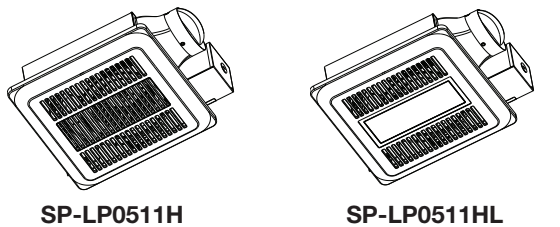


Installation, Operation and Maintenance Manual

Please read and save these instructions for future reference. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions will result in voiding of the product warranty and may result in personal injury and/or property damage.

Ceiling Exhaust Fan

Model SP-LP0511H/L is a low-profile, direct drive wall/ceiling exhaust fan featuring an integrated humidity sensor that helps control bathroom condensation to prevent mold and mildew. Additional accessories and features include lights, flow selection, and constant airflow. These models are UL listed and certified by Home Ventilating Institute (HVI) and ENERGY STAR®.



General Safety Information

Only qualified personnel should install this fan. Personnel should have a clear understanding of these instructions and should be aware of general safety precautions. Improper installation can result in electric shock, possible injury due to coming in contact with moving parts, as well as other potential hazards.

1. Do not install this ventilation fan where interior room temperature may exceed 104°F (40°C).
2. Make sure that the electric service supply voltage is AC 120V, 60Hz.
3. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the National Fire Protection Agency (NFPA), where applicable. Follow the Canadian Electric Code (CEC) in Canada.
4. Always disconnect the power source before working on or near the fan, motor, light fixture, or junction box.
5. Protect the power cord from sharp edges, oil, grease, hot surfaces, chemicals or other objects.
6. Do not kink the power cord.
7. Do not install the unit where ducts are configured as shown in Fig. 1.
8. Provide make up air for proper ventilation



Fig. 1



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Features

High Energy Efficiency: The fan uses a brushless DC motor to ensure a high energy efficiency.

Humidity Sensor: The fan's integrated humidity sensor constantly monitors air humidity in the room. When the sensor detects humidity levels above the fan's user-adjustable set-point (30%-80% relative humidity), the fan will turn on to lower the humidity and run for 20 minutes. The sensor will continue to check humidity levels and run in 20 minute intervals until the humidity level is below the user-adjustable set-point. The factory setting is 30%. See Fig. 2.

Constant Air Flow: Duct length, elbows and other factors increase static pressure and negatively impact the performance of most ventilation fans. This fan utilizes adaptive Constant CFM technology that monitors the static pressure in the system and adjusts the speed of the motor.

Flow Selection: Fans are supplied with a flow selection switch which can be set to 50, 80, or 110 CFM. The factory setting is 110 CFM. See Fig. 3.

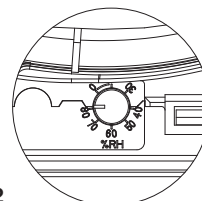


Fig. 2

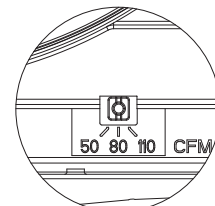
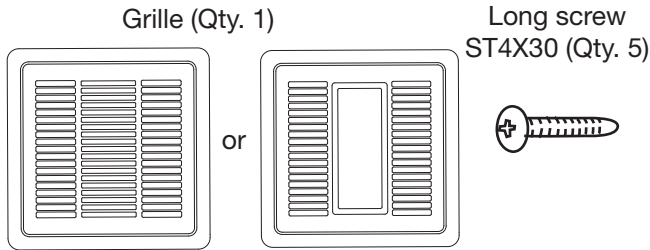


Fig. 3

Supplied Accessories

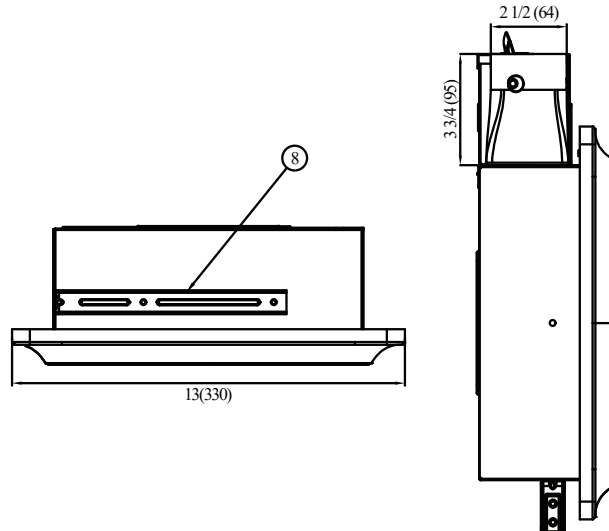
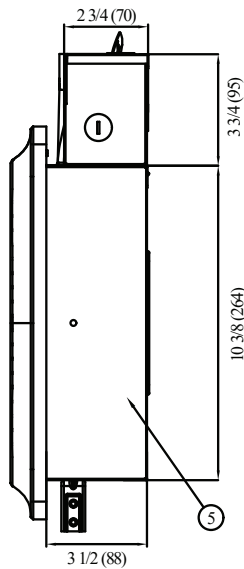
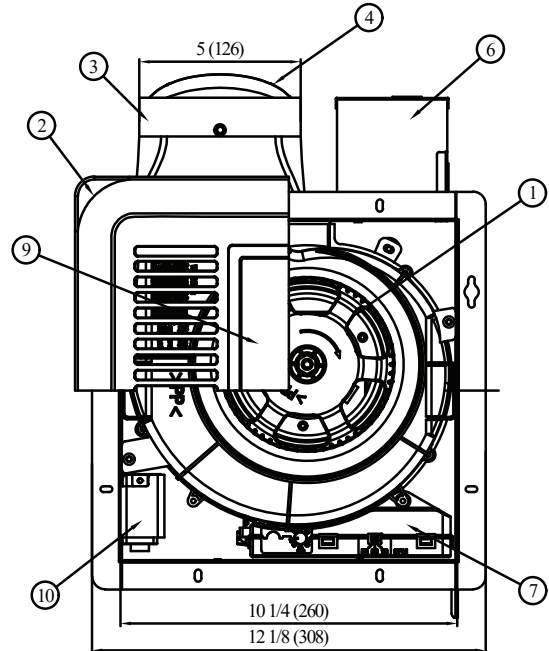
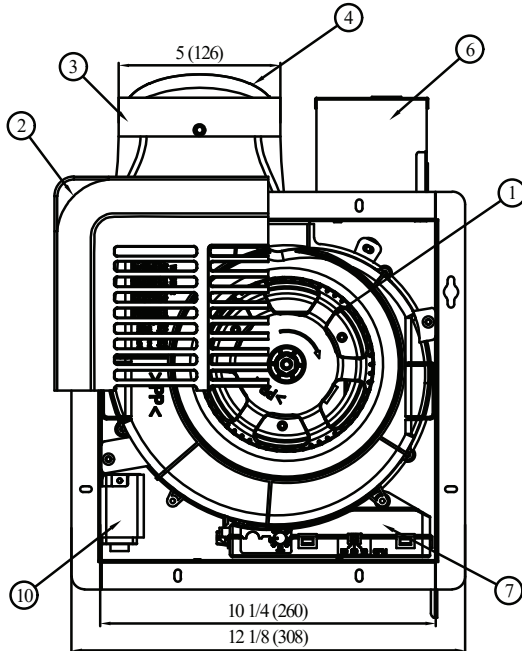


Dimensional Data

SP-LP0511H

Unit: inches (mm)

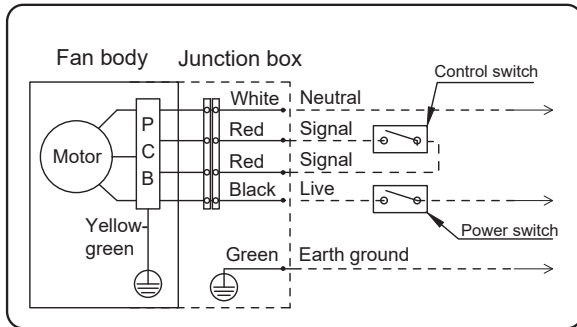
SP-LP0511HL



No.	Part Name	No.	Part Name
1	Wheel	6	Junction Box
2	Grille	7	Base PCB Box
3	Duct Adapter	8	Mounting Bracket
4	Damper	9	LED Light
5	Housing	10	Humidity Sensor

Wiring Diagrams

Fan only model: **SP-LP0511H**



ATTENTION

Do not apply 115V to red wires. Unit damage will occur.

Note: If a control switch is not used, the red wires can be 1) Connected together for continuous operation at your high speed setting, ignoring the humidity sensor or 2) Separated, the fan will run high speed only when the humidity sensor is activated.

CAUTION!

- For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
- Not for use in cooking areas (Fig. 2)
- This product must be properly grounded.

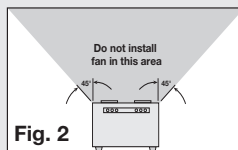


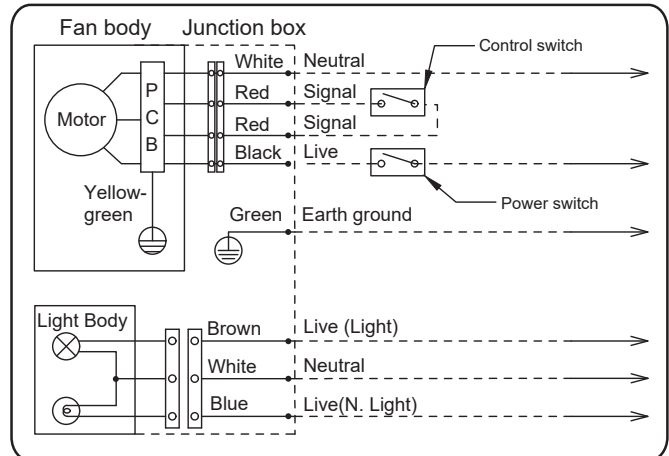
Fig. 2

WARNING!

To reduce the risk of fire, electric shock, or injury to persons, observe the following:

- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- Before servicing or cleaning unit, switch power off at service panel and lock 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.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards.
- 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.
- When cutting or drilling into a wall or ceiling, do not damage electrical wiring or other hidden utilities.
- Ducted fans must always be vented to the outdoors.
- Do not use this fan with any solid state speed control.
- If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a Ground Fault Circuit Interrupter (GFCI) protected branch circuit.
- These models are UL listed for tub and shower enclosures.
- These fans are not to be installed in a ceiling thermally insulated to a value greater than R40.

With light model: **SP-LP0511HL**



ATTENTION!

- À utiliser pour la ventilation générale uniquement. Ne pas utiliser pour l'aspiration de matières et vapeurs dangereuses ou explosives.
- N'est pas destiné à une utilisation dans des zones de cuisson (Fig. 2).
- Ce produit doit être correctement relié à la terre.

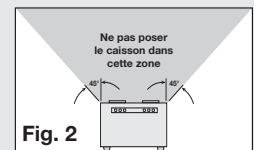


Fig. 2

AVERTISSEMENT!

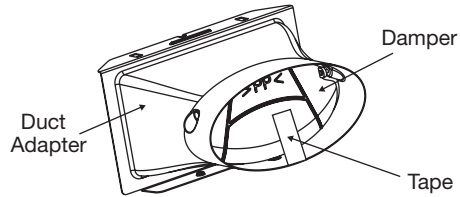
Pour réduire le risque d'incendie, de choc électrique ou de blessure corporelle, respecter ce qui suit :

- Utiliser cet appareil exclusivement comme prévu par le fabricant. En cas de questions, communiquer avec le fabricant.
- Avant tout entretien ou nettoyage de l'appareil, couper l'alimentation sur le tableau électrique et verrouiller le dispositif de sectionnement pour empêcher toute mise sous tension accidentelle. Si le dispositif de sectionnement ne peut pas être verrouillé, attacher un moyen de mise en garde bien visible, tel qu'un panneau, au tableau électrique.
- La pose et le câblage électrique doivent être effectués par des personnes qualifiées en conformité avec les codes et normes en vigueur, y compris pour la résistance au feu du bâtiment.
- Une quantité d'air suffisante est nécessaire pour la bonne combustion et l'extraction des gaz brûlés par le conduit d'évacuation (cheminée) d'appareils à combustible afin d'éviter le refoulement. Veiller à suivre les indications du fabricant du matériel de chauffage, les normes de sécurité telles que celles publiées par la National Fire Protection Association (NFPA) et l'American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) et la réglementation en vigueur.
- Lors de la découpe ou du perçage de murs ou plafonds, ne pas endommager les câbles électriques et autres conduites masquées.
- Les caissons d'extraction à gaine doivent toujours être évacués vers l'extérieur.
- Ne pas utiliser ce ventilateur avec un quelconque dispositif de régulation de vitesse à semi-conducteurs.
- Si cet appareil doit être posé au-dessus d'une baignoire ou d'une douche, il doit être marqué comme il se doit pour l'application considérée et raccordé à un circuit de dérivation à protection GFCI (disjoncteur différentiel).
- Ces modèles sont répertoriés par UL pour des enceintes de baignoire et des cabines de douche.
- Ces ventilateurs ne devront pas être installés dans un plafond ayant une isolation thermique d'une valeur supérieure à R40.

Installation for Joist Mounting

IMPORTANT

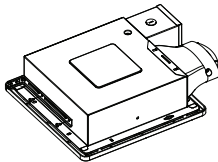
Remove the tape from damper and duct adapter before installation. As shown below:



1. Position fan housing between the joists with the duct adapter aligned to the designed duct run. Fasten housing to joist through the housing flange using two of the provided (ST4X30) screws. Fasten the mounting bracket to the joist using two additional (ST4X30) screws. See Fig. 3.

ATTENTION

Do not remove or replace the screws securing the mounting bracket to the housing, otherwise the cord in PCB box may be damaged and cause fire.



IMPORTANT

Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the National Fire Protection Agency (NFPA), where applicable. Follow the Canadian Electric Code (CEC) in Canada.

2. Remove the knockout plate and secure conduit or strain relief to knockout hole.

Refer to wiring diagrams on page 3.

Use UL approved connectors to connect the incoming power wires to the ventilation fan wires. Then attach knockout plate to the fan body. See Fig. 4.

3. Utilize 4-inch circular duct to connect to duct adapter on the fan housing. Squeeze the circular duct to fit the adapter and seal it with mastic or approved foil tape, then secure it with clamps or ties. See Fig. 5.

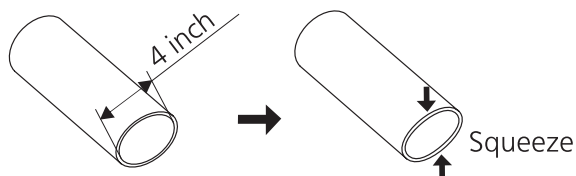
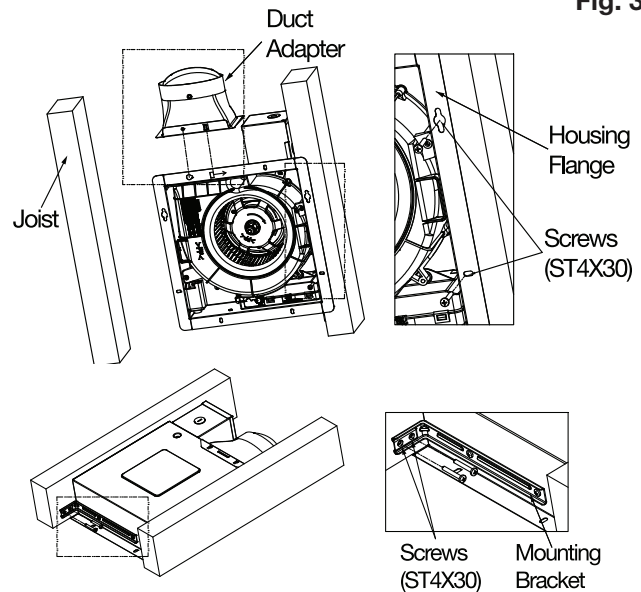
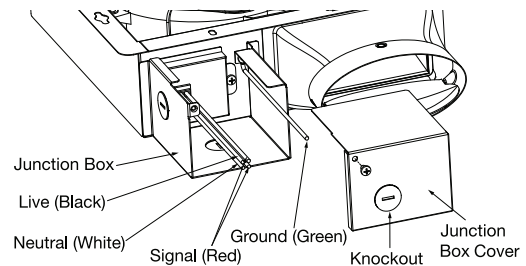


Fig. 3



SP-LP0511H

Fig. 4



SP-LP0511HL

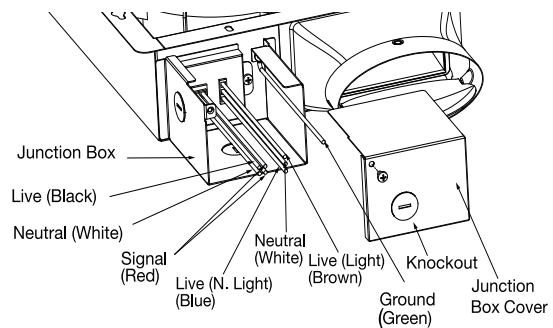
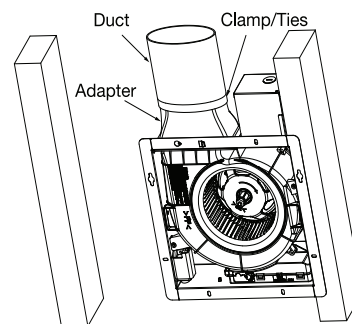
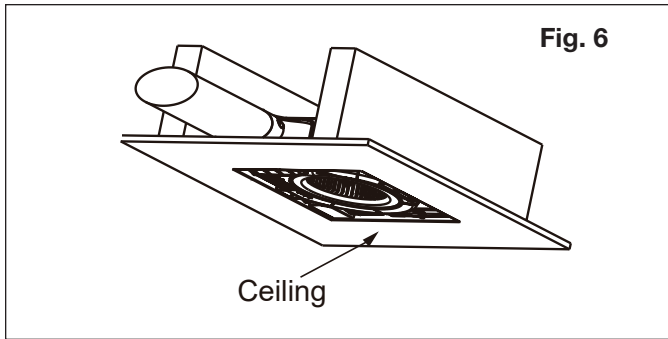


Fig. 5



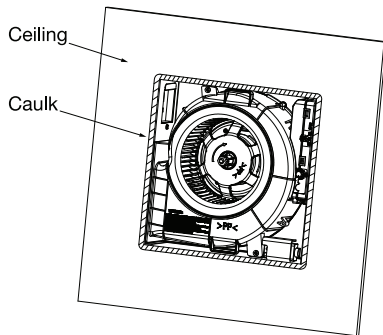
Installation for Joist Mounting Continued

4. Finish ceiling work. Ceiling hole should be aligned with the inside edge of the flange. See Fig. 6.

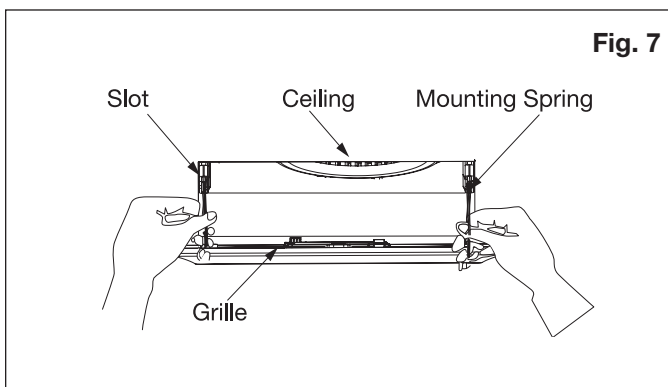


IMPORTANT

After finishing installation, fill gap between flange and ceiling with caulk or other sealant to prevent air leakage.

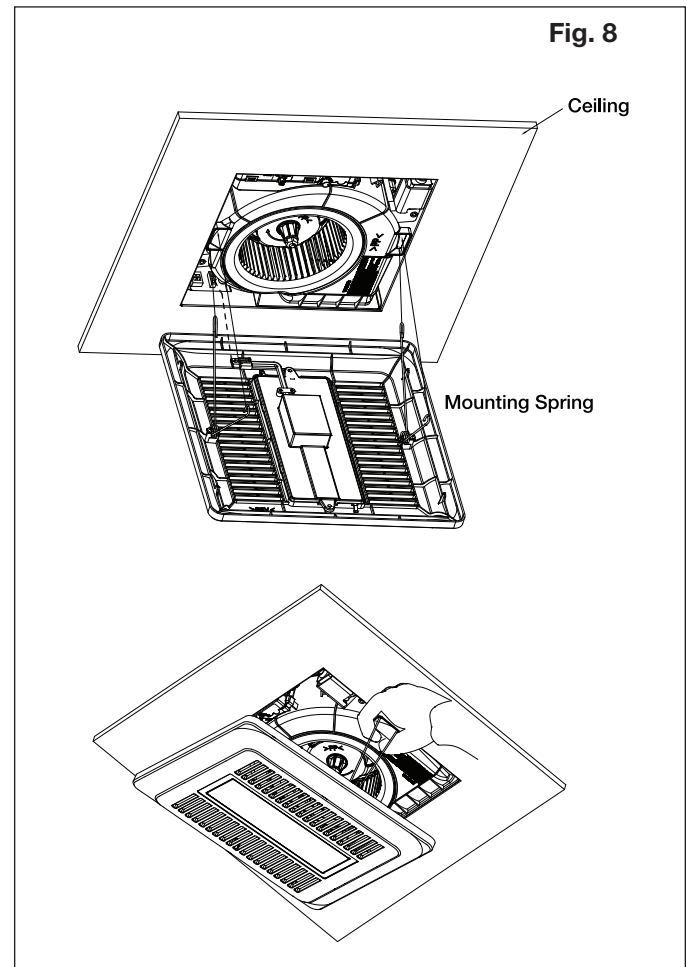


5. Insert the grille mounting springs into slots on the fan body and raise the grille toward the fan body. See Fig. 7.



6. For model SP-LP0511HL, with light.

- Insert the grille mounted spring closest to the light cord into the slot on the fan body closest to the junction box.
- Plug the light cord into the receptacle in the fan housing.
- Insert the remaining grille mounting spring into the remaining slot on the fan body and raise grill toward the fan body. See Fig. 8.



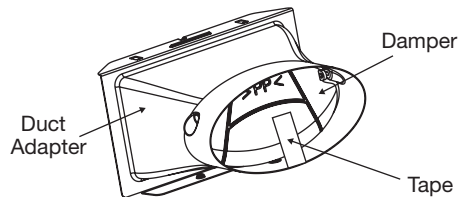
ATTENTION

- Before turning on the light, make sure the plug is fully engaged.
- Mount carefully so that light wiring is not pinched.

Installation for Wall Mounting

IMPORTANT

Remove the tape from damper and duct adapter before installation. As shown below:



1. Position fan housing between the studs with discharge pointing up. Fasten housing to joist through the housing flange using two of the provided (ST4X30) screws. Fasten mounting bracket to stud using two additional screws (ST4X30). See Fig. 9.

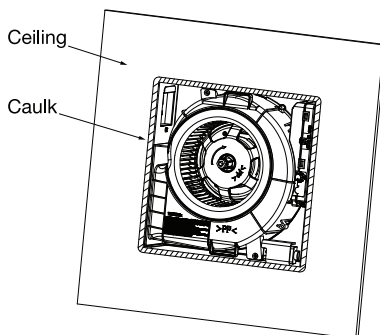
ATTENTION

The duct adapter of product must be installed upward.

2. Complete the wiring and duct work, please refer to steps 2 and 3 of Installation for Joist Mounting (page 4).
3. Finish the wall work. Wall hole should be aligned with the inside edge of the flange. See Fig. 10.

IMPORTANT

After finishing installation, fill gap between flange and wall with caulk or other sealant to prevent air leakage.



4. Install the grille, please refer to step 5 of Installation for Joist Mounting (page 5).

Fig. 9

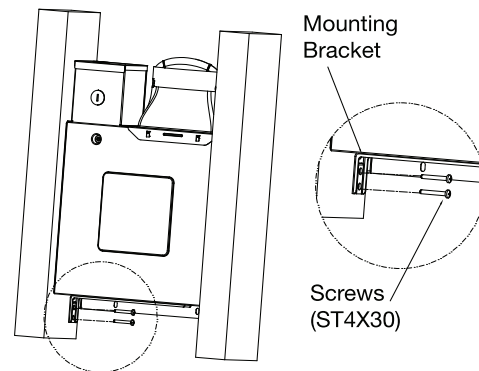
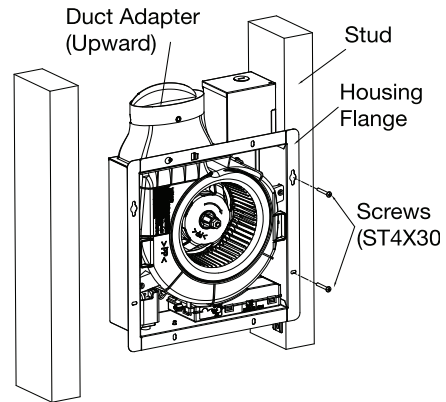
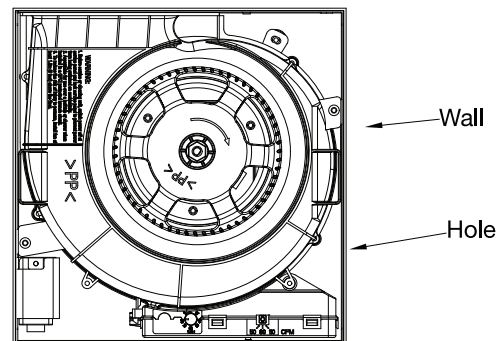


Fig.10



Maintenance

ATTENTION

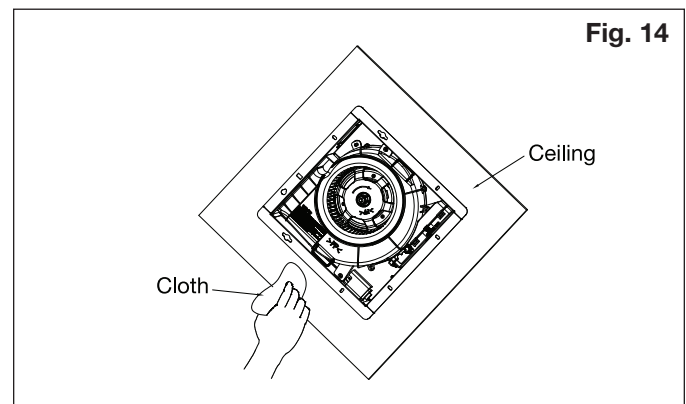
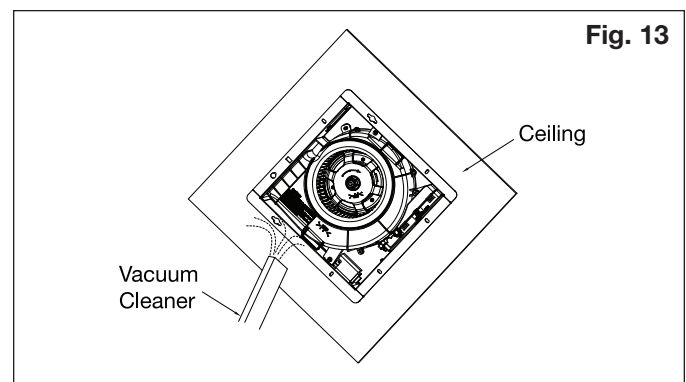
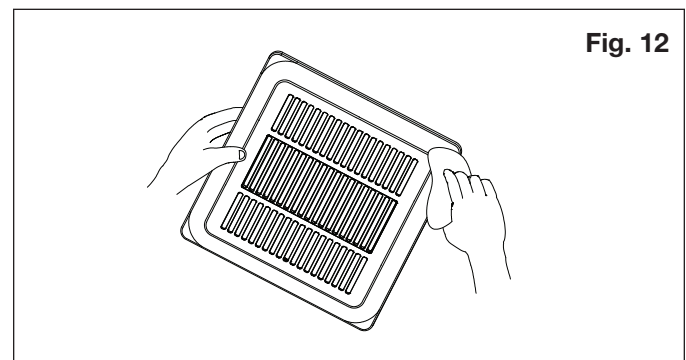
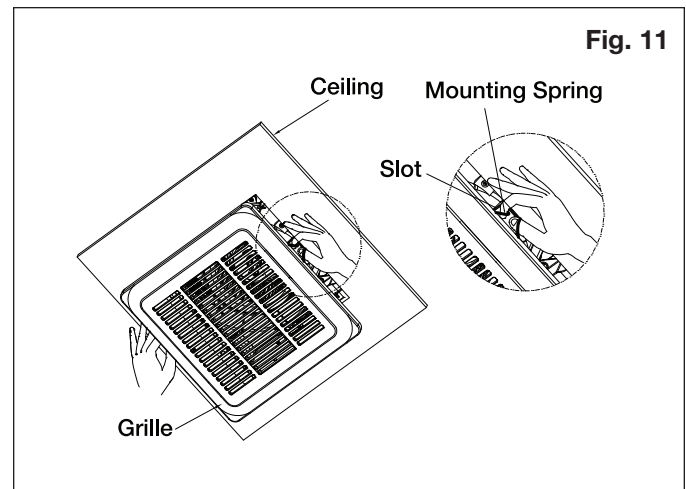
Disconnect power source before working on unit.
Routine maintenance must be performed annually.

IMPORTANT

1. Never use gasoline, benzene, thinner or any other such chemicals for cleaning the ventilating fan.
2. Do not immerse motor in water when cleaning.
3. Do not soak parts in water over 140°F (60°C).

Cleaning

1. Remove grille. Squeeze mounting spring and pull down carefully. See Fig. 11.
2. Clean grille. Do not put into hot water. Use non-abrasive kitchen detergent, wipe dry with clean cloth. See Fig. 12.
3. Remove dust and dirt from fan body using a vacuum cleaner. See Fig. 13.
4. Use a cloth dampened with kitchen detergent to remove any dirt from fan body. Wipe dry with clean cloth. See Fig. 14.
5. Ensure grille is dry and reinstall onto the fan.



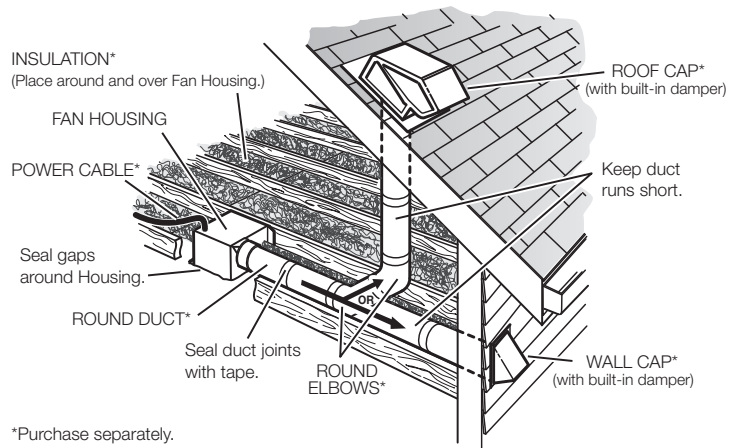
Typical Installation

The ducting from this fan to the outside of the 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.


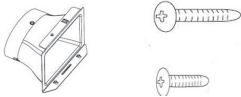


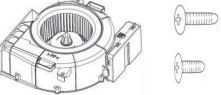
Rigid metal duct is recommended for optimal fan performance.

Ensure duct joints and exterior penetrations are sealed with caulk or other similar material to create an air-tight path and to minimize building heat loss and gain and reduce the potential for condensation.

Place/wrap insulation around duct and/or fan to in order to minimize possible condensation buildup within the duct, as well as minimize building heat loss and gain.



Replacement Parts List

Part	Part Number	Description
	485154	Mounting Bracket with two (2) screws S4X6
	485153	Duct Adapter with six (6) screws S4X30 5pcs • S4X12 1pc
	485152	Grille with spring clips
	486300	Lighted Grille with spring clips
	486344	Power Pack Assembly – includes motor, control board, blower, wheel, and three (3) screws. S4X8 2pcs • S4X6 1pc

Our Commitment

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.

Product warranties can be found online at Greenheck.com, either on the specific product page or in the literature section of the website at Greenheck.com/Resources/Library/Literature.

