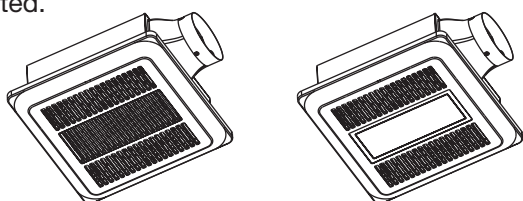


Installation, Operation and Maintenance Manual

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.

MultiSpec Ceiling Exhaust Fan

Model SP-LP is a direct drive wall/ceiling exhaust fan designed for clean air applications where low sound levels are required. Accessories include lights, flow selection, and constant airflow. These models are ETL listed.



MultiSpec SP-LP0511 MultiSpec SP-LP0511L

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

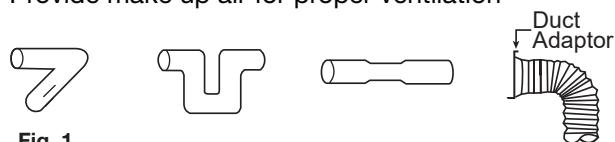


Fig. 1

Table of Contents

Features	1
Supplied Accessories	2
Dimensional Data	2
Wiring Diagrams	3
Installation for Joist Mounting	4
Installation for Wall Mounting	6
Maintenance	7
Typical Installation	8
Replacement Parts List	8

Features

High Energy Efficiency

The fan uses a brushless DC motor to ensure a high energy efficiency.

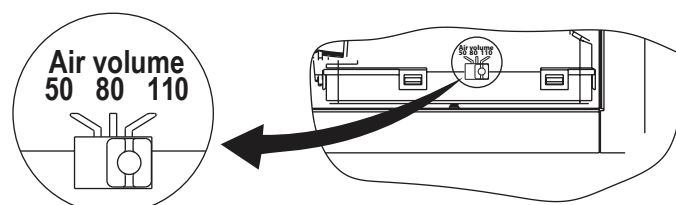
Constant Air Flow

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 speeds up or slows down the rpm of the motor depending upon the amount of resistance within the ducts. The fan will perform at the rated airflow and helps avoid potential installation issues.

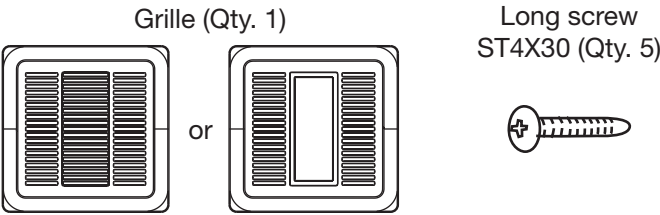
Flow Selection

Fans are supplied with a flow selection switch which can be set to 50, 80, or 110 CFM.

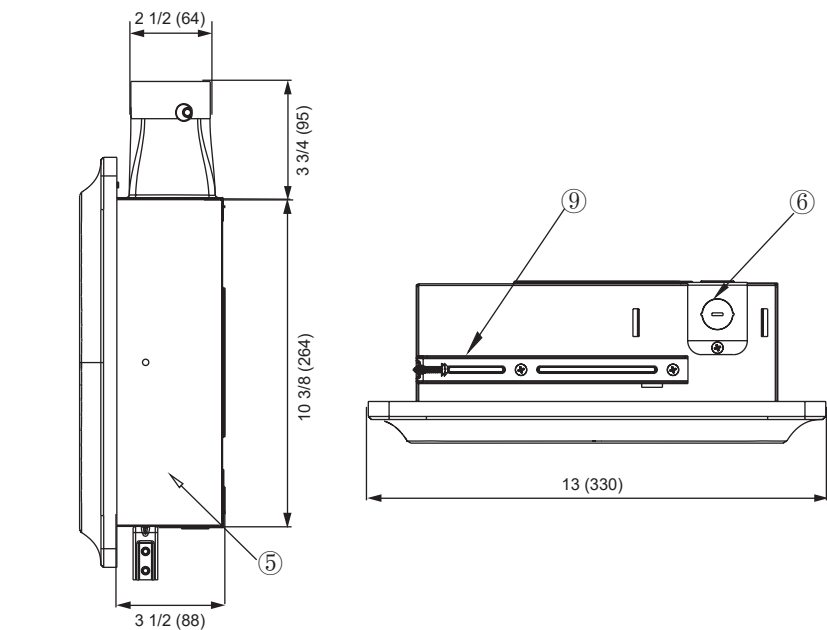
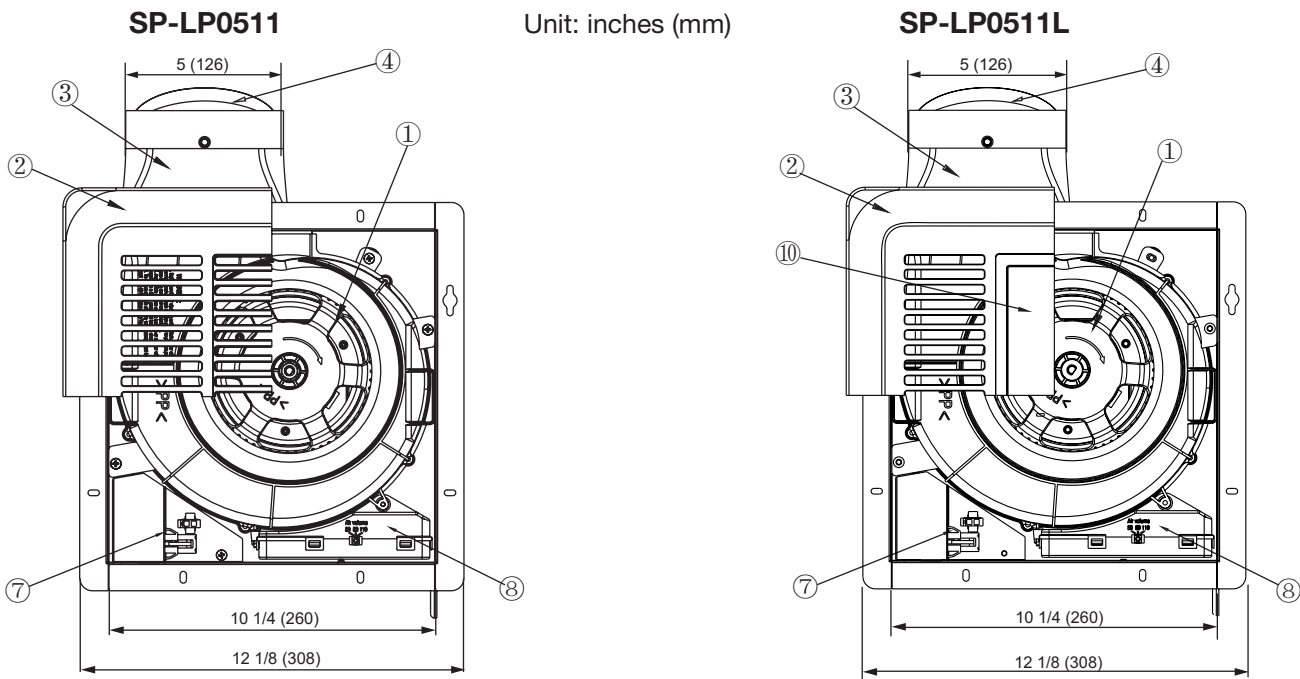
Air volume option (cfm)			Factory setting
50	80	110	110



Supplied Accessories



Dimensional Data

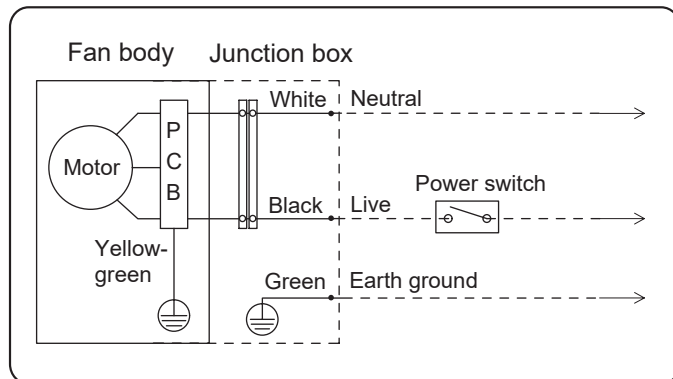


No.	Part Name	No.	Part Name
1	Wheel	6	Knockout plate
2	Grille	7	Junction box
3	Duct Adapter	8	Base PCB box
4	Damper	9	Mounting Bracket
5	Housing	10	LED light

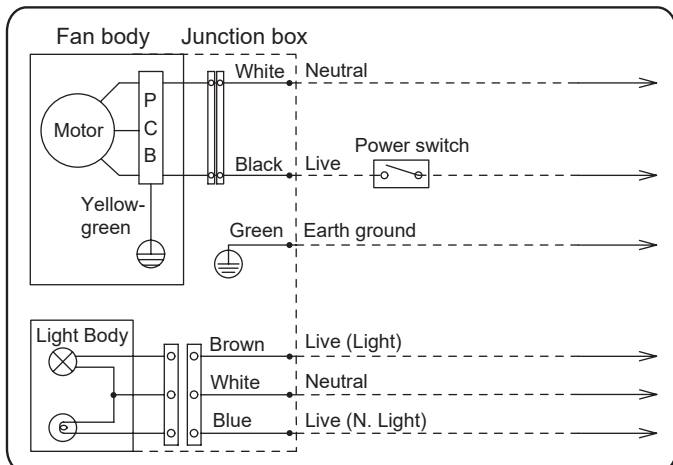


Wiring Diagrams

Fan only model: SP-LP0511



With light model: SP-LP0511L



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.

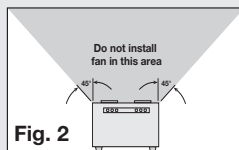


Fig. 2

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 ETL listed for tub and shower enclosures.
- These fans are not to be installed in a ceiling thermally insulated to a value greater than R40.

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.

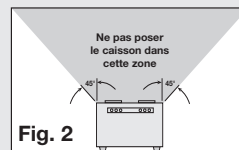


Fig. 2

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 reflux.
- 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 ETL 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.

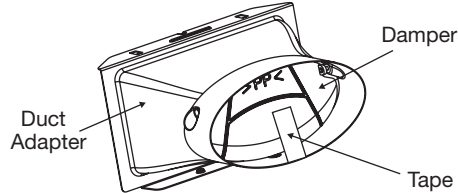
Installation for Joist Mounting

ATTENTION

Please wear gloves during the installation work.

IMPORTANT

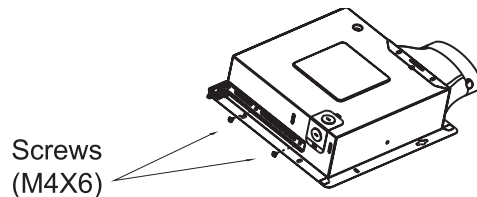
Remove the tape from damper and duct adapter before installation. As shown below:



1. Position fan housing between the joists. Fasten housing to joist using two screws (ST4X30) through the housing flange, and fasten mounting bracket to joist using two screws (ST4X30). See Fig. 3.

ATTENTION

The screws for securing bracket should not be replaced by other screws, 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 secure it with clamps or ties, and seal it with mastic or approved foil tape. See Fig. 5.

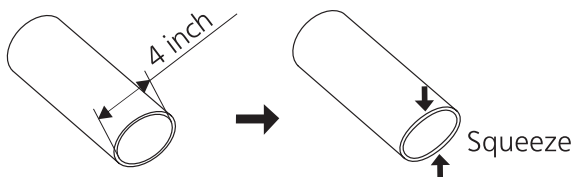


Fig. 3

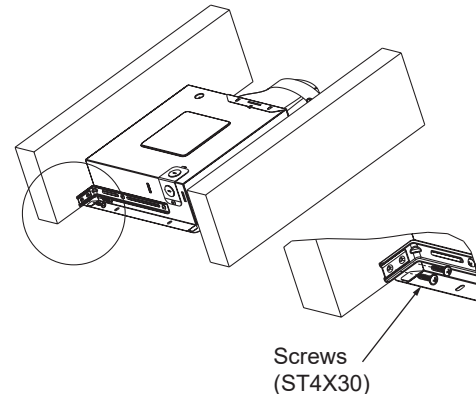
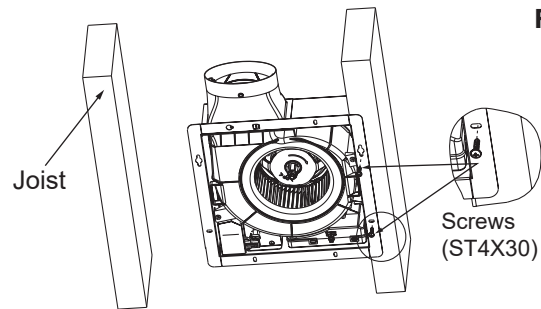


Fig. 4

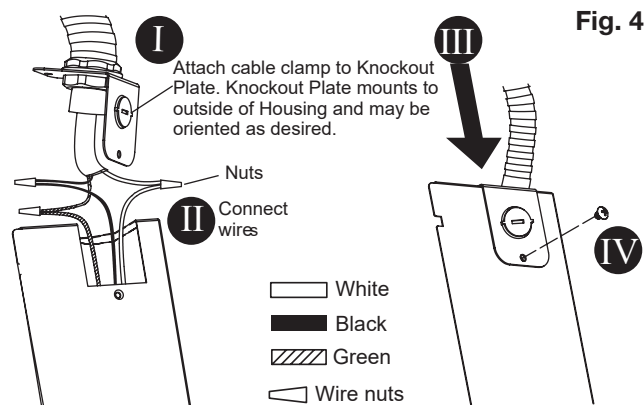
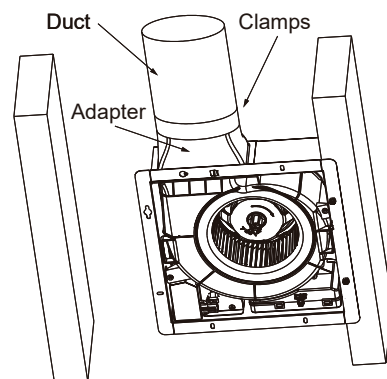
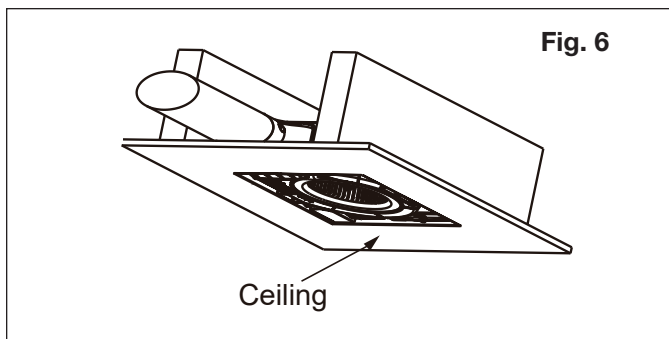


Fig. 5



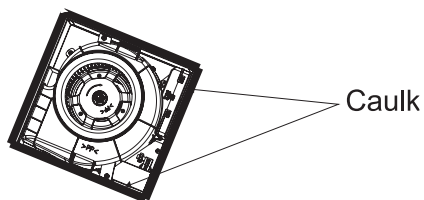
Installation for Joist Mounting Continued

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



IMPORTANT

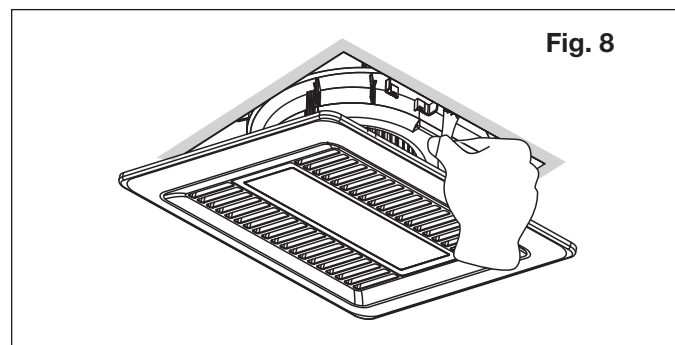
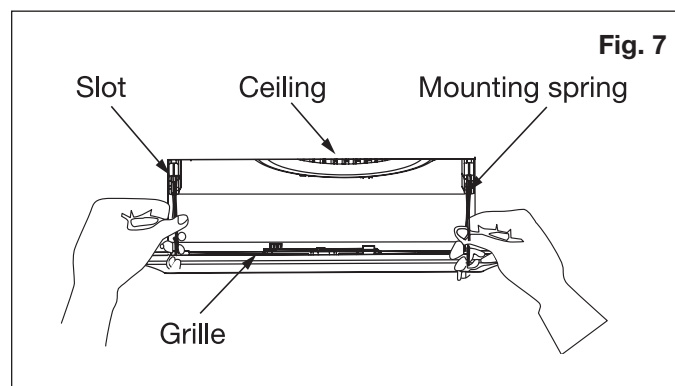
After finishing installation, fill gap between flange and ceiling with caulk or other sealant to prevent air leakage.



5. Insert the mounting springs into slots as shown and mount grille to fan body. See Fig. 7 and Fig. 8.

6. For model SP-LP0511L, with light.

- Insert the grille mounting spring on the wiring side into the slot, insert the plug into the receptacle in the housing.
- Insert the other mounting spring into the slot and mount the grille to fan body. See Fig. 7 and Fig. 8.



ATTENTION

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

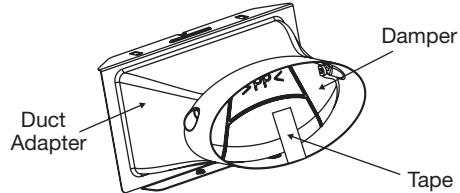
Installation for Wall Mounting

ATTENTION

Please wear gloves during the installation work.

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 stud using two screws (ST4X30) through the housing flange, and fasten mounting bracket to stud using two screws (ST4X30). See Fig. 9.

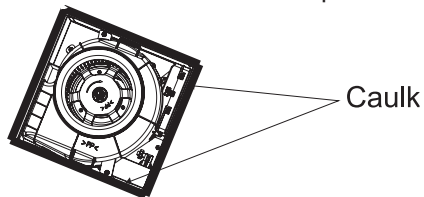
ATTENTION

The duct adapter of product must be installed upward.

2. Complete the wiring and duct work, please refer to steps 2 and 3 of Joist Mounting Installation (page 4) to complete the adapter installation.
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 steps 5 and 6 of joist mounting installation (page 5).

Fig. 9

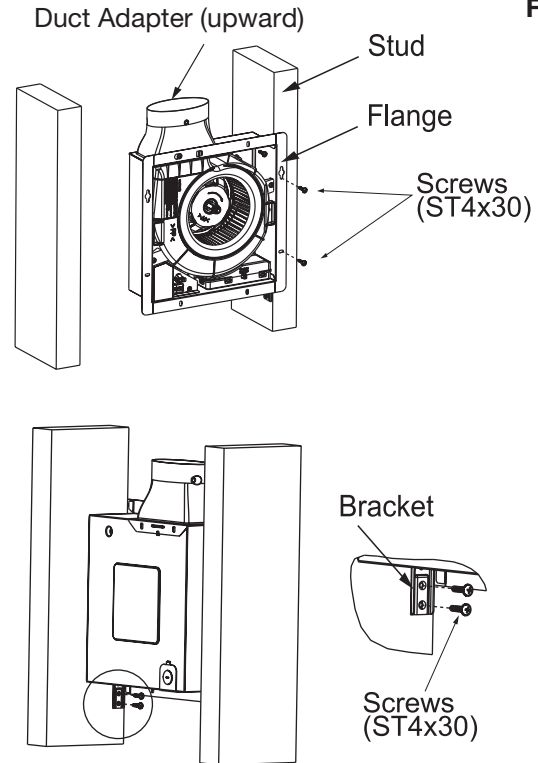
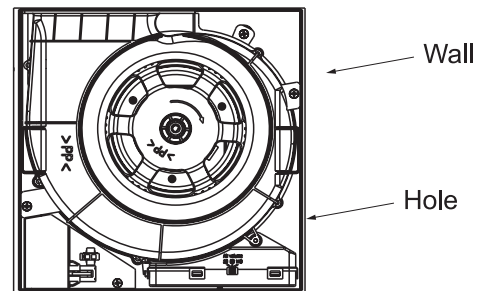


Fig. 10



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. Using a cloth dampened with kitchen detergent, remove any dirt from fan body. Wipe dry with clean cloth. See Fig. 14.
5. Ensure grille is dry and reinstall onto the fan.

Fig. 11

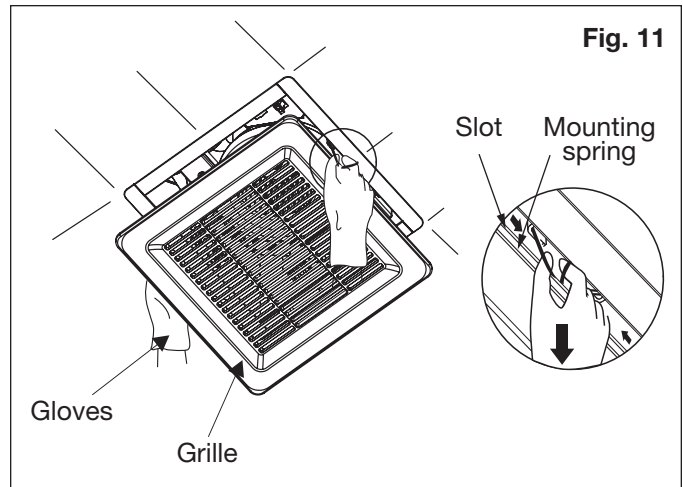


Fig. 12

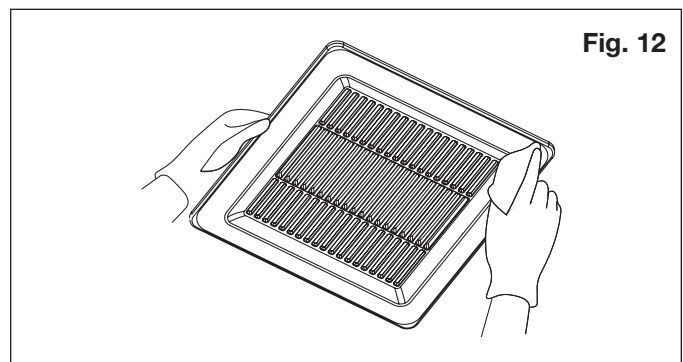


Fig. 13

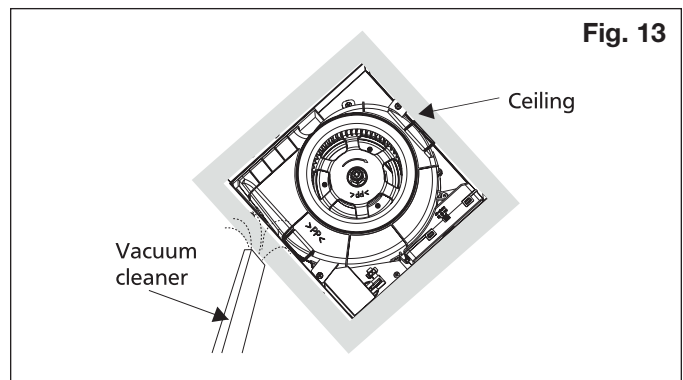
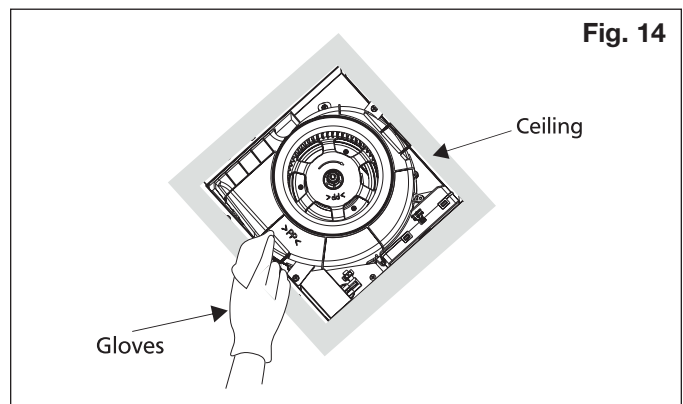


Fig. 14



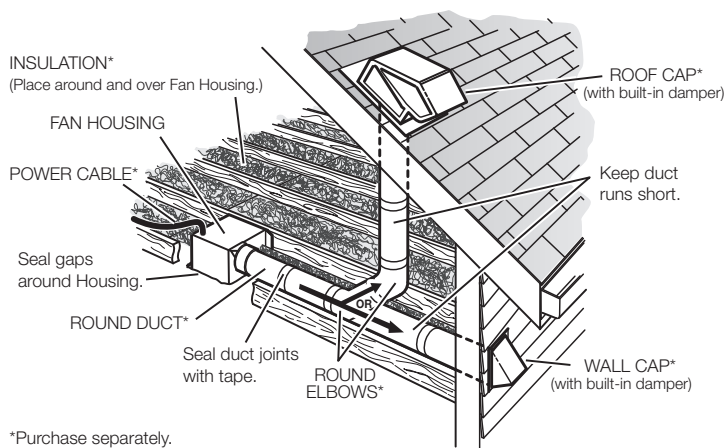
Typical Installation

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.



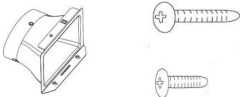

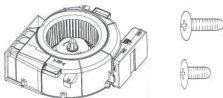
Rigid metal duct is recommended for optimal fan performance.

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
	484917	Knockout plate and one (1) screw S4X6
	485153	Duct Adapter with six (6) screws S4X30 5pcs • S4X12 1pc
	485152	Grille with spring clips
	485151	Power Pack Assembly – includes motor, control board, blower, wheel, and three (3) screws. S4X8 2pcs • S4X6 1pc

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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.

