Thermador®
CORPORATION

INSTALLATION INSTRUCTIONS
PHE WALL HOOD

APPROVED FOR ALL RESIDENTIAL APPLIANCES

FOR RESIDENTIAL USE ONLY

PLEASE READ ENTIRE INSTRUCTIONS BEFORE PROCEEDING.

INSTALLATION MUST COMPLY WITH ALL LOCAL CODES.

IMPORTANT: Save these Instructions for the Local Electrical Inspector's use.
INSTALLER: Please leave these Instructions with this unit for the owner.
OWNER: Please retain these instructions for future reference.
Safety Warning: Turn off power circuit at service panel and lock out panel, before wiring this appliance.
Requirement: 120 V AC, 60 Hz. 15 or 20 A

IMPORTANT SAFETY INSTRUCTIONS

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

CAUTION: FOR GENERAL VENTILATING USE ONLY. DO NOT USE TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS OR VAPORS.

A. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.

B. Before servicing or cleaning the unit, switch power off at service panel and lock service panel disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, attach a tag to the service panel to indicate power has been switched off for maintenance.

C. Installation Work and Electrical Wiring Must Be Done By Qualified Person(s) In Accordance With All Applicable Codes & Standards, Including Fire-rated Construction.

D. 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 manufacturers guideline and safety standards such as those published by the National Fire Protection Association (NFPA), the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.

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FILE # E21958

READ AND SAVE THESE INSTRUCTIONS

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E. Due to size and weight of this unit two installers are recommended.
F. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
G. To properly exhaust air, be sure to duct air outside - do not vent exhaust air into spaces within walls, ceilings, attics, crawl spaces, or garages.
H. **WARNING - TO REDUCE THE RISK OF FIRE, USE ONLY METAL DUCT WORK.**
I. Install this hood in accordance with all requirements specified.

LES INSTRUCTIONS DE SÉCURITÉ IMPORTANTES

AVERTISSEMENT - POUR RÉDUIRE LE RISQUE D'INCENDIE, DE CHOC ÉLECTRIQUE, OU DE LA BLESSURE AUX PERSONNES, OBSERVER LE SUIVANT:

ATTENTION: SEULEMENT POUR L'UTILISATION D'AÉRATION. NE PAS L'UTILISER POUR ÉPUISER LA VAPEUR OU LES MATIÈRES EXPLOSIVES OU DANGEREUSES.

A. Utiliser cet appareil seulement dans la manière destinée par le fabricant. Si vous avez des questions, contacter le fabricant.
B. Avant l'entretien ou le nettoyage de l'appareil, couper le courant au tableau de service, et fermer à clef la moyenne de débrayage de service pour empêcher l'alimentation d'être allumée par hasard. Quand la moyenne de débrayage de service ne peut pas être fermée à clef, attacher une étiquette au tableau de service pour indiquer que l'alimentation a été coupée pour l'entretien.
C. Le Travail d'Installation et de Câblage Électrique Doit Être Fait Par les Personne(s) Qualifiées Conformément à Tous les Codes & Normes Applicables, y Compris la Construction Calculée à Feu.
D. L'écoulement comburant pour le fonctionnement sûr du matériel de la combustion du combustible peut être affecté par le fonctionnement de cet appareil. Suivre la directive des fabricants du matériel chauffant et les normes de sécurité tel que ceux publiées par l'Association du Protection de Feu National (NFPA), et la Société Américaine pour les Ingénieurs de Chauffage, de Réfrigération et de Climatisation (ASHRAE), et les autorités des codes locales.
E. Par suite de la dimension et le poids de cet appareil, deux installateurs sont recommandés.
F. En coupant ou en forant dans un mur ou dans un plafond, ne pas endommager le câblage électrique et des autres utilités cachées.
G. Les ventilateurs canalisés doivent être toujours déchargés à l'extérieur et vers le haut. Ne pas décharger au grenier ou au vide sanitaire.
H**. Pour réduire le risque d'incendie, utiliser seulement le travail du conduit métallique**.
I. Installer ce capot conformément aux toutes exigences spécifiées par le fabricant de votre cooktop/cuisinière.

Parts Included with your Hood

- Hood Canopy Assembly with Light Bulbs Installed
- Care & Use /Installation Instructions
- Registration Card
- Filters, 2, 3, 4 or 5 depending on model and size
- Metal Transition with Back draft dampers installed
- Screws and Drywall Anchors
- Remote Blower (“pigtail”) Adaptor
- Wooden Strip for Hood Support
- Wire Clamp
- Contents Sheet

Parts Not Included with your Hood

- Duct Tape
- 1/2" Conduit
- Wire Nuts
- Ventilator- The PHE model can be installed with any Thermador VTN1000Q, VTR600R, VTR1000Q, and VTR1400Q.
- Optional duct cover, 6” or 12” height, available for purchase seperately

CONSIDERATIONS BEFORE INSTALLING HOOD

1. For the most efficient air flow exhaust, use a straight run or as few elbows as possible.

   CAUTION: Vent unit to outside of building, only.

2. Use flex ducting only to connect rigid duct directly to transitions.

3. COLD WEATHER installations should have an additional backdraft damper installed to minimize backward cold air flow and a nonmetallic thermal break to minimize conduction of outside temperatures as part of the ductwork. The damper should be on the cold air side of the thermal break. The break should be as close as possible to where the ducting enters the heated portion of the house.

4. Hood installation height above cooktop is the users preference. The lower the hood above the cooktop, the more efficient the capturing of cooking odors, grease, and smoke. This hood has been approved for installations from 24” to 36” above the cooktop. The lower height may be inconvenient for tall people and large cooking vessels. Consequently, Thermador recommends the hood be installed 30”-36" above the countertop.

5. Remote blowers require a five wire installation.

Appliance Installation:

The PHE unit can be mounted on a wall or suspended from a cabinet. Both vertical and horizontal discharge are possible with either mounting method.

Discharge Direction: The PHE hood is shipped ready for vertical discharge. To change to horizontal discharge simply move the two plates marked **A** in Figure 1 to the top of the hood. Each plate is held in place by two sheetmetal screws.

Assembly of the Transition:
The transition supplied with the PHE hood mounts to the top or rear of the hood depending on the discharge direction.

1. Align mounting holes at base of transition with mounting holes on 1/2" flange located at the top or rear of the hood depending on direction of discharge.

2. Fasten transition to hood using 6 (4 mm x 9.5 mm) screws (included with hood).

3. Duct tape connection between transition and hood.

4. Remove tape holding damper closed.

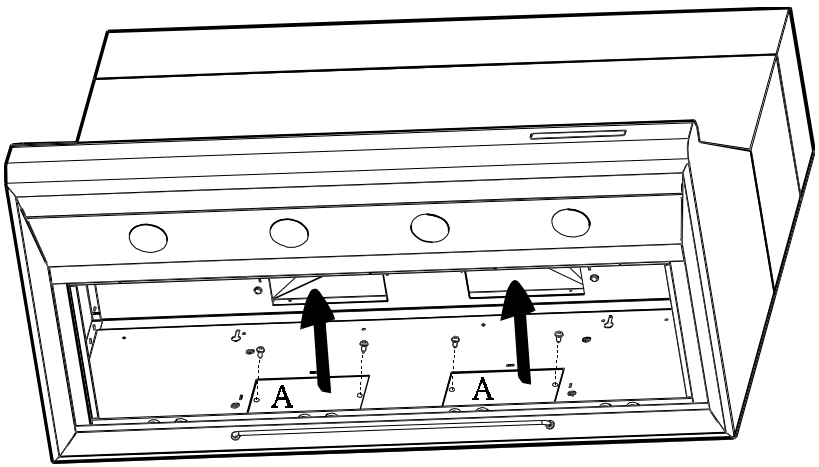


Figure 1

Wall Mount Installation

The desired installation height of the PHE is the user's preference. Figure 2 shows a typical installation of the hood with two duct covers. Thermador offers 6" and/or 12" duct covers to fill the space between the hood and ceiling.

The installation height shown in Figure 2 is 24". One 6" and one 12" duct cover have been used in this installation. Add or subtract duct

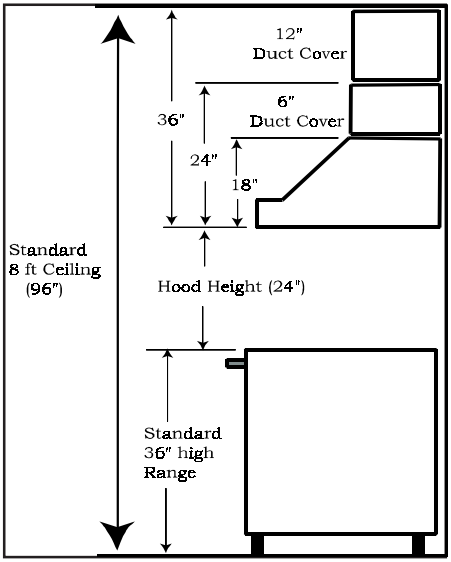


Figure 2

covers as appropriate to accommodate ceiling height and desired hood height. The duct cover structure is supported by the hood.

1. Hood Installation Height After the hood installation height has been determined draw a horizontal line at a distance above the cooktop equal to the desired hood installation height plus 15.5". This line is the mounting location of the wooden bracket shipped with the hood.

2. Find the centerline of the cooktop. Draw a vertical line along this centerline up to the horizontal line drawn in step 1.

3. The PHE is mounted to the wall using a wooden bracket shipped with the hood. Remove the bracket from the hood by removing two shipping screws. Mark the centerline of the bracket.

4. Find studs behind the drywall by tapping the wall or using a stud finder. Locate one stud on either side of the cooktop centerline to use for mounting the wooden bracket as shown in Figure 3.

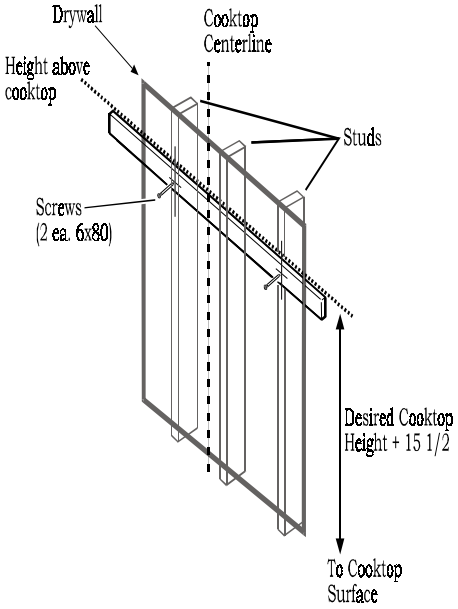


Figure 3

5. Align the top of the wood bracket along the horizontal line drawn in step 1. Align the centerlines of the bracket and cooktop.

6. Drill a 3" deep 1/8" tap hole through the wooden bracket, drywall, and into the stud.

7. Use 2-4 (6mm x 80 mm) screws to attach the bracket to the wall as shown in Figure 3. For support of longer hoods, use three or four studs as available. Countersink the heads to prevent interference with the hood.

8. On the wood bracket mark the locations used to hang the hood according to Figure 4.

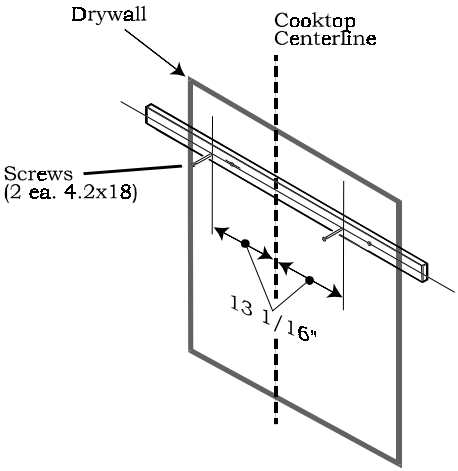
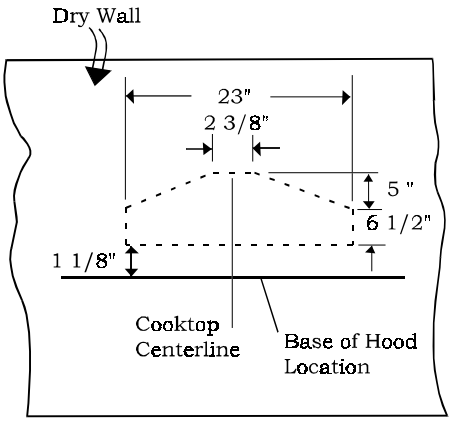


Figure 4

9. Drill a 1/8" tap hole through the wooden bracket and drywall. These screws do not need to go into the studs.

10. Screw 2 (4.2mm x 18 mm) screws into the wood bracket leaving 1/4" of the screw exposed for hanging the hood.

11. Discharge Direction: Horizontal discharge requires a wall cutout, as shown in Figure 5, to provide clearance for the transition. The location of the cutout is determined by the hood installation height.



Note: Dashed line indicates cutout needed for clearance of the transition

Figure 5

The transition supplied with the PHE connects to standard 10" round duct. Figure 6 shows the transition connected for horizontal discharge.

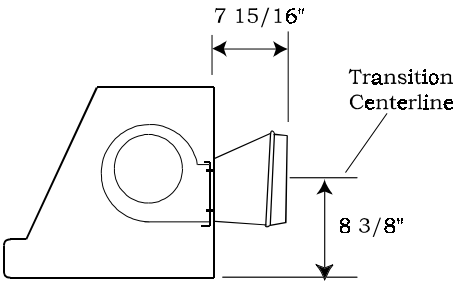


Figure 6

Figure 7 below shows the PHE configured for vertical discharge. Installations using this type of method require a cutout in the ceiling to accomodate 10" duct and the 1/2" conduit carrying power to the unit.

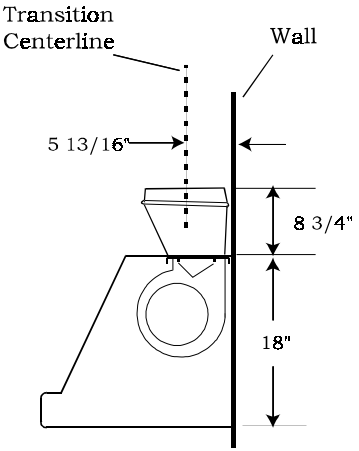


Figure 7

Duct covers, sold separately, are available to cover the space between the top of the hood and ceiling.

12. Hang the hood using slots **I** in Figure 8. Make sure the wood bracket fits into the recess on the back of the hood.

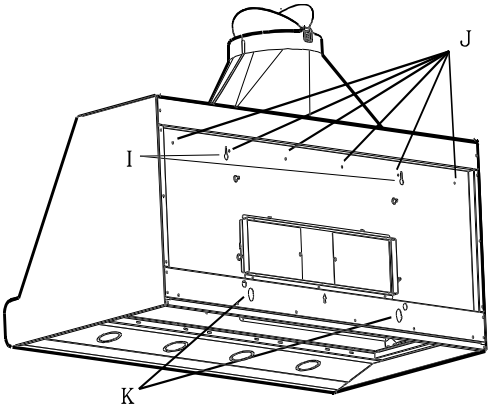


Figure 8

13. Tighten the screws in slots **I**. Use slots **I** to level the hood.

14. From inside the hood drive screws (4.2 mm x 18 mm) through holes **J** into wooden bracket.

15. Drill a 3/8" tap hole through the center of the oval holes K into the wall. Insert two wall plugs into drilled holes. Tighten hood to wall anchors by installing 2 screws with washers.

Assembly and Installation of the Duct Covers:

Optional duct covers shown in Figure 9 may be used to fill the space between the hood and ceiling in wall mount installations. 6" and 12" high duct covers are available and may be ordered separately.

1. If multiple duct covers are used, connect the pieces together using sheetmetal screws provided with chimneys.

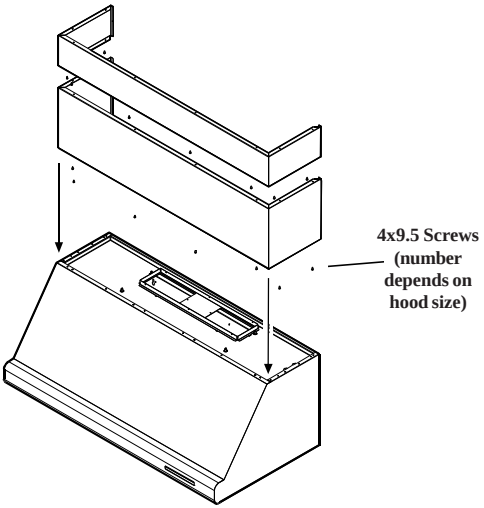


Figure 9

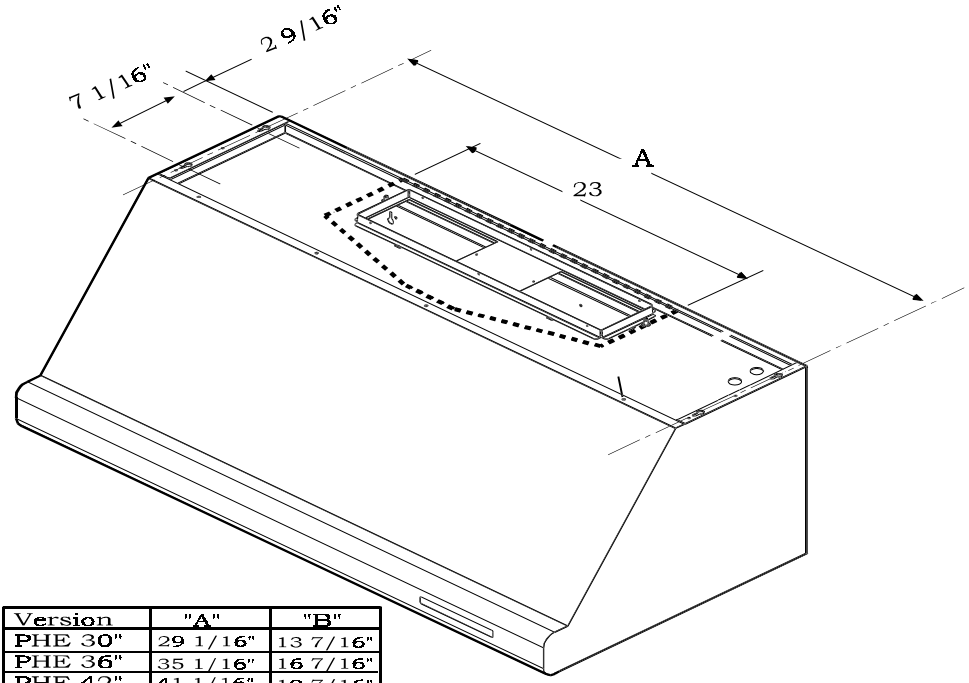
2. Attach the duct cover(s) to the hood using sheetmetal screws as shown in Figure 9.

Cabinet Installation:

The PHE hood can be installed under a cabinet by supporting the hood from the top.

Note: The cabinet must be structurally joined to the wall studs to support the weight of this hood.

Figure 10 shows the four holes used for mounting the hood to the bottom of the cabinet.

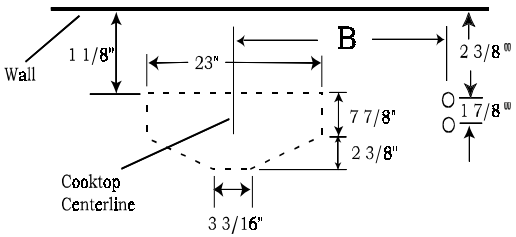


Version	"A"	"B"
PHE 30"	29 1/16"	13 7/16"
PHE 36"	35 1/16"	16 7/16"
PHE 42"	41 1/16"	19 7/16"
PHE 48"	47 1/16"	22 7/16"
PHE 60"	59 1/16"	28 7/16"

Figure 10

1. In the base of the cabinet drill 1/16" tap holes at the locations shown in Figure 10. Screw in four 4.2 mm x 18 mm screws (provided with hood) leaving 1/4" exposed.

2. If the hood is installed for vertical discharge use Figure 11 to create clearance holes for passage of the transition and conduit. Dimension A in Figure 11 depends on the hood model being installed and can be located in the table above.



Plan View of Cabinet Cutout

Figure 11

3. For horizontal discharge use Figure 5 for the geometry of the cutout required for clearance of the transition.

4. Hang hood from screws and tighten securely.

5. Install two wall anchors as described in step 15 on the previous page.

Installing an Integral Blower:

The PHE hood can be installed with Thermador's VTN1000Q blower.

1. In the 30" PHE model remove the two spacers **A** shown in Figure 12. Each spacer is held in place by three screws.

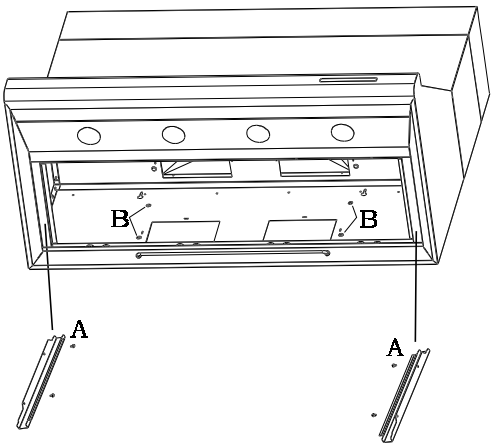


Figure 12

2. For horizontal discharge install four M5 screws in location **B** as shown in Figure 12. Install the screws in the hood top plate for vertical discharge installations. Do not tighten screws.

3. The four screws in step two are used to mount the motor by guiding the screws into the slots on the motor mounting plate. Tighten the screws **B**.

Wiring the PHE with an Integral motor:

Warning: Turn off electricity at the service panel before wiring the unit.

1. Connect the VTN1000Q molex plug connector to the connector present inside the hood as shown in Figure 13.

2. Remove the j-box cover as shown in Figure 14.

3. Remove 1 of 2 knockouts and install 1/2" conduit connector in j-box.

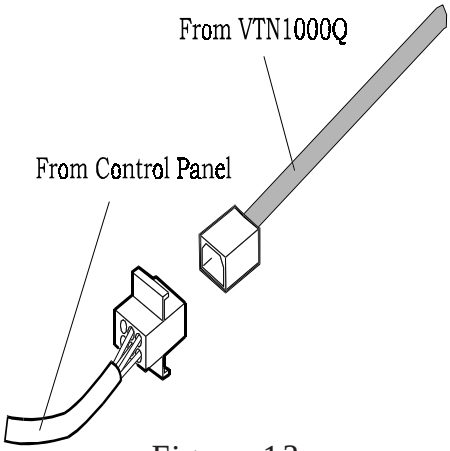


Figure 13

4. Run black, white, and green wires (#16 AWG) in 1/2" conduit from power supply to j-box.

5. Connect black, white, and green wires from power supply to black, white, and green/yellow wires in j-box respectively.

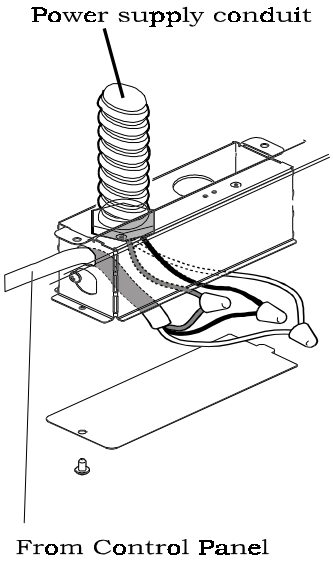


Figure 14

6. Close j-box cover. Replace filters as described in the Care & Use section of this manual. Turn power on at service panel. Check operation of the hood.

Remote Blower Installation:

The PHE hood is designed to work with Thermador's VTR600R, VTR1000Q, and VTR1400Q remote blowers. For installation instructions see the instructions supplied with the blower unit.

Wiring the PHE with a Remote Blower:

Warning: Turn off electricity at the service panel before wiring the unit.

1. Remove the j-box cover as shown in Figure 15.

2. Remove cover **T** from the j-box.

3. Remove the 2 knockouts and install 1/2" conduit connectors.

4. Run black, white, and green wires (#16 AWG) in 1/2" conduit from power supply to j-box.

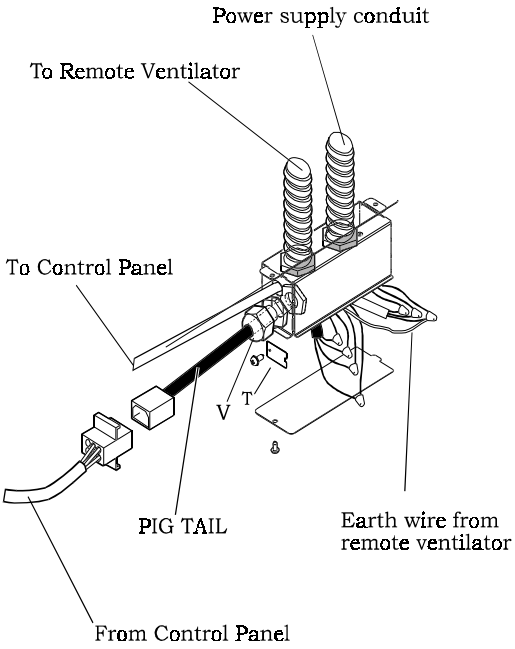


Figure 15

5. Connect black, white, and green wires from power supply to black, white, and green/yellow wires in j-box respectively.

6. Connect wire clamp to "pigtail" as shown in Figure 15. Insert "pigtail" wires into j-box and fix wire clamp to j-box using nut supplied with wire clamp **V**.

7. Run five wires (#16 AWG) in 1/2" conduit from the remote blower to the second conduit connector.

8. Connect the black, white, red, and blue wires from the remote ventilator to the black, white, red, and blue wires of the "pigtail respectively. Connect the remote blower green/yellow (ground) wire to the ground wire from the service panel.

9. Close junction box cover. Check that all light bulbs are secure in their sockets. Install filters. Turn power on at service panel, and check lights and blower operation per Care & Use section of this manual.