

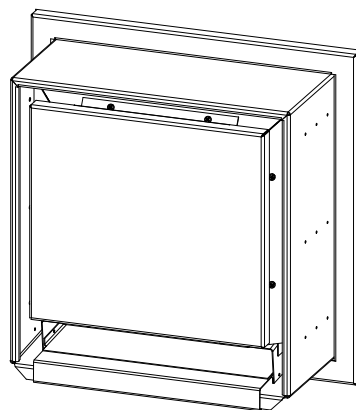
INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

These instructions are supplementary to the Installation and Operating Instructions supplied with the fireplace and should be kept together. Refer to the Installation and Operating Instructions for proper gas supply, safety requirements and operating instructions.



TOWN & COUNTRY
LUXURY FIREPLACES

HORIZONTAL VARIABLE DEPTH POWER VENT KIT



**For use with TC Series “C” & “D” units,
NOT FOR USE with TC54**

22270003 1 - 25 FEET
22270004 7 - 110 FEET

**INSTALLATION AND
OPERATING INSTRUCTIONS**



Visit www.townandcountry.com for the most recent version of this manual

PAINT:

The vent terminal is painted with a neutral color and can be painted to suit the house color

MINIMUM CLEARANCES TO COMBUSTIBLE

Terminal casing:
0in. (0mm)

Vertical vent pipe:
1.5 in. (38mm)

Horizontal vent pipe:
1.5 in. (38mm)

All other clearances are as per the fireplace installation instructions.

Power Vent Installation

Locate the fireplace as per the main instructions supplied. Make the following modifications to add the components used with the Flush Mount Power Vent Kits. This installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.

All electrical installations should be performed by a qualified electrician to the Canadian and U.S. National Electrical Codes (CSA C22.1 for Canada), (ANSI/NFPA 70 for the U.S.) and/or local electrical codes.

UNDER NO CIRCUMSTANCES SHALL A RHEOSTAT BE USED TO ALTER THE VOLTAGE SUPPLY TO THIS UNIT.

Contents of Power Vent Kit

ITEM	PART No.	DESCRIPTION	QTY
1	TCVT.7894	Power Vent Assy.	1
2	8020.5	Inner wall Plate	1
3	8029	Wall Pipe Cover	1
4	TCVT.80285WLD	Wall Sleeve Assembly	1
5	TCVT.PVCINST	Instructions	1

This powervent is switchable from “Low” to “High.” The power setting must be selected prior to operation.

TCVT.PV1.25

“Low” = 0 - 6 FEET

“High” = 7 - 25 FEET

TCVT.PV7.110

“Low” = 7 - 25 FEET

“High” = 26 - 110 FEET

Follow the selection chart on page 3 to select which powervent kit to order.



Venting Length

POWER VENT	0 - 6'	7'- 25'	26'-110'
TCVT.PV1.25	LOW	HIGH	-
TCVT.PV7.110	-	LOW	HIGH

Powervents Available by Model

MODEL	TCVT.PV1.25	TCVT.PV7.110	TCVT.PVKIT REQUIRED
TC30.D	√	√	YES
TC36.DAR	√	√	YES
TC36.D	√	√	YES
TC36.DST	√	√	YES
TCWS.38D	√	√	YES
TC42.D	√	√	YES
TCWS.54D	√	√	YES
TCWS.54DST	√	√	NO

Power Vent

Fig. #1

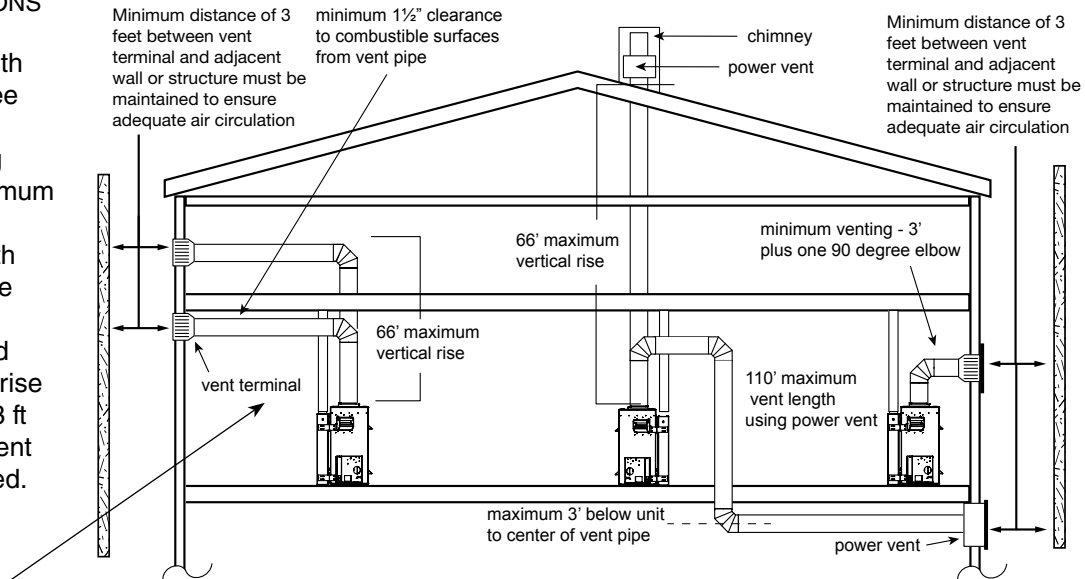
VENTING CONFIGURATIONS

Maximum total vent length is 110ft plus six 90-degree elbows or combination of other elbows equaling 90-degrees, with a maximum 66 foot vertical rise.

Minimum total vent length is 3 ft plus one 90-degree elbow.

The vent can be installed with any combination of rise and run including up to 3 ft below the unit. Ensure vent pipe is properly supported.

Maximum Combined vertical & horizontal venting -110 ft plus six 90-degree elbows.

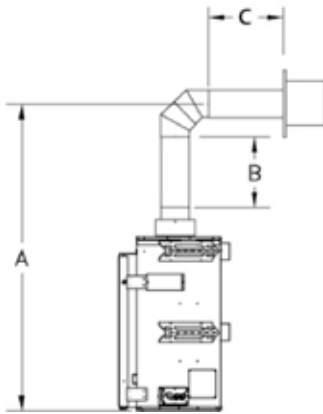


See table (pg.3) to determine which powervent kit to use.

Minimum Vent Length Chart

THIS POWER VENT SYSTEM IS FOR USE WITH 5" & 8" COAXIAL DIRECT VENT PIPING

Fig. #2



A						B	C
Minimum Rise From Floor to Flue Center						Pipe Length	Min. Pipe Length
TCWS 54D**	TCWS 38D	TC30D	TC36D*	TC42D	TC36DST		
49"	45"	47	51"	57"	56"	0"	3 feet
61"	57"	59"	63"	69"	68"	12"	2 feet
73"	69"	71"	75"	81"	80"	24"	1 foot

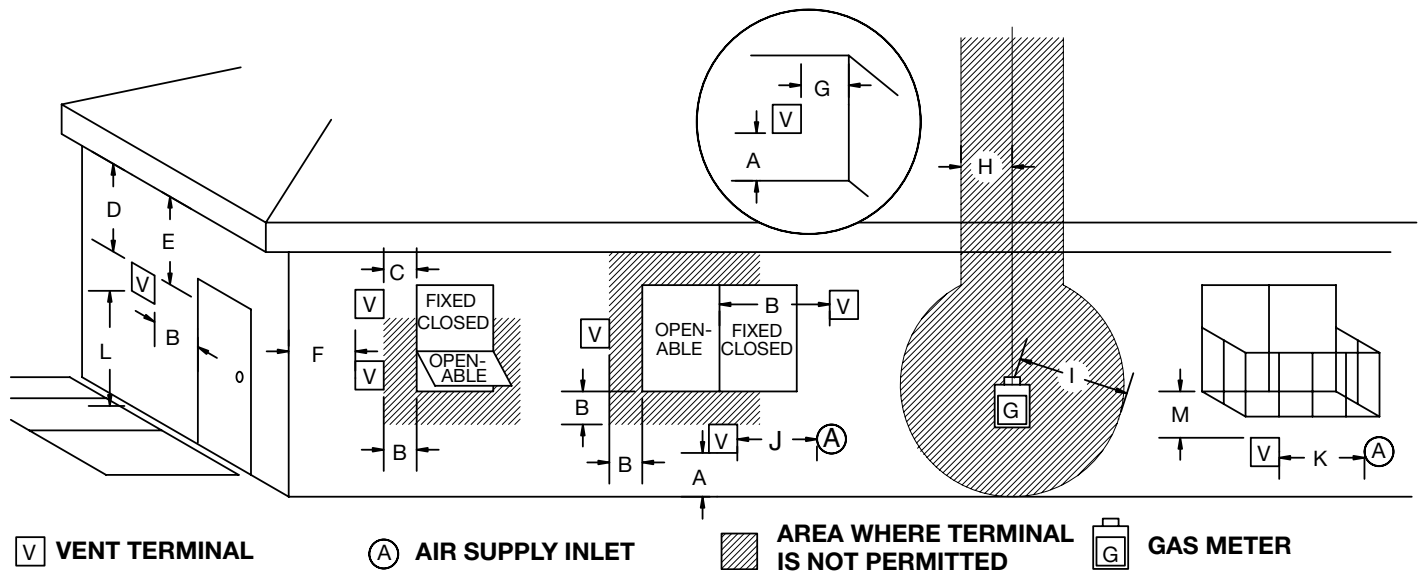
*TC36D and TC36DAR have same dimensions.

**TCWS 54D, and TCWS 54DST have the same dimensions

This power vent kit cannot be used on model TC54.D

Vent Terminal Minimum Clearances

Fig. #3



Warning:

The clearances listed below are based on testing with allowable temperatures of 170F (75C), some building materials (vinyl, plastic etc.) may be damaged or distorted at these allowable temperatures. Soffits, Siding and Decking made with vinyl or other plastics will require larger clearances to prevent heat related damage. Check with siding/Soffit or decking manufacturer and proceed with caution.

		Canada ¹	US ²
A=	Clearances above grade, veranda, porch, deck, or balcony.	12 inches (30 cm) min.	12 inches min.
B=	Clearance beside or below a window or door that may be opened.	12 inches (30 cm) for appliances ≤ 100,000 Btuh., 36 inches (91cm) for appliances > 100,000 Btuh.	9 inches for appliances > 10,000 Btuh and ≤ 50,000 Btuh. *12 inches for appliances > 50,000 Btuh.,
C=	Clearance to permanently closed window recommended to prevent condensation on window.	12 inches (30 cm)	12 inches
D=	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal.	2 inches (5 cm) min.	2 inches min.
E=	Clearance to unventilated soffit from the center line of the terminal.	2 inches (5 cm) min.	2 inches min.
F=	Clearance to outside corner.	6 inches (15 cm) min.	6 inches min.
G=	Clearance to inside corner from the side of the terminal.	3 inches (8 cm) min.	3 inches min.
H=	Clearance to each side of center line extended above meter/regulator assembly.	3 feet (90 cm) min. within a height of 15ft (4.5m) above the meter or regulator assembly	**
I=	Clearance to service regulator vent outlet.	3 feet (90cm) min.	**
J=	Clearance to non mechanical air supply inlet to building or the combustion air inlet to any other appliance.	12 inches (30 cm) ≤ 100,000 Btuh. 36 inches (91) cm > 100,000 Btuh	9 inches for appliances > 10,000 Btuh and ≤ 50,000 Btuh. 12 inches for appliances > 50,000 Btuh.
K=	Clearance to a mechanical air supply inlet.	6 feet (1.8 m) min.	3 feet (90cm) min. above if within 10ft (3m) horizontally
L=	Clearance above paved side-walk or a paved driveway located on public property	^ 7 feet (2.1 m) min.	**
M=	Clearance under veranda, porch, deck, or balcony	‡ 2 inches (5 cm) min.	‡ 2 inches min.

1) - In accordance with the current CSA B149.1 Natural Gas and Propane Installation Code

2) - USA - In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code,

** Clearance in accordance with local installation codes and the requirements of the gas supplier

^ A vent shall not terminate directly above a side-walk or paved driveway which is located between two single family dwellings and serves both dwellings*

‡ Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

Horizontal (Side Wall) Venting

This kit uses either Simpson DuraVent GS direct vent pipe, Secure Vent direct vent pipe, Selkirk Direct-temp vent pipe or ICC Exceldirect vent pipe with a 5" inner pipe and an 8" outer pipe. For part numbers see the table of venting components on page 12 of this manual. This vent can only be used as a side wall termination.

CAUTION:

This terminal is designed to be flush, or protruding from the finished outside wall. Under no circumstances should this terminal be recessed into the wall past this point. (Fig. #8)

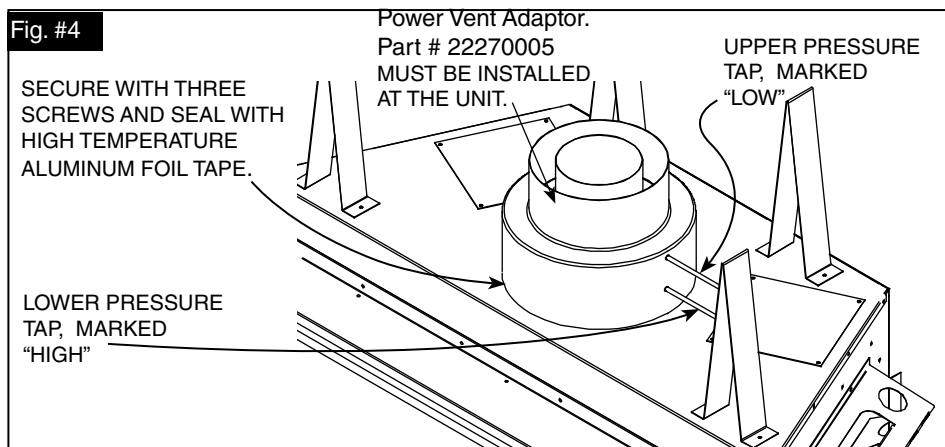
1. Attach the Power Vent Adaptor (part # 22270005) directly to the appliance with the three screws and seal outer pipe with high temperature aluminium tape provided. (Fig. #4)

Note: The inner pipe does not need to be sealed.

2. Connect one of the high temperature silicone tubes to the upper pressure tap (marked "LOW") on the adaptor. (Fig. #4) Secure with the hose clamp provided and route the tube through any hole back to the control box. This tube will be connected to the "low" side of the pressure switch inside the control compartment. (Fig. #20) Connect the second tube to the lower pressure tap (marked "HIGH") and route to the control box as before. Connect this tube to the remaining port on the pressure switch.

Tubes may touch unit and be trimmed if required.

Note: Ensure that there are no blockages in these tubes, as this will cause the control to malfunction.



CAUTION:

The adjustable vent restrictor located on the underside of the firebox top must be fully open.

3. Locate the power vent termination following the clearance to combustable table (Page 2), venting configuration diagram (Fig. #1 & 2), and terminal location diagram (Fig. #3).

4. Cut and frame a 14 5/8" wide by 14 7/8" high opening. For standard up and out installations, the opening should be 3/4" lower than the minimum specified in Fig. #2. Height of the opening will vary with each installation. See Fig. #5.

5. Attach the power vent terminal, by securing the outer flanges on the perimeter of the terminal to the outside wall; ensure that the terminal is the right way up (exhaust at the bottom). Once secured to the building, the outer flanges may be covered with siding/ stucco/etc. up to the level of the perimeter edge. As per local building codes. See Fig. #6.

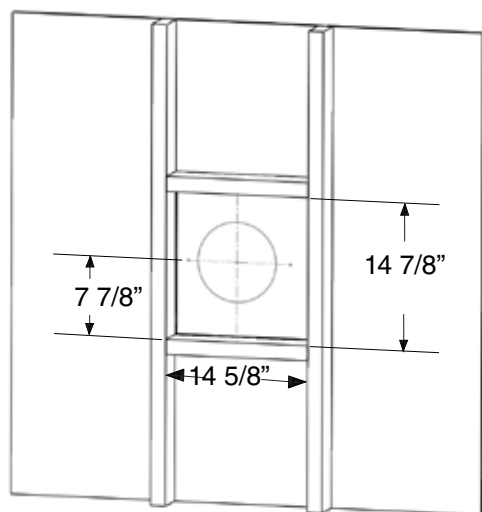
6. Determine desired amount of exterior power vent protrusion, and fasten mounting flange with supplied fasteners. Silicone joint after installation. See Fig. #8 and #13.

- 7a. For wall thicknesses 7 1/2" or less, install the inner wall plate supplied over the terminal as shown in Fig. #7 and secure to the framing.

NOTE:

THE TCWS 54DST DOES NOT REQUIRE THE TCVT. PVKIT. IT HAS A VACUUM SWITCH AND TUBES WHICH ARE PRE-INSTALLED INTO THE UNIT.

Fig. #5



CAUTION:

The rise and run combination and the number of elbows must not exceed specifications in Fig #1 and Fig #2.

Fig. #7

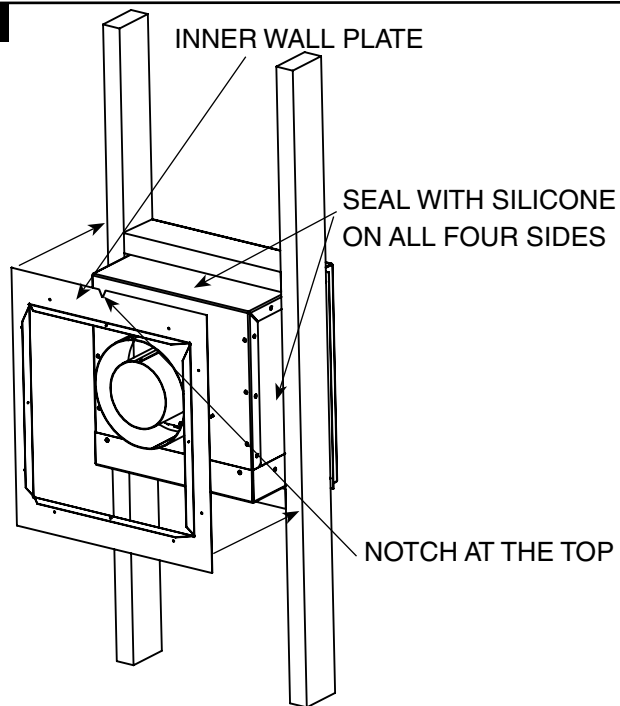


Fig. #6

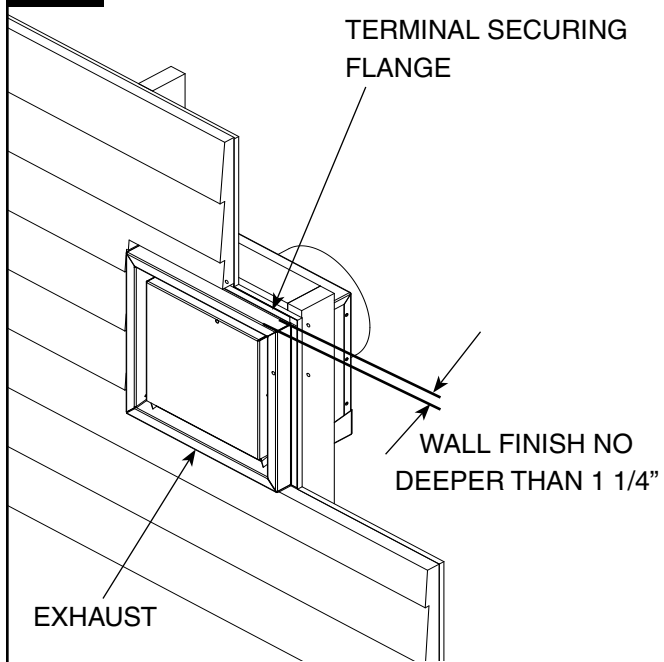
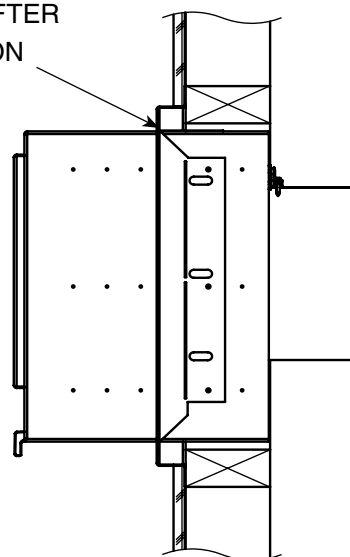


Fig. #8

SILICONE AFTER INSTALLATION



ADJUSTABLE FROM FLUSH TO SURFACE. MOUNT IN 1 1/2" INCREMENTS



7b. For wall thicknesses greater than 7 1/2" and up to a maximum of 16 1/2", attach the inner wall plate to the wall sleeve assembly, using the four screws provided (Fig #9). Then slide this assembly over the terminal with the notch at the top (Fig #11 & Fig. #12).

8. Slide the wall pipe cover, with the small notch oriented at the top, over the vent pipe and attach pipe to the fireplace. (Fig #10) Connect the vent pipe to the vent terminal and then secure the inner wall plate and wall pipe cover to the framing. This ensures that any insulation is retained in the wall and that the correct clearances are maintained.

9. Run the required Simpson Duravent GS / Secure Vent / Selkirk Direct-temp or ICC Exceldirect pipe from the adaptor to the terminal assembly. Assemble as per the vent pipe manufacturer's instructions including all shields and firestops.

NOTE: The vent terminal comes pre-painted, but can be painted to match your wall finish color using high temperature paint that can withstand temperatures of at least 250 degrees Fahrenheit or 120 degrees Celcius.

Fig. #11

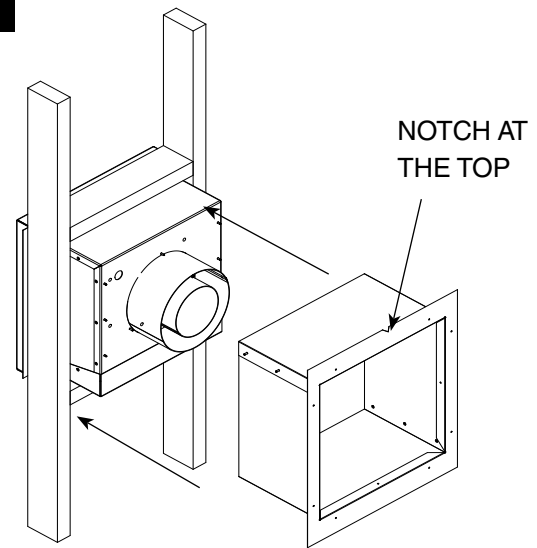


Fig. #12 WALL THICKNESS GREATER THAN 7 1/2" UP TO MAX. 16 1/2"

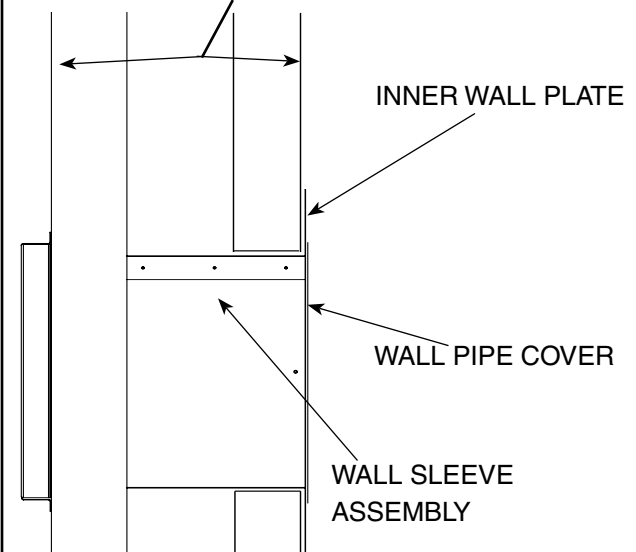


Fig. #9

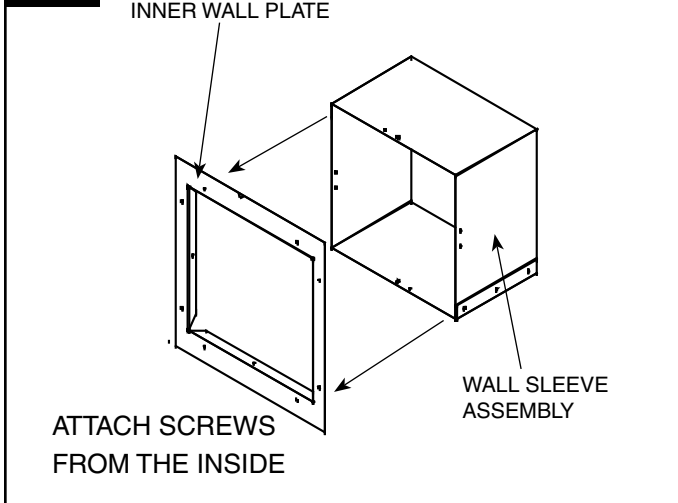


Fig. #10

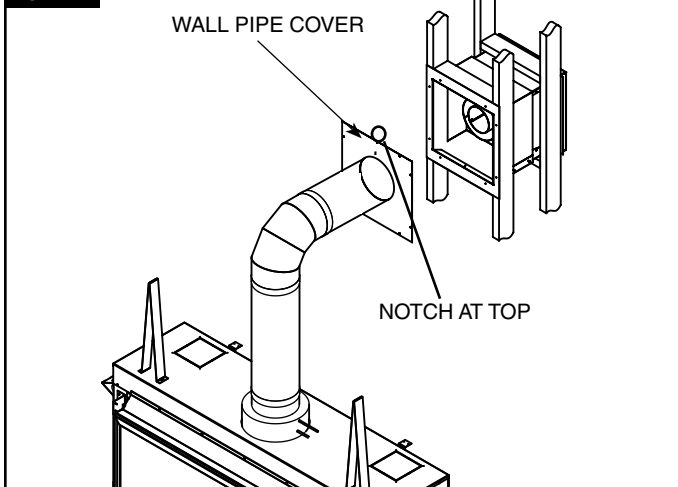
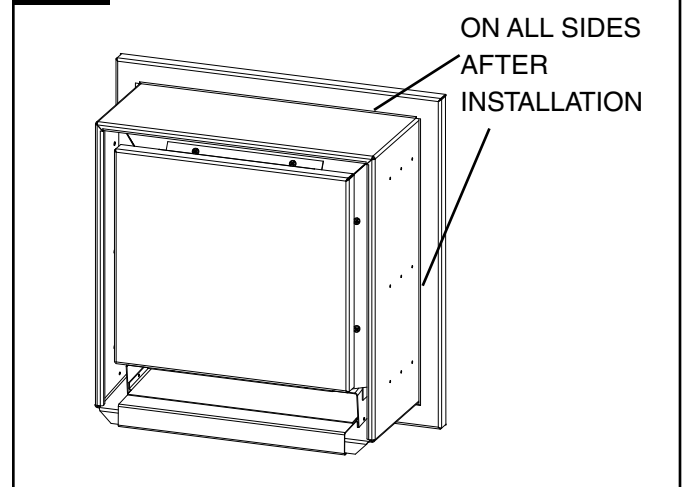


Fig. #13

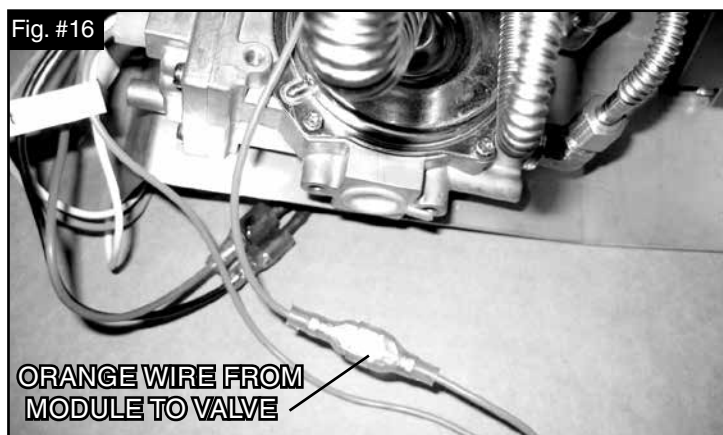
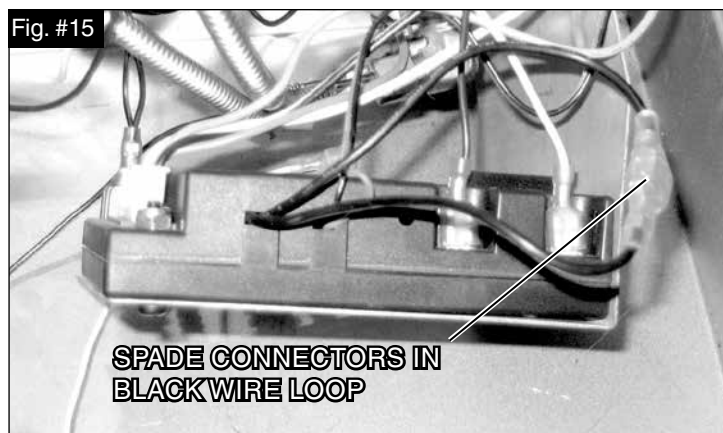
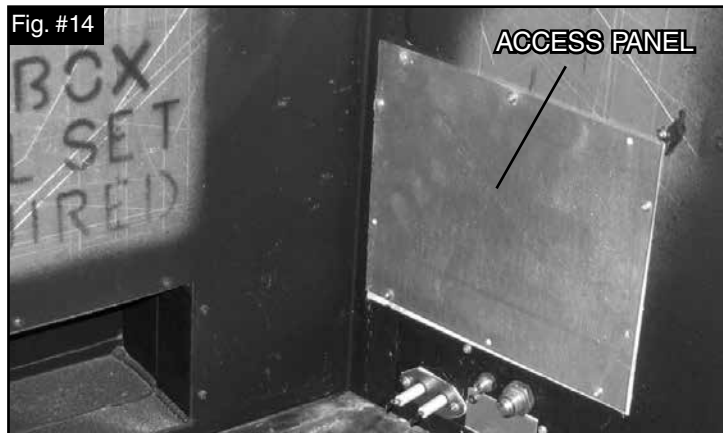


Control System Connection

For “Series C” Fireplaces

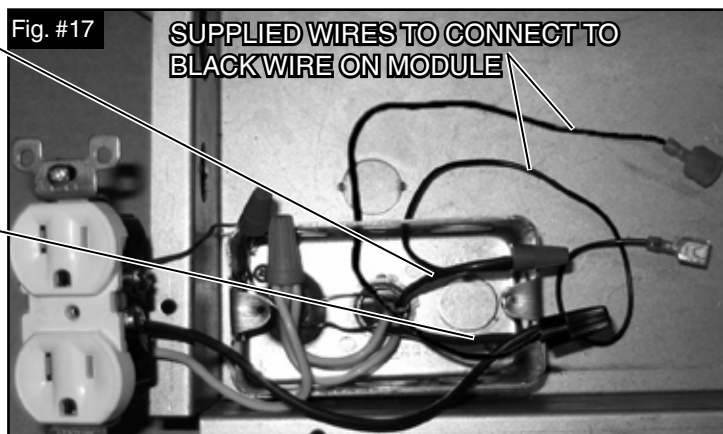
The gas control system is located on the right hand side of the firebox behind an access panel and the decorative panel.

1. Burner assembly, burner media and/or decorative panels may need to be removed if already installed (see main installation manual for details).
2. Remove access panel located on the right hand side of the firebox (Fig. #14).
3. Locate and disconnect the spade connectors in the black wire loop on the right side of the module and in the orange wire running from the module to the socket labelled “pilot” on the valve (Fig. # 15 and #16).
4. Using the jumper wires provided, connect the 120V “hot” supply wire to one of the black wires from the control module. Then connect the “hot” wire from the power vent blower to the other black wire on the control module, (Fig. #17). The module acts as a switch to turn on the power vent blower. (Also see wiring diagram on Pg.15).



HOT WIRE FROM BLOWER

HOT WIRE FROM 120V SUPPLY



Pressure Switch Installation

For “Series C” Fireplaces

1. Connect the pressure switch jumper wires to the orange wire (Fig. # 19).
2. Attach the silicone tube from the upper pressure tap on the power vent adaptor (Fig. #4) to the “low” port of the pressure switch. Attach the other silicone tube from the lower pressure tap to the “high” port of the pressure switch (Fig. #20).
3. Secure the pressure switch in the control box using the screw provided (Fig. #21).
4. Continue with installation and reassemble all of the parts previously removed.

This power vent system can only run on 115 V AC. Before operating the unit, the battery backup located behind the wall switch receiver must be removed. The wall switch must be set to power vent mode, see unit manual.

WARNING: This switch must be installed in a vertical position and will not function if installed otherwise. (Fig. 18)

Fig. #19

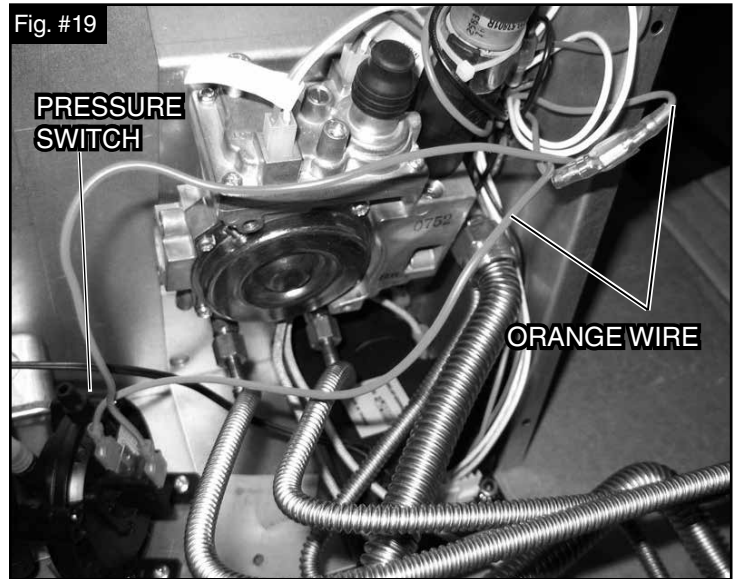


Fig. #20

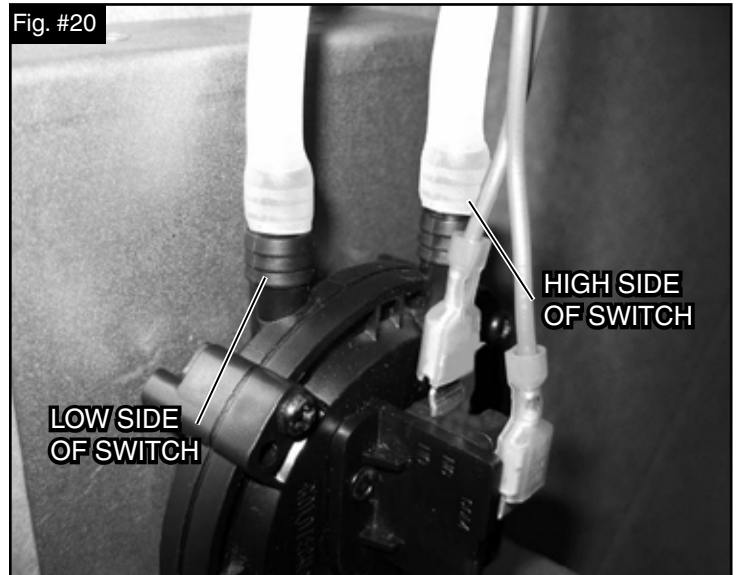


Fig. #18



Fig. #21



Control System Connection

For “Series D” Fireplaces

The gas control system is located on the right hand side of the firebox behind an access panel and the decorative firebox panel (if installed). The fireplace is operated via a wall control and a hand held remote control unit.

The wall control is connected to the fireplace by a 40 ft. communication cable supplied with the fireplace.

Installation

1. Place the fireplace in the desired location.
2. Remove the window from the fireplace.
3. Remove access panel from right hand side of the firebox (Fig #22).
4. Connect 110 V. AC electrical supply to the wires installed inside the junction box (Fig #23). The fireplace is rated at 110 volts, 60Hz, 0.25A. The optional power vent kit is rated at 115 volts, 60Hz, 1.8A.

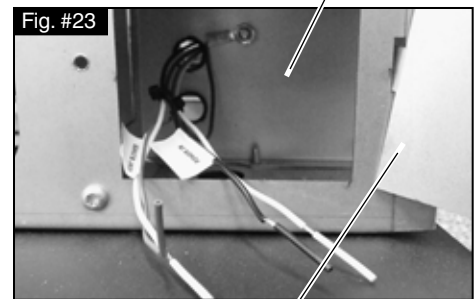
The electrical wires can be accessed from both inside and outside the junction box by removing one of the two small access panels (Figs #23 & 24).

5. Connect the gas supply to the valve (Fig #24).
6. Attach one end of the wall switch control cable to the wall control. (not shown), and the other end to the interface board (Fig #24).
7. If not already installed, install the burner using the instructions supplied with the burner kit.
8. Turn on the gas supply and check that all connections are tight and leak free.

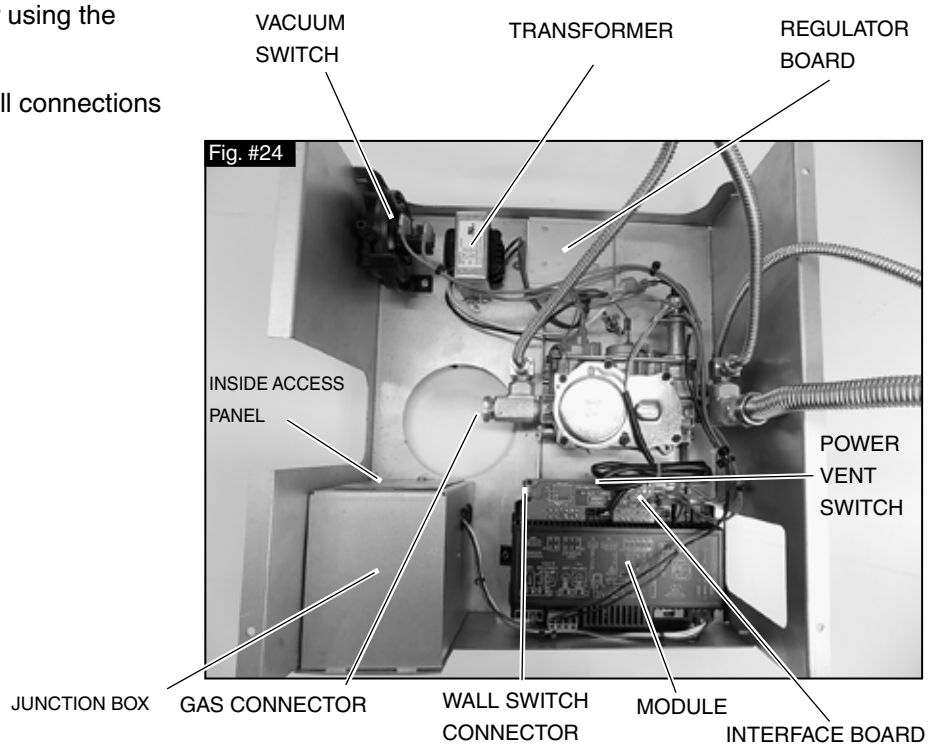
FIREBOX ACCESS PANEL



JUNCTION BOX



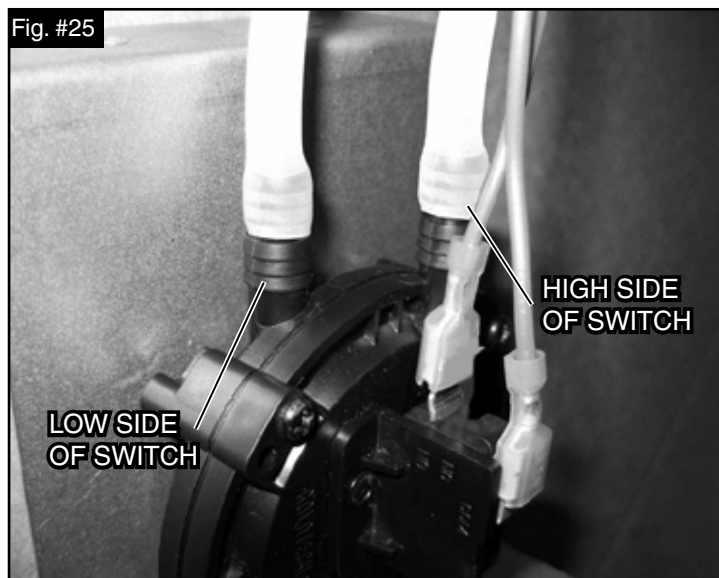
OUTER ACCESS PANEL



Pressure Switch Installation

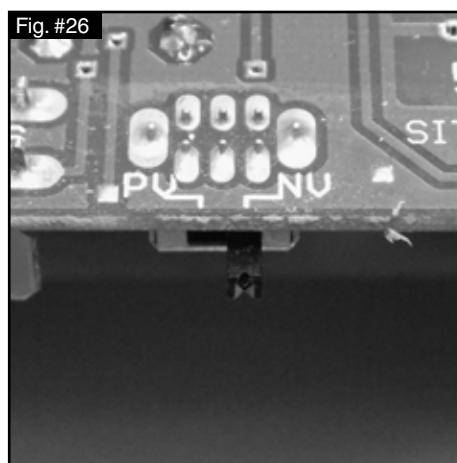
For “Series D” Fireplaces

Attach the silicone tube from the upper pressure tap on the power vent adaptor (Fig. #4) to the “low” port of the pressure switch. Attach the other silicone tube from the lower pressure tap to the “high” port of the pressure switch (Fig. #25).



Selecting Natural Vent and Power Vent Modes

The NV / PV (Natural Vent / Power Vent) switch (Fig #26) on the interface board (Fig #24) is set according to which type of evacuating vent system is present. If the fireplace is vented without the assistance of a power vent, the switch should be set to “NV”. If using a power vent, “PV” should be selected.



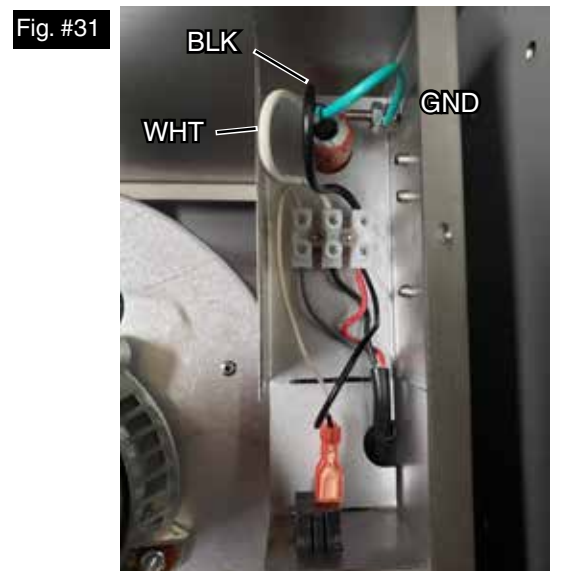
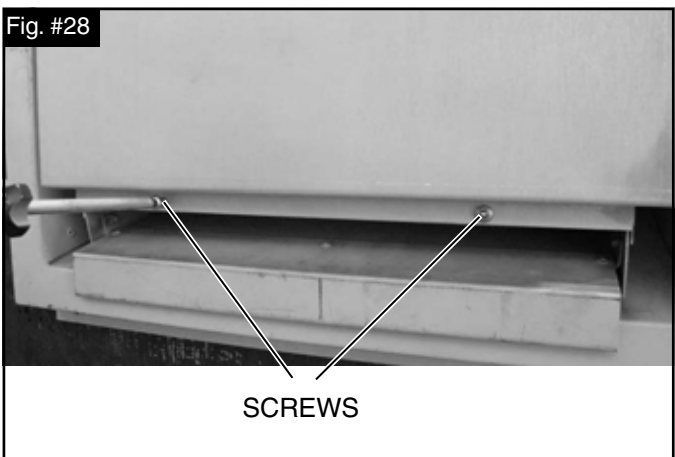
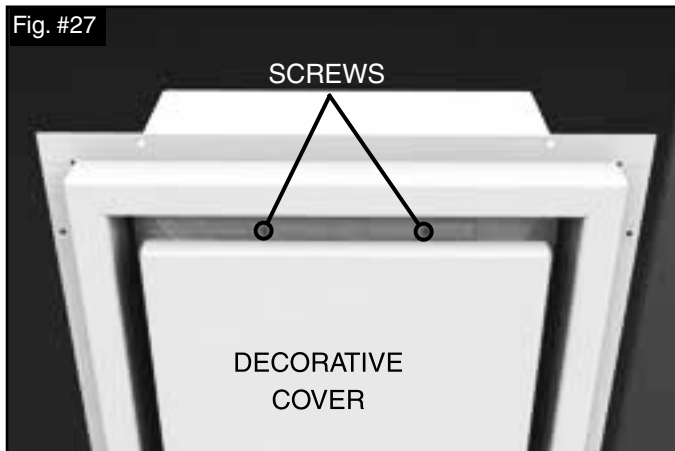
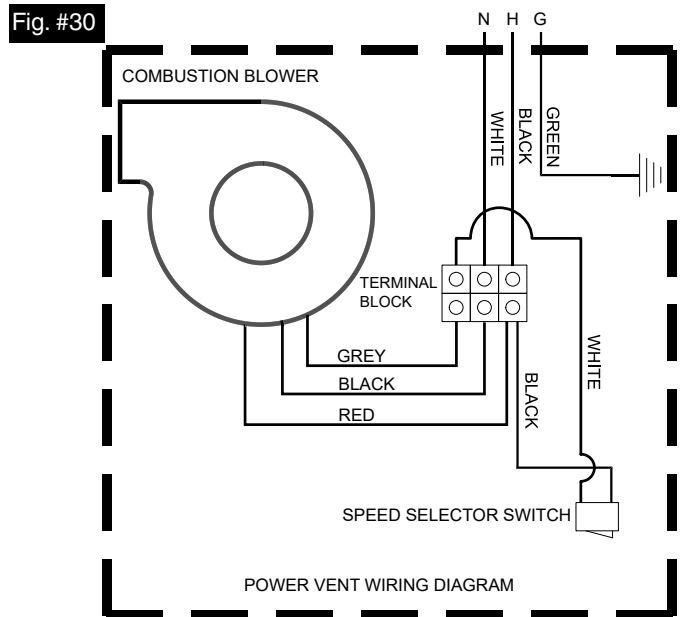
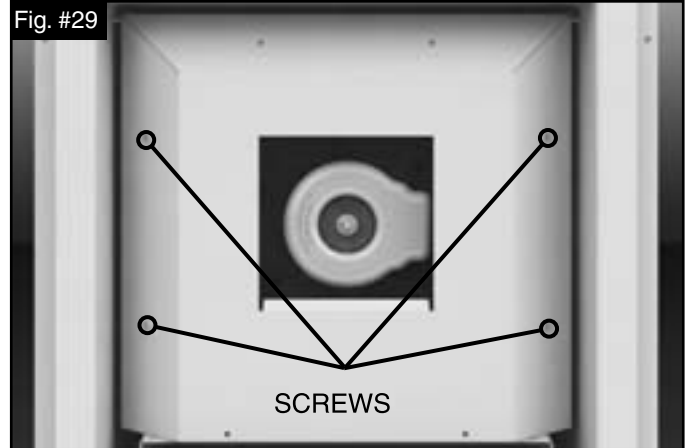
Important Note:

When switching between NV and PV, both the electrical power supply to the fireplace must be turned off and the backup batteries removed to properly re-set the module.

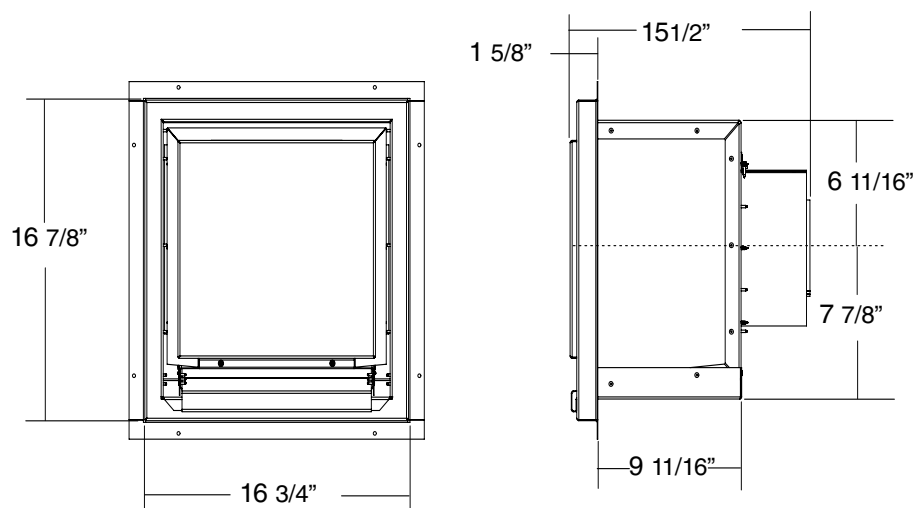
Fan Wiring

The Flush Mount Power Vent assembly has an electrical connector block mounted internally. The external wiring from the main voltage/control module should be connected to this block. Follow the steps below to access this block.

1. Remove the 2 top and 2 bottom screws securing the end cap only. Remove the cover (Fig #27 & #28).
2. Remove the 4 screws securing the blower cover to the assembly and remove. (Fig #29)
3. Run the power supply wire from the fireplace to the connector block inside the power vent assembly. (Fig #30 & #31). Connect wires as shown. Connect ground to ground screw and tighten strain relief.
4. Reposition blower cover and secure in place with previously removed screws. Place the end cover back onto the upper tabs and secure in place with 2 screws on top and 2 on bottom.

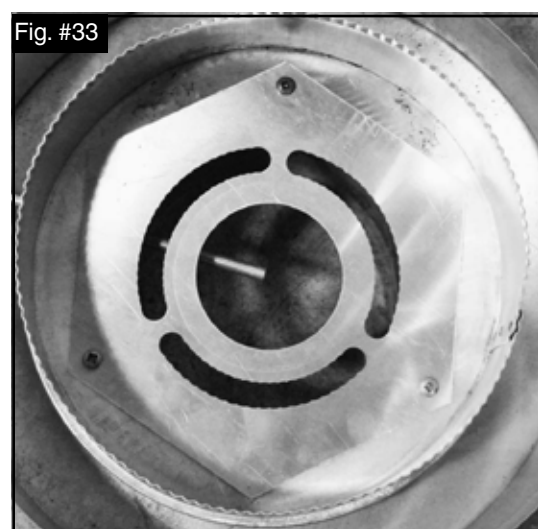


Dimensions



NOTE: If this powervent is to be installed in a TC30 then it should use the full restrictor as shown in Fig. #32.

NOTE: For all other units use the restrictor shown in Fig. #33.



Venting Components

SIMPSON DURAVENT COMPONENTS

Number	Description
1208	6" Pipe Length
1207	9" Pipe Length
1206	12" Pipe Length
1204	24" Pipe Length
1203	36" Pipe Length
1202	48" Pipe Length
1211	11" to 14-5/8" Pipe, Adjustable
1217	4-10" Pipe, Adjustable
1245	45° Elbow
1290	90° Elbow
1240	Round Ceiling Support /Wall Thimble Cover
1241	Cathedral Ceiling Support Box
1242	Wall Firestop
1247	Wall Thimble
1263	Ceiling Firestop
1288	Wall Strap

SECURE VENT COMPONENTS

Number	Description
SV5L6	6" Pipe Length
SV5L12	12" Pipe Length
SV5L24	24" Pipe Length
SV5L36	36" Pipe Length
SV5L48	48" Pipe Length
SV5LA	6" Pipe, Adjustable
SV5LA12	12" Pipe, Adjustable
SV5LA24	24" Pipe, Adjustable
SV5E45	Swivel 45° Elbow
SV5E90	Swivel 90° Elbow
SV5CSB	Adjustable decorative sq. cathedral support
SV5AC	Collar for decorative sq. cathedral support
SV5SU	Universal support
SV5SD	Floor support
SV5BM	Wall band
SV5RSA	Attic radiation shield
SV5RSM	Wall radiation shield
SV5BF	Firestop

SELKIRK DIRECT-TEMP

Number	Description
1605006	6" Pipe Length
1605009	9" Pipe Length
1605012	12" Pipe Length
1605018	18" Pipe Length
1605024	24" Pipe Length
1605036	36" Pipe Length
1605048	48" Pipe Length
1605082	4-10" Pipe, Adjustable
1605215	45° Elbow
1605230	90° Elbow
1605424B	Cathedral ceiling support box (blk)
1605500	Firestop spacer
1605460B	Wall thimble (blk)
1605430	Wall support band

ICC MODEL EXCELDIRECT

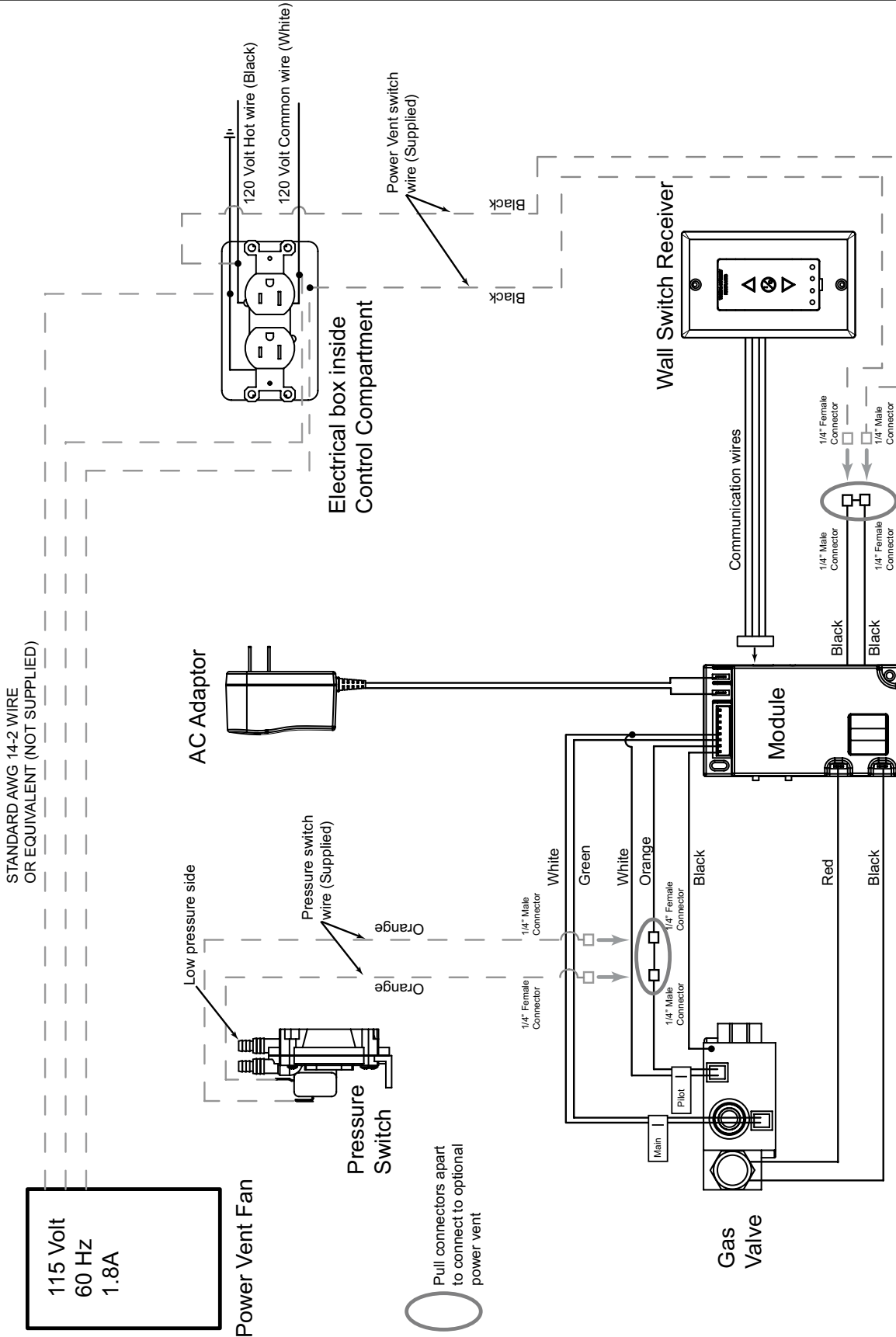
Number	Description
TC-5DL6	6" Pipe Length
TC-5DL1	12" Pipe Length
TC-5DL2	24" Pipe Length
TC-5DL4	48" Pipe Length
TE-5DE45	Swivel 45° Elbow, Galvalume
TE-5DE90	Swivel 90° Elbow, Galvalume
TM-5SS	Square Support / Radiation Shield
TM-5RDS	Round Support / Radiation Shield
TM-5CS	Cieling Support / Firestop
TM-OS	Offset Support
TM-SR	Roof Support
TM-WS	Adjustable Wall Support
TM-5WT	Insulated Wall Thimble
TM-5TR	Trim Ring, Black
TM-5AS	Attic Radiation Shield / Firestop



Wiring Diagram for Series "C" Fireplaces

Fig. #34

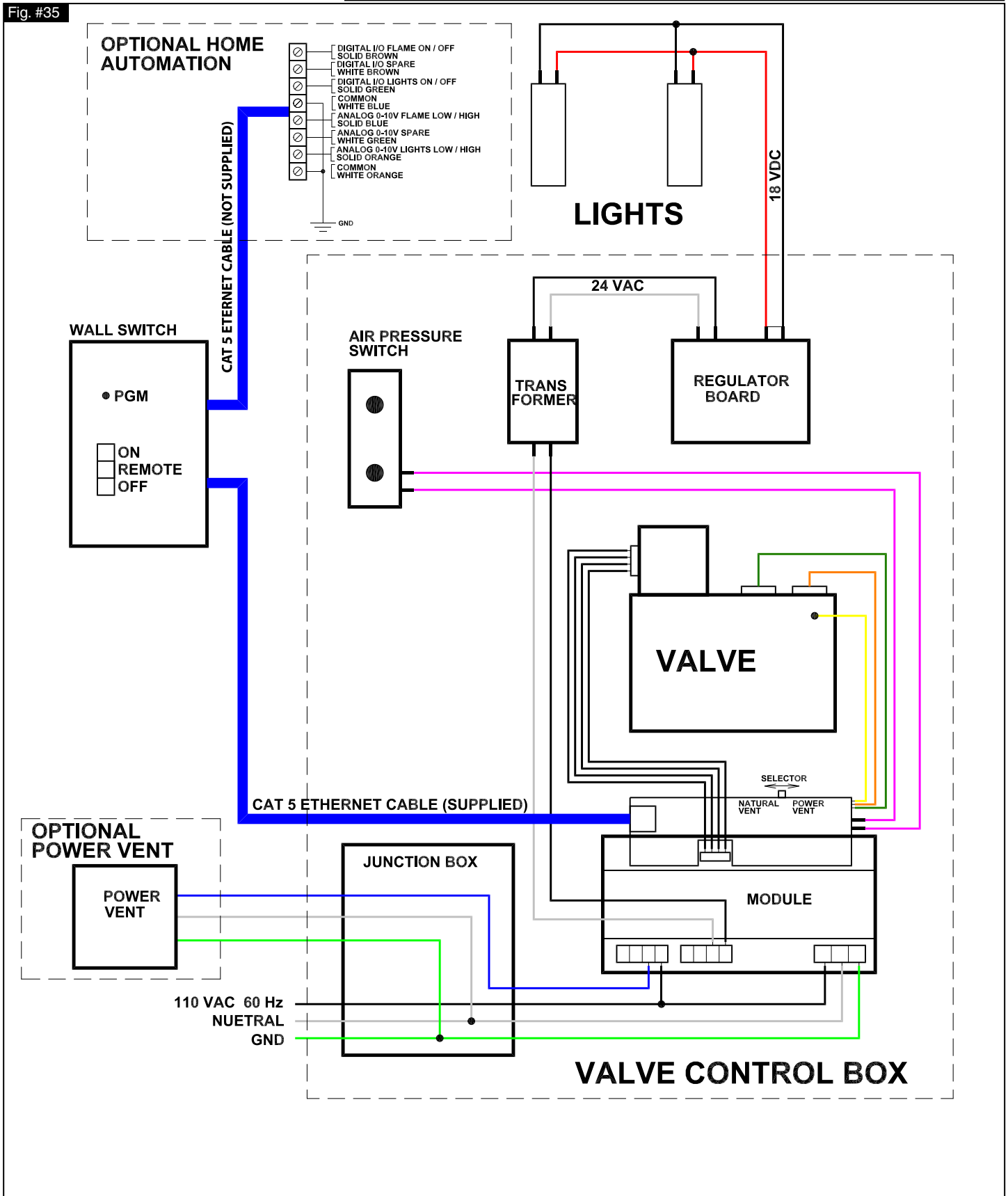
Wiring the Optional Power Vent Kit provided by Town & Country



All electrical installations should be performed by a qualified electrician to the Canadian and U.S. National Electrical Codes (CSA C22.1 for Canada), (ANSI/NFPA 70 for the U.S.) and/or local electrical codes.

Wiring Diagram for Series “D” Fireplaces

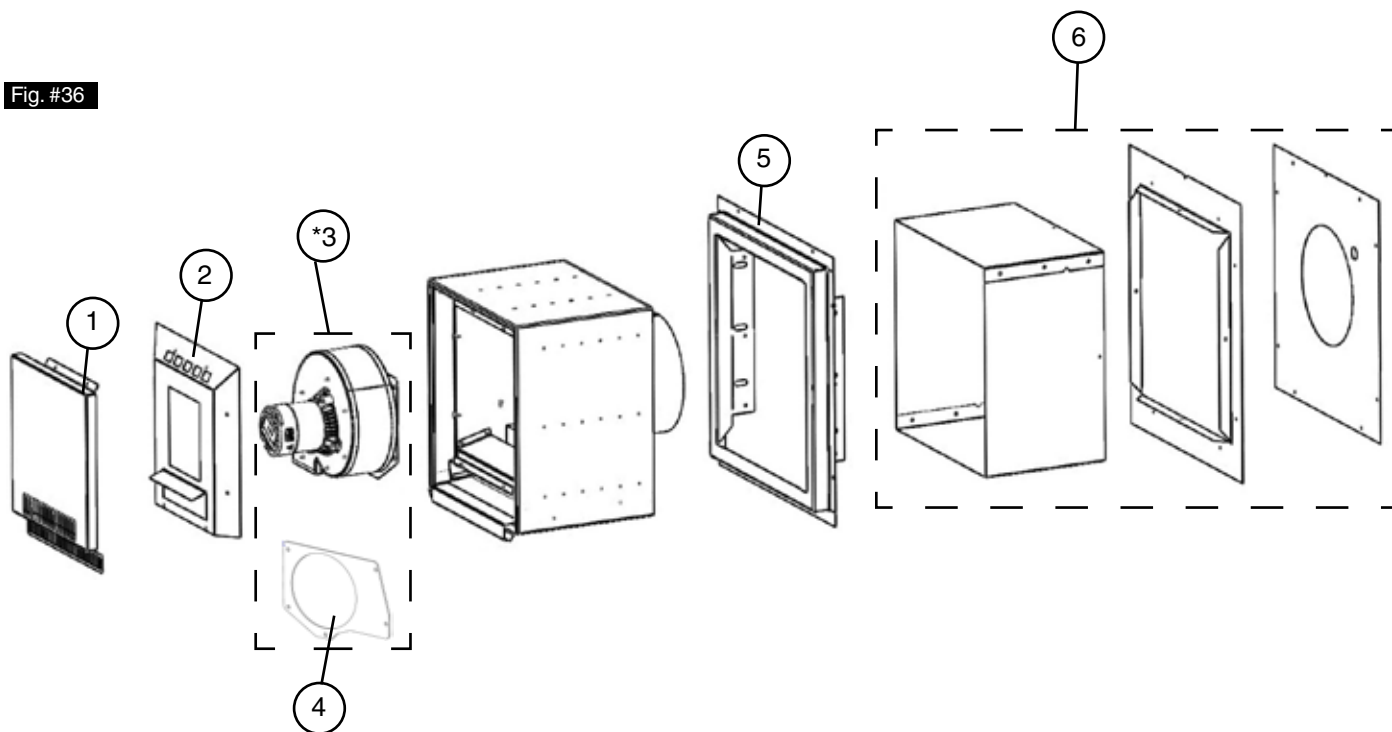
Fig. #35



Parts Diagram

ITEM	PART No.	DESCRIPTION	QTY
1	80001902	FRONT GRILL COVER	1
2	80002217	INNER GRILL	1
*3	80000553	BLOWER ASSEMBLY 1' TO 25'	1
*3	80000554	BLOWER ASSEMBLY 25' TO 110'	1
4	80002024	BLOWER GASKET	1
5	80002216	MOUNTING FLANGE	1
6	80002059	FIRESTOP KIT	1

Fig. #36





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For Technical Support, please contact your retailer.

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