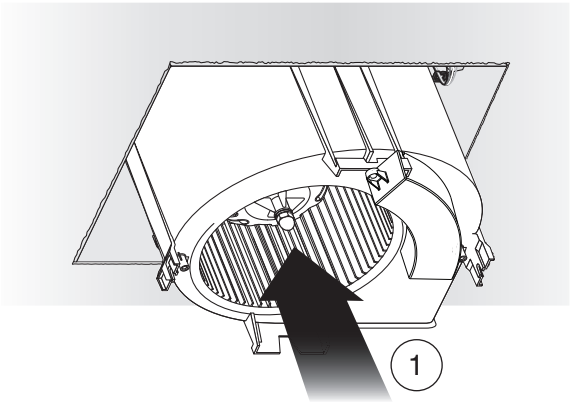


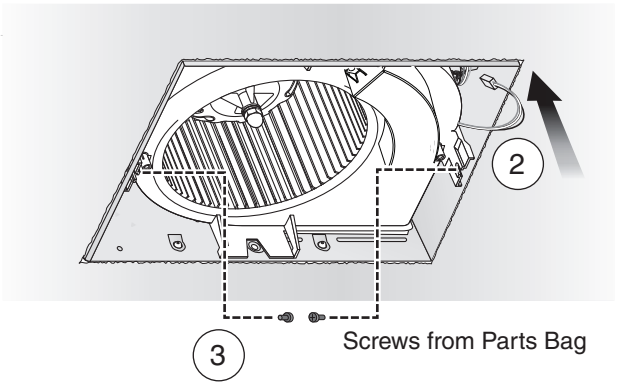
Retrofit Installation

12 Reinsert and Secure Blower Assembly

CAUTION **IN ORDER TO PREVENT MOTOR/CONTROL DAMAGE:**

Power must be disconnected (see page 2, WARNING item 2) before inserting motor plugs into control assembly.

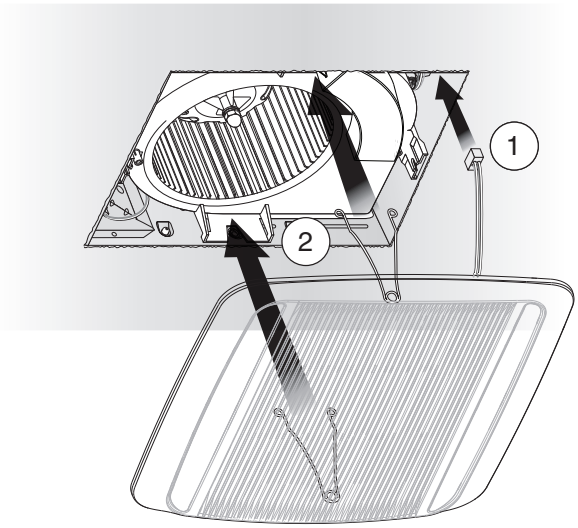


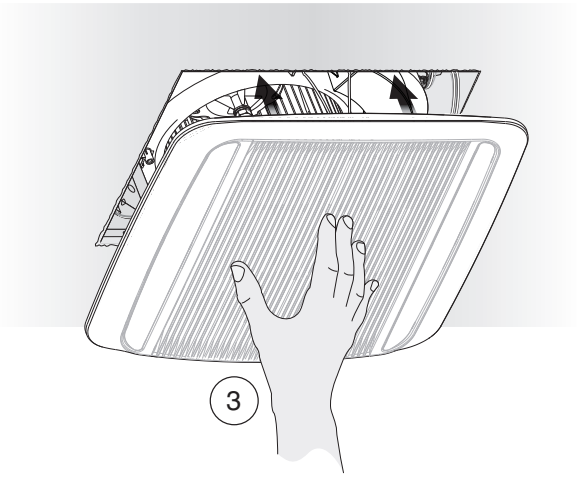


Screws from Parts Bag

If ceiling repairs are needed, place Mask in Housing after Blower Assembly is secured. See New Construction Installation Step 6. Remove Mask before installing Grille.

13 Install Grille





WARNING **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.**

Operation

To Operate Fan

Use an ON/OFF switch, timer, or speed control to operate this ventilator. Use of speed control other than the Broan 78V and 78W may cause a motor humming noise.

To Operate Lights

The fan and light can be operated independently, using separate switches. The light may be operated with a dimmer switch. See wiring diagrams.

Cleaning and Maintenance

CAUTION

IN ORDER TO PREVENT MOTOR/CONTROL DAMAGE:

DO NOT remove motor plug to stop spinning motor.

Power must be disconnected (see WARNING above) before motor plug is removed or inserted into control assembly.

To Clean

For quiet and efficient operation, long life and attractive appearance, remove Grille and vacuum interior of unit with a dusting brush attachment.

The Motor is permanently lubricated and never needs oiling. If the motor bearings are making excessive or unusual noises, replace the Motor.

Troubleshooting

Symptom: The fan does not run.

- Check for an open fuse or circuit breaker in the building's service panel.
- Check that the plug-in connection for the Motor is seated firmly in place.
- Check that the Blower Wheel spins freely.

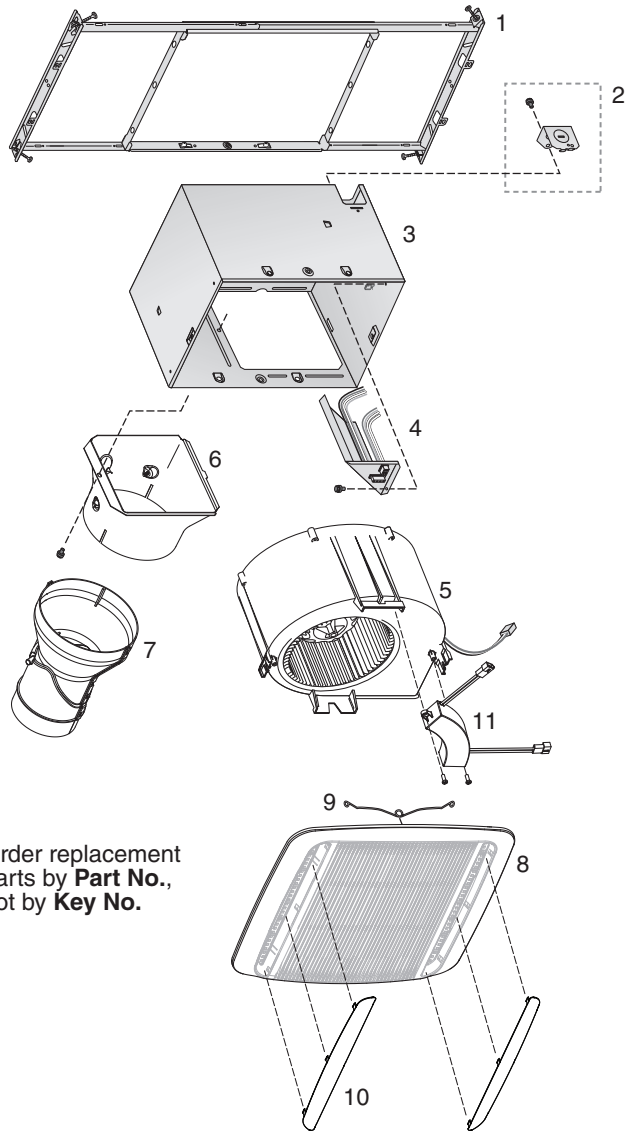
Symptom: The fan runs erratically.

- Check that the Blower Wheel is firmly attached to the Motor shaft and both spin freely.

Symptom: The fan seems noisy.

- Check that the back draft damper in the fan's Transition pivots freely.
- Check that the back draft damper in the wall or roof cap pivots freely. These dampers are sometimes mistakenly painted shut or obstructed by bird and insect debris..

Service Parts



Order replacement parts by **Part No.**, not by **Key No.**

Key No.	Part No.	Description
1	97018349	Mounting Frame
2	97018721	Knockout Plate & Screws
3	97018382	Housing
4	97021054	Wiring Panel/Harness Assembly
5	97021061	Blower Assembly (RB80L1)
	97021062	Blower Assembly (RB110L1)
6	97019520	Flange
7	97019466	Transition
8	97020827	Grille Assembly (includes 9, 10)
9	99140208	Grille Spring (2 req'd)
10	99111711	Lens (2 req'd)
11	99271625	LED Driver

Warranty

Broan Ventilation Fan/Lights Limited Warranty

WARRANTY PERIOD: Broan warrants to the original consumer purchaser of its Broan Ventilation Fan/Light (the "Fan") that your Fan (excluding lamps/bulbs) will be materially free from defects in materials or workmanship for a period of three (3) years from the date of original purchase. The warranty on the lamps/bulbs provided with the Fan is one (1) year and does not cover lamp/bulb breakage. This warranty does not cover accessories, such as speed controls, that may be purchased separately and installed with the Fan.

The limited warranty period for replacement parts, and for Fans repaired or replaced under this limited warranty, shall continue for the remainder of the original warranty period.

NO OTHER WARRANTIES: THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED. BROAN DISCLAIMS AND EXCLUDES ALL OTHER EXPRESS WARRANTIES, AND DISCLAIMS AND EXCLUDES ALL WARRANTIES IMPLIED BY LAW, INCLUDING WITHOUT LIMITATION THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT THAT APPLICABLE LAW PROHIBITS THE EXCLUSION OF IMPLIED WARRANTIES, THE DURATION OF ANY APPLICABLE IMPLIED WARRANTY IS LIMITED TO THE PERIOD SPECIFIED FOR THE EXPRESS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Any oral or written description of the Fan is for the sole purpose of identifying it and shall not be construed as an express warranty.

REMEDY: During the applicable limited warranty period, Broan will, at its option, provide replacement parts for, or repair or replace, without charge, any Fan or part thereof, to the extent Broan finds it to be covered by and in breach of this limited warranty. Broan will ship the repaired or replaced Fan or replacement parts to you at no charge. You are responsible for all costs for removal, reinstallation and shipping, insurance or other freight charges incurred in the shipment of the Fan or part to Broan. This warranty does not cover (a) normal maintenance and service, (b) normal wear and tear, (c) any Fans or parts which have been subject to misuse, abuse, abnormal usage, negligence, accident, improper or insufficient maintenance, storage or repair (other than repair by Broan), (d) damage caused by faulty installation, or installation or use contrary to recommendations or instructions, (e) any Fan that has been moved from its original point of installation, (f) damage caused by environmental or natural elements, (g) damage in transit, (h) natural wear of finish, (i) Fans in commercial or nonresidential use, or (j) damage caused by fire, flood or other act of God. This warranty covers only Fans sold in the United States or through U.S. distributors authorized by Broan.

EXCLUSION OF DAMAGES: BROAN'S OBLIGATION TO PROVIDE REPLACEMENT PARTS, OR REPAIR OR REPLACE, AT BROAN'S OPTION, SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY AND BROAN'S SOLE AND EXCLUSIVE OBLIGATION. BROAN SHALL NOT BE LIABLE FOR INCIDENTAL, INDIRECT, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE FAN, ITS USE OR PERFORMANCE. Incidental damages include but are not limited to such damages as loss of time and loss of use. Consequential damages include but are not limited to the cost of repairing or replacing other property which was damaged if the Fan does not work properly.

Some states 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, which vary from state to state.

This warranty supersedes all prior warranties and is not transferable from the original consumer purchaser.

BROAN SHALL NOT BE LIABLE TO YOU, OR TO ANYONE CLAIMING UNDER YOU, FOR ANY OTHER OBLIGATIONS OR LIABILITIES, INCLUDING, BUT NOT LIMITED TO, OBLIGATIONS OR LIABILITIES ARISING OUT OF BREACH OF CONTRACT OR WARRANTY, NEGLIGENCE OR OTHER TORT OR ANY THEORY OF STRICT LIABILITY, WITH RESPECT TO THE FAN OR BROAN'S ACTS OR OMISSIONS OR OTHERWISE.

This warranty covers only replacement or repair of defective Fans or parts thereof at Broan's main facility and does not include the cost of field service travel and living expenses.

Any assistance Broan provides to or procures for you outside the terms, limitations or exclusions of this limited warranty will not constitute a waiver of such terms, limitations or exclusions, nor will such assistance extend or revive the warranty.

Broan will not reimburse you for any expenses incurred by you in repairing or replacing any defective Fan, except for those incurred with Broan's prior written permission.

HOW TO OBTAIN WARRANTY SERVICE: To qualify for warranty service, you must (a) notify Broan at the address or telephone number stated below within seven (7) days of discovering the covered defect, (b) give the model number and part identification and (c) describe the nature of any defect in the Fan or part. At the time of requesting warranty service, you must present evidence of the original purchase date.

Broan, 926 West State Street, Hartford, WI 53027
(1-800-637-1453)
www.broan.com

If you must send the Fan or part to Broan, as instructed by Broan, you must properly pack the Fan or part—Broan is not responsible for damage in transit.