



### WARNING

**WARNING — THE INSTALLATION MUST BE CARRIED OUT BY A QUALIFIED ELECTRICIAN.**

1. For general ventilating use only. DO NOT use to exhaust hazardous or explosive materials and vapours
2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit
3. Read specification label on product for further information and requirements

### Application Notice

1. Use this unit only in the manner intended by the manufacturer. Contact the manufacturer in case of questions
2. Acceptable for use over a tub or shower when connected to a GFCI (Ground Fault Circuit Interrupter) — protected branch circuit (ceiling installation only)
3. To reduce risk of fire and to properly exhaust air, be sure to duct air outside — DO NOT vent exhaust air into spaces within walls or ceiling or into attics, crawl spaces, or garages
4. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switching on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel
5. 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. Ducted fans must always be vented to the outdoors. This unit **MUST** be grounded, and is **NOT RECOMMENDED** for use in kitchens
6. The fan **MUST NOT** be installed in ceiling thermally insulated to a value greater than R40
7. When cutting or drilling into wall or ceiling, DO NOT damage electrical wiring and other hidden utilities
8. To reduce the risk of fire or electric shock, DO NOT use this fan within any solid-state speed control device

### CAUTION

**PLEASE READ INSTRUCTION BEFORE COMMENCING INSTALLATION AND RETAIN FOR FUTURE REFERENCES.**

**HVAC related products can cause death or injury, or damage to property.**

**If in any doubt about the installation or use of this product, consult a competent technician.**

### CLEANING & MAINTENANCE

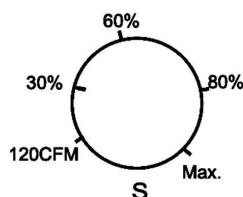
For quiet and efficient operation, long life, and attractive appearance — lower or remove grille and vacuum interior of unit with the dusting brush attachment. The motor is permanently lubricated and never needs oiling. If the motor bearings are making excessive or unusual noises, replace the motor with the exact service motor. The impeller should also be replaced.

### OPERATION

See "Connect Electrical Wiring" on page 3 of this instruction manual for details

The control box, located inside the fan housing, has two separate adjustments:

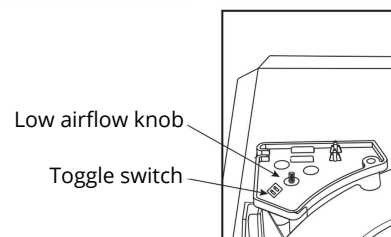
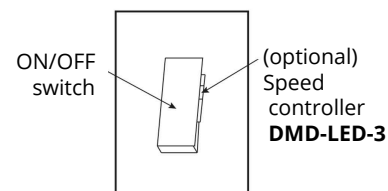
- 1) The low airflow knob adjusts the lower airflow from 120 CFM up to the airflow rate of the high fan speed determined by the toggle switch setting
- 2) The toggle switch will adjust the upper fan speed setting from 200 CFM to 500 CFM. Use the optional accessory wall switch to operate this fan. Use the low airflow knob to set the motor speed according to diagram as you need. You can also use the speed regulator on the wall switch to set the speed, but potentiometer **MUST** be rotated full CW for control signal input. The wall switch can control the start or stop of the fan



Switch position				
Airflow (CFM)	200	300	400	500
Duct diameter	8"			

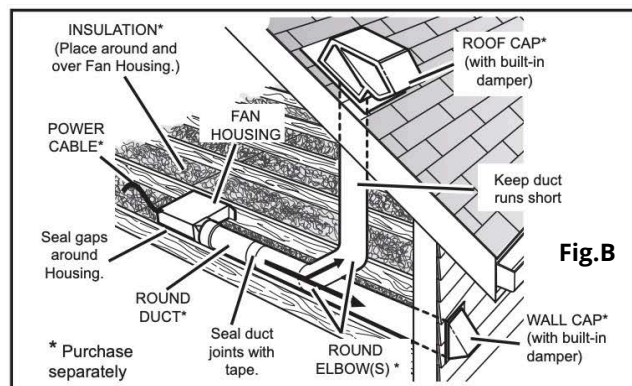
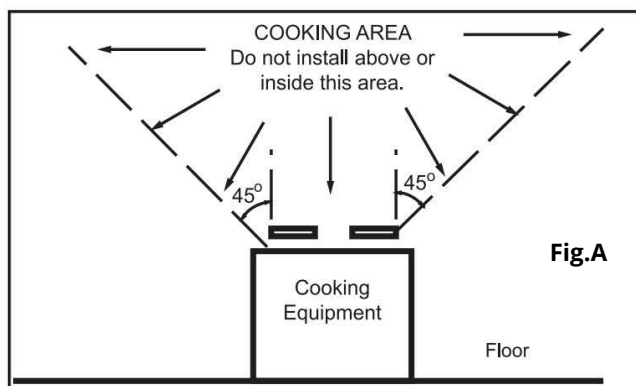
**Airflow according to the diagram.**

**■ is the position of switch**



### INSTALLATION GUIDE

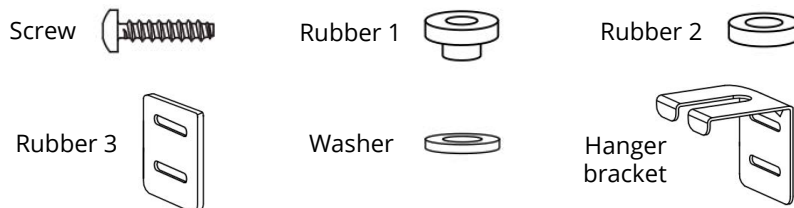
#### Plan the Installation



1. DO NOT use in a cooking area (see Fig.A above)
2. Two ways to connect ductwork to a factory-shipped unit (see Fig.B above)

#### Assembly Instructions

1. Before installation, you need to know the diagram list on the right:

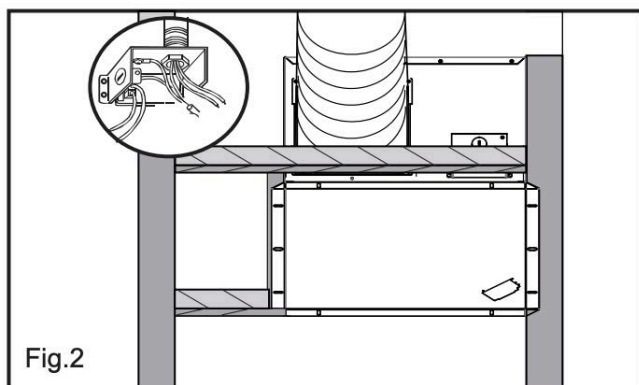
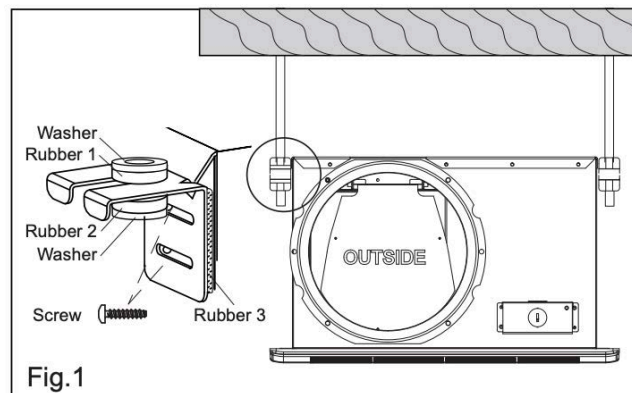


2. Mount with Hanger Bracket

Before installation, need to assembly hanger bracket and rubber 3 to housing with screw.

Then install the rubber 1, rubber 2 and washer to hanger bracket.

Use anchor bolts (not included) to secure housing (see Fig. 1 on the right).



3. Install duct work and junction box

Remove junction box cover and secure conduit or stress relief to junction box knock-out hole.

Using connectors, connect house power wires to ventilating fan wires (refer to the wiring diagram on the next page CONNECT ELECTRICAL WIRING section) replace the junction box cover.

Squeeze the ductwork to fit the adapter then slip onto the adapter and secure it with duct tape (not included). Run the ductwork to a roof or wall cap (not included), secure all the ductwork connections so that they are air tight.

### INSTALLATION GUIDE

#### Assembly Instructions

##### 3. Install duct work and junction box (cont'd)

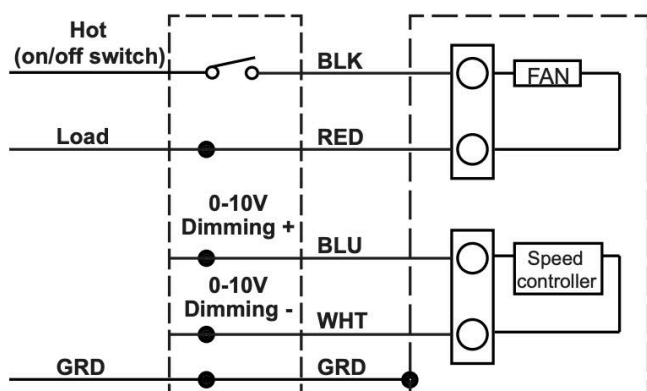
The ducting from this fan to the outside of building has a strong effect on the airflow, noise and energy use of the fan.

Use the shortest, straightest 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.

#### Connect Electrical Wiring

Run 120V AC house wiring to the location of the fan. Use only UL-approved connectors (not included) to attach the house wiring to the wiring plate. Refer to the wiring diagram below, and connect the wires as shown.

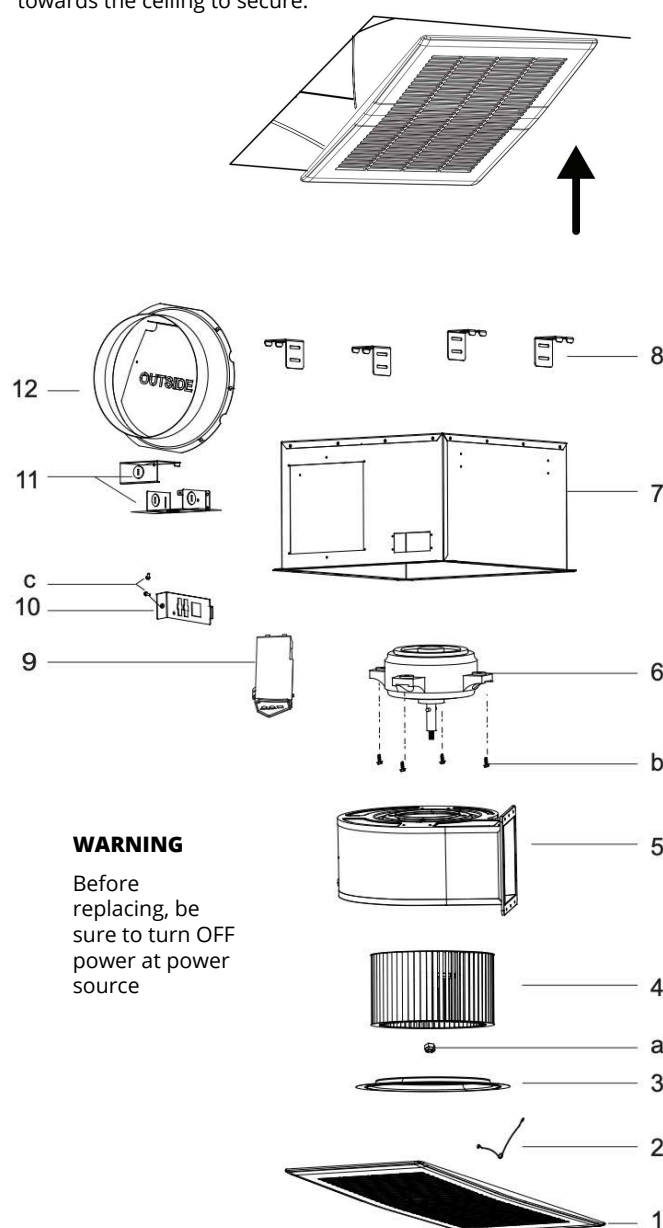


#### Service Parts

PART	PART NAME	Qty.
1	Grille Assembly (includes part 2)	1
2	Grille Spring	2
3	Plate	1
4	Blower Wheel	1
5	Blower	1
6	Motor	1
7	Housing	1
8	Hanger bracket	4
9	Power Box	1
10	Wire Panel / Harness Assembly	1
11	Wiring plate	1
12	Damper / Duct Connector	1
a	Nut, Hex Lock	1
b	Screw	4
c	Screw	2

#### Install Grille

Install ceiling material to complete the ceiling construction. Then, cut around the fan housing. To attach the grille assembly to the fan housing, pinch the grille into the housing with the grille springs in the appropriate slots. Push the grille assembly towards the ceiling to secure.



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