

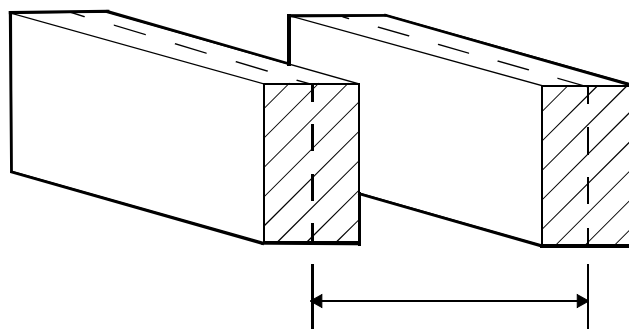
Installation

1 Determine joist width

- Measure the distance from the center of the two ceiling joists where you will be installing the ventilation fan.
- Use the table to determine the header bar installation.
 - For configuration 1, proceed to step 2.
 - For configuration 2, proceed to step 3.
 - For configuration 3, proceed to step 4.

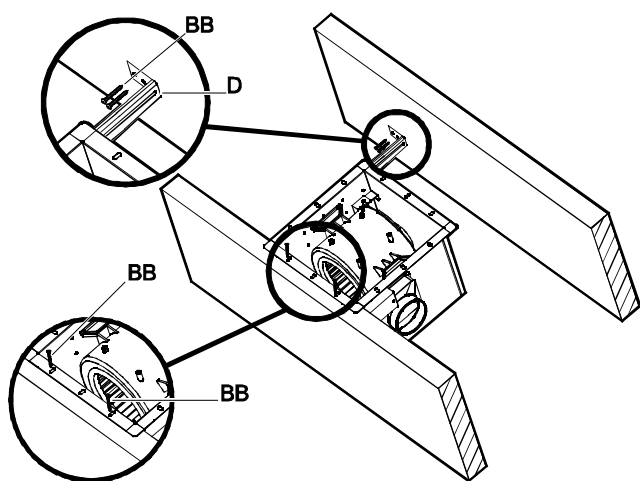
Use the following to determine the proper installation configuration:

Width between the Joists	Brackets Used	Configuration
12 in.	I	1
16 in.	I, IV	2
19.2 in.	I, II	3



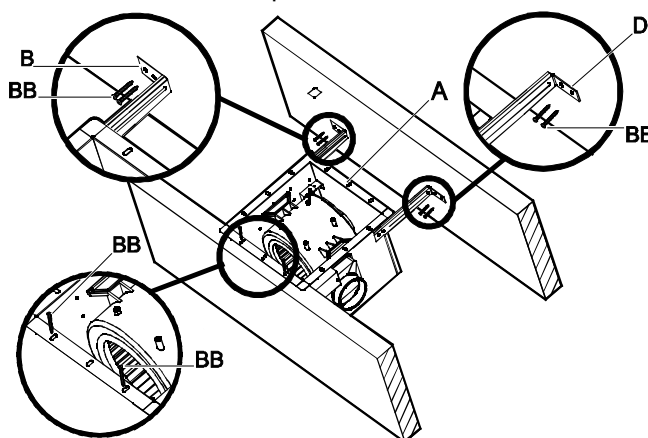
2 Configuration 1, initial install

- Use long wood screws (BB) to loosely attach the main body of fan (A) to ceiling joist in the four locations shown.
- Fit bracket I (D) against the main body of fan, ensuring the bracket is snug against the opposite ceiling joist.
- Use long wood screws to loosely attach bracket I to the opposite ceiling joist as shown.
- Proceed to step 6.



3 Configuration 2, initial install

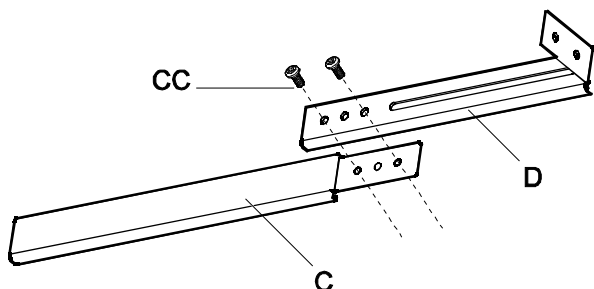
- Use long wood screws (BB) to loosely attach the main body of fan (A) to the ceiling joist in the four locations shown.
- Fit bracket IV (B) against the main body of fan, ensuring bracket I is snug against the opposite ceiling joist.
- Fit bracket I (D) against main the body of fan, ensuring bracket IV is snug against the opposite ceiling joist.
- Use long wood screws to loosely attach bracket I to opposite ceiling joist as shown.
- Proceed to step 6.



Installation (continued)

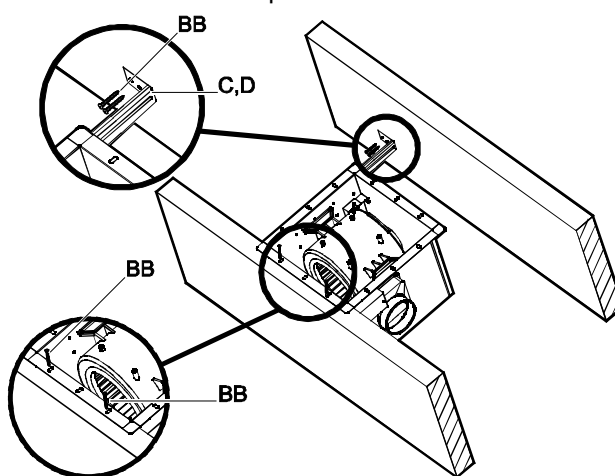
4 Configuration 3, preparation

- Connect bracket I (D) to bracket II (C) using two M4x6 screws (CC).



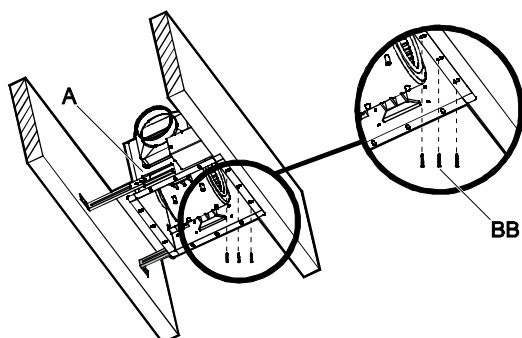
5 Configuration 3, initial install

- Use long wood screws (BB) to loosely attach the main body of fan (A) to the ceiling joist in the four locations shown.
- Fit connected brackets (C, D) against the main body of fan, ensuring they are snug against the opposite ceiling joist.
- Use long wood screws to loosely attach bracket I and 2 (C, D) to the opposite ceiling joist as shown.
- Proceed to step 6.



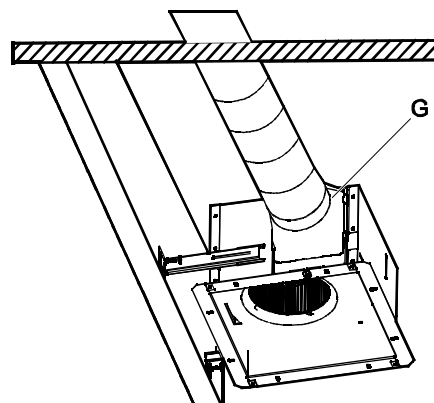
6 Final installation

- Ensure the main body (A) is level.
- Ensure the flange on the main body is flush with the ceiling joist.
- Firmly secure all screws on the main body and any installed brackets.
- Use long wood screws (BB) to secure the main body flange to bottom of ceiling joist as shown.



7 Connect duct

- Install a circular duct to outlet and secure it with duct tape or clamps.
- Install the duct (G) to the outlet with a gradient 1°~2° to the outside as shown.



Installation (continued)

8 Using quick connect



WARNING: Wiring must comply with all applicable electrical codes. Turn OFF power before removing or installing connectors.



WARNING: COPPER TO COPPER ONLY. Do not use on Aluminum wire.

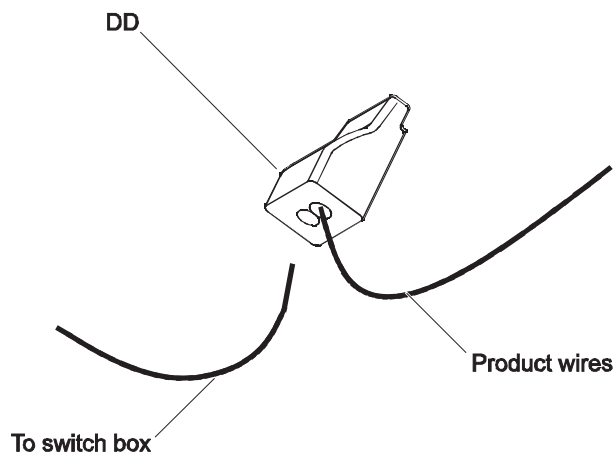


CAUTION: Accessory part DD (quick connect) should meet installation instructions below.



NOTE: Connector is reusable on solid wires of the same wire gage or smaller. Do not reuse connector on stranded wires.

- Strip the wires so half of the bare wire is showing.
- Grip the wire firmly and push the stripped end of the wire into the open port of connector (DD). Use only one stripped end of the wire per port.
- Verify the stripped end of the wire is fully inserted to the back of the connector (DD).



NOTE: Important wire information. Maximum temperature rating 105°C (221°F). 600 volts maximum for building wire and 1000 volts maximum in signs and lighting fixtures. Flammability rating of the wires must meet UL94-V2. The acceptable wire range includes: Solid: 12-20 AWG, Stranded: 12-16 AWG (≤19 STRAND); 18AWG (7 STRAND), Tin bonded: 14-18 AWG (≤19 STRAND).

9 Connect wiring from house to box

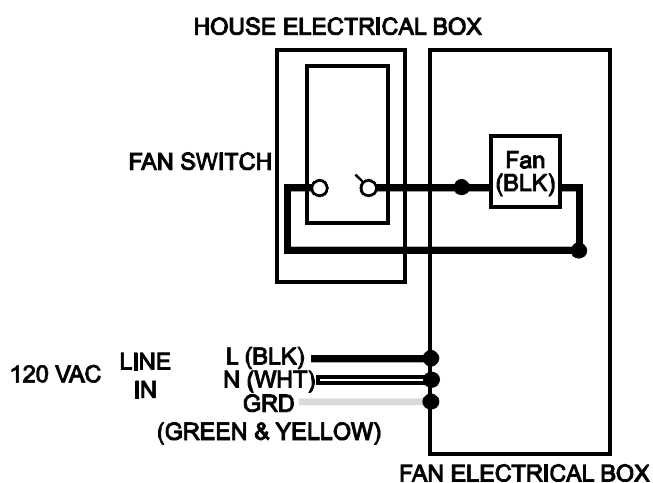


WARNING: Follow all local electrical and safety codes.



CAUTION: Never place a switch where it can be reached from a tub or shower.

- Connect house wires to ventilation fan wires.
- Match colors as shown.



CAUTION: If your house wires do not match these colors, determine what each house wire represents before connecting. You may need to consult a licensed electrician to determine this safely.

Installation (continued)

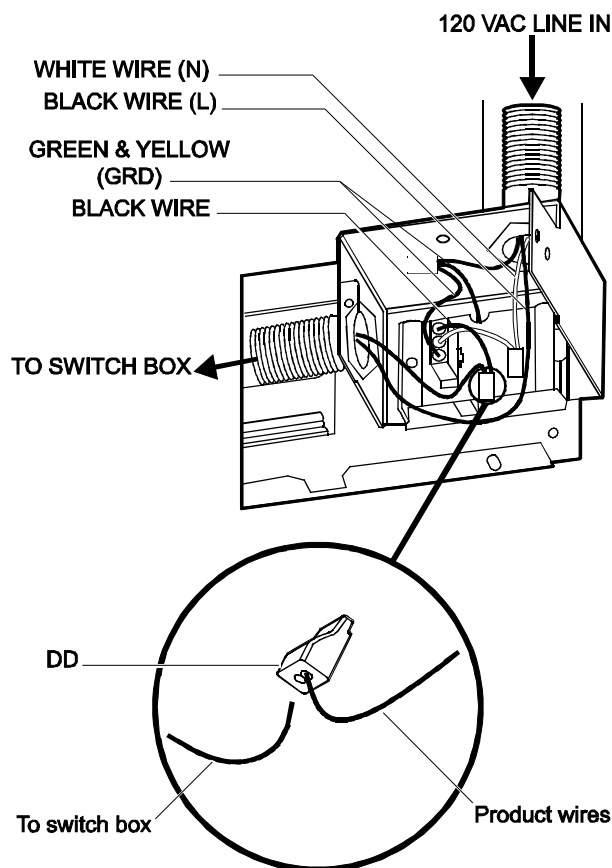
10 Connect wiring from box to switch



WARNING: Follow all local electrical and safety codes.

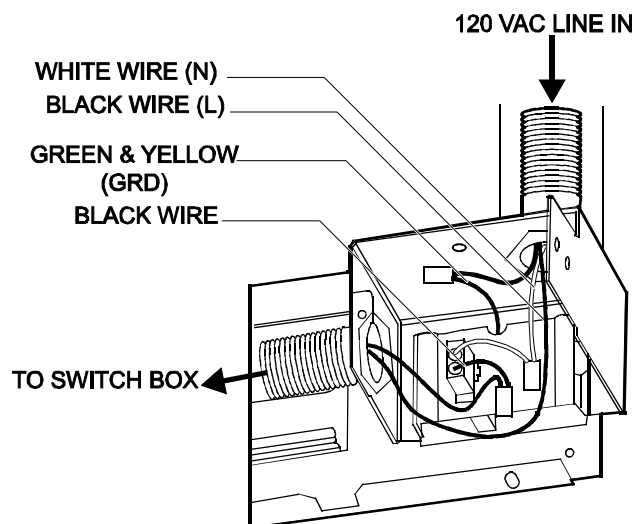
- Connect wires to switch using the quick connect (DD) or wire nuts (not provided).
- Match colors as shown.

TY-80-A (HD) ITEM #986-793



WARNING: Failure to wire product correctly could result in electrical shock, fire hazards, or damage to the product. Consult a licensed electrician if you are unsure of your ability to correctly install wiring.

TY-50-A (HD) ITEM #986-755



WARNING: Failure to wire product correctly could result in electrical shock, fire hazards, or damage to the product. Consult a licensed electrician if you are unsure of your ability to correctly install wiring.

11 Attach grill

- Insert the mounting springs into the slots in the grill (F).
- Squeeze springs together and insert into the main body.

