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.



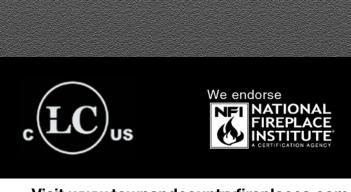
# VERTICAL POWER VENT KIT



Note: Some models require a TCVT.PVKIT

For use with any TC Series "D" units, except for the TC54.

SKU# 22270013 3 - 110 FEET INSTALLATION INSTRUCTIONS



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## **Power Vent Characteristics**

Locate the fireplace as per the main instructions supplied.

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.

This power vent is switchable from "Low" to "High". The power setting must be selected prior to operation.

For venting lengths between 3 & 25 feet, the switch must be set to "Low".

For venting lengths between 26 & 110 feet, the switch must be set to "High".

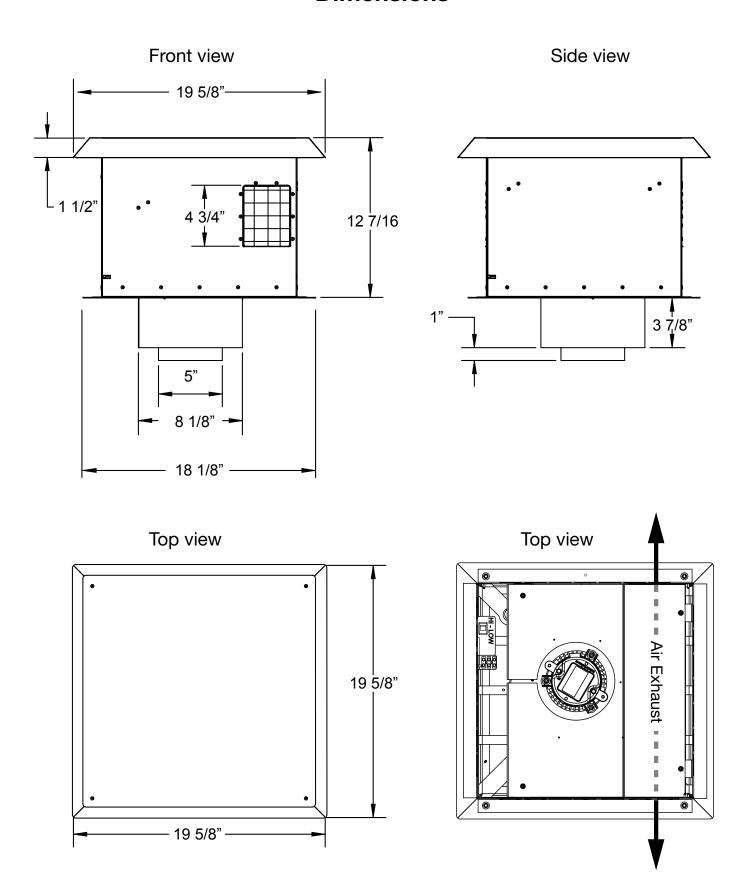


Figure 1: TCVT.PVVT dimensions.

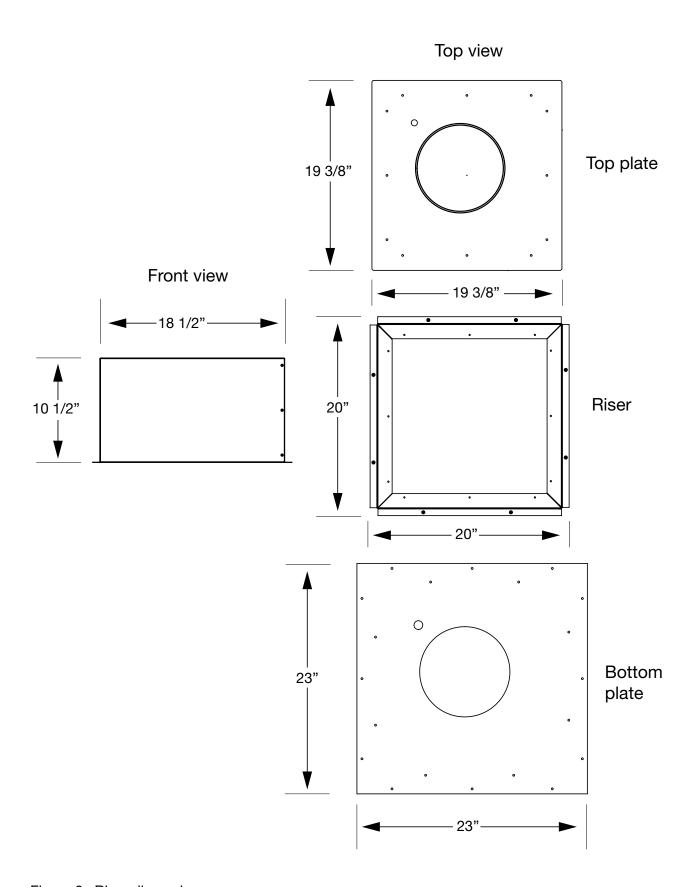


Figure 2: Riser dimensions.

## Venting Length

POWER VENT	3 - 25'	26'- 110'
TCVT.PVVT	LOW	HIGH

## Power Vents available by Model

(See TCVT.PVKIT installation instructions on page 12)

MODEL	TCVT.PVVT	TCVT.PVKIT REQUIRED
TC30.D	$\checkmark$	YES
TC36.DAR	V	YES
TC36.D	√	YES
TC36.DST	<b>√</b>	YES
TCWS.38D	<b>√</b>	YES
TC42.D	√	YES
TCWS.54D	V	YES
TCWS.54DST	√	NO
TCWS.54STOK	V	NO

## Venting Configurations

Maximum total vent length is 110 ft 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. The vent can be installed with any combination of rise and run. Ensure vent pipe is properly supported and sealed.

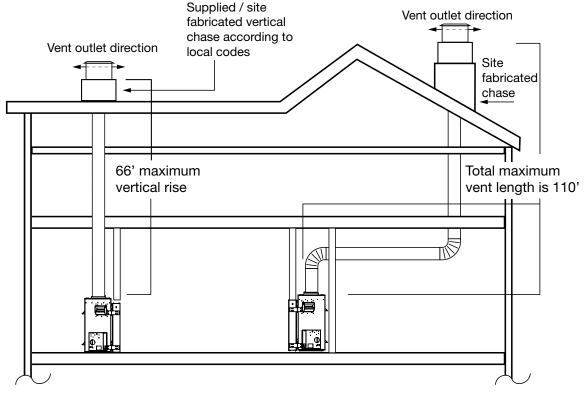


Figure 3: TCVT.PVVT venting configurations.

## Vent Terminal Clearance

#### Minimum clearances to combustibles Table

Terminal casing: See Figure 4

• Vertical vent pipe: 1.5 in. (38mm)

Horizontal vent pipe: 1.5 in. (38mm)

All other clearances are as per the fireplace installation instructions.

Minimum clearances to the vent terminal must be maintained as shown in (Figure 4). Measure clearances to the nearest edge of termination hood.

#### NOTE: LOCAL CODES OR REGULATIONS MAY REQUIRE DIFFERENT CLEARANCES.

NOTE: For flat roof installations, check local codes for elevated platform dimensional requirements.

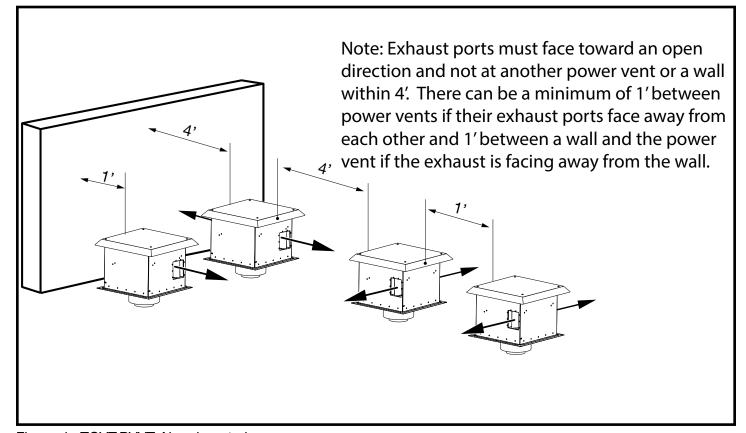


Figure 4: TCVT.PVVT Air exhaust clearances.

Note: A site fabricated riser or standoff must be built to elevate this power vent from any surface where water or snow could accumulate at the power vents base if not using supplied riser. Consult local codes to determine the height of this chase or standoff.

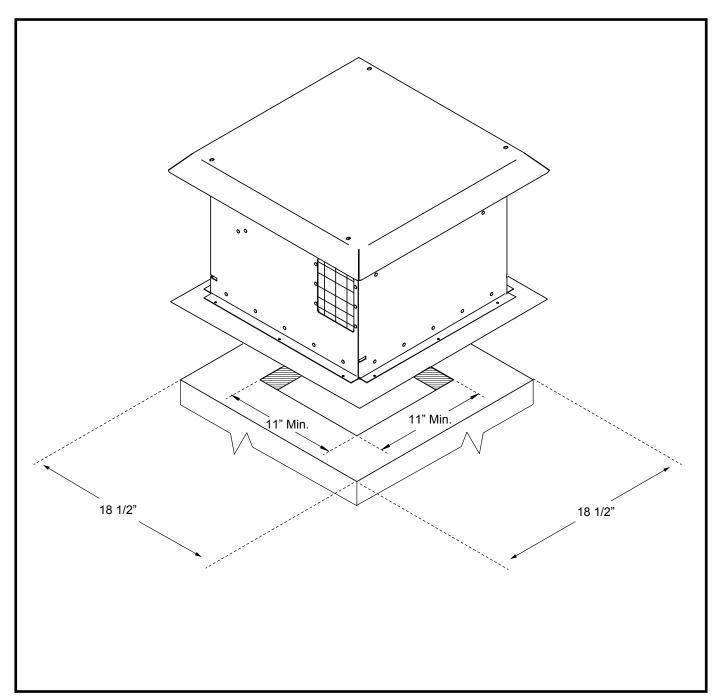


Figure 5: TCVT.PVVT Installation.

14-2 Electrical wiring must not be in contact with the vent pipe. There must be a minimum of 1 1/2 inches distance between the electrical wiring and the vent pipe

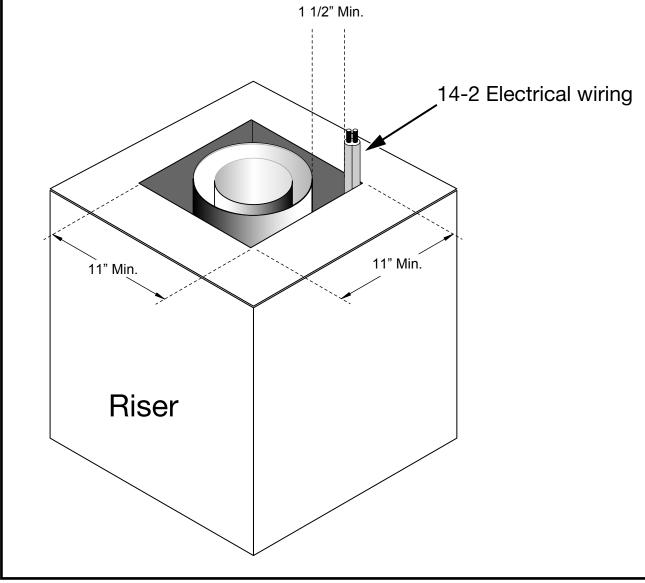


Figure 6: Electrical wiring clearance.

Venting from fireplace to terminal must overlap enough so that the venting can be secured with screws. Tape over the joints using only the aluminum ducting tape supplied with the fireplace.

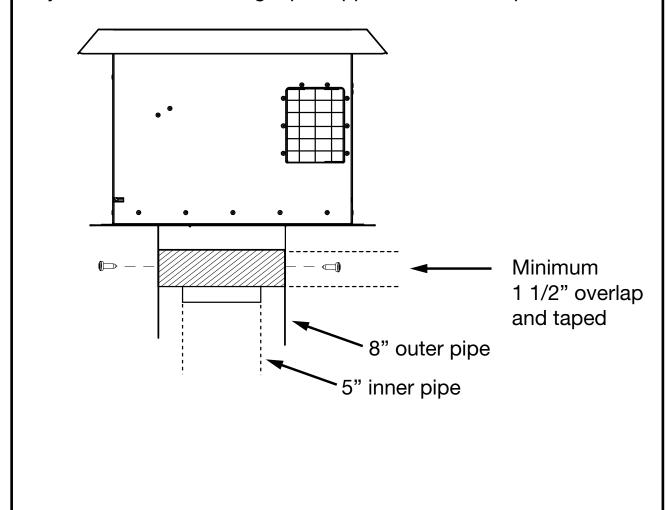


Figure 7: Power vent overlap.

## Securing the Power Vent to the Site Fabricated Riser —

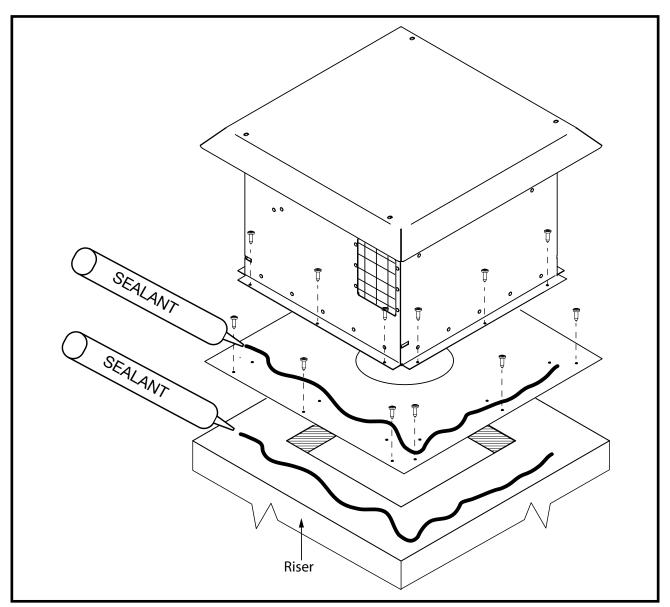


Figure 8: Power vent attachment.

- Power Vent unit attaches to site fabricated riser at 3 points along each edge of the terminal base using installer supplied hardware. Terminal base attaches to supplied riser or site fabricated riser.
- Use Weather Sealant between the base of the power vent terminal and plates and the riser as necessary
  to prevent moisture from entering the power vent unit and building (Figure 8). Flash according to local
  codes.

## **TCVT.PVKIT Installation**

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 "Venting Components" on page 18 of this manual. This vent can only be used as a vertically mounted roof termination.

1. Attach the vent adaptor directly to the appliance with the three screws (Figure 9) and seal outer pipe with aluminium tape provided.

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 (Figure 9). 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. 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.

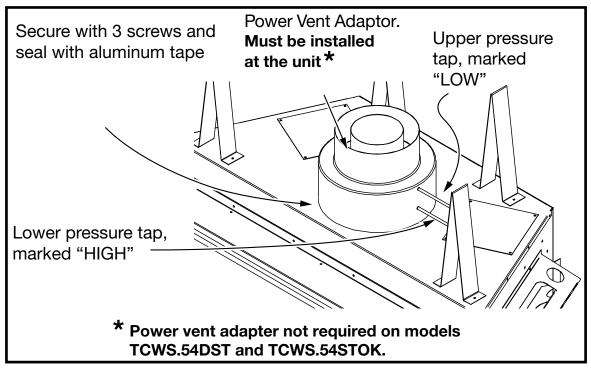


Figure 9: Power vent adapter.

- 3. Locate the power vent termination following the clearance to combustible table, (See "Minimum clearances to combustibles Table" on page 7), venting configuration diagram and terminal location diagram (Figure 4 on page 7).
- 4. Seal and attach the power vent terminal base plate to the site fabricated chase as necessary to prevent moisture from entering the power vent unit. (Figure 5 on page 8) and flash according to local codes.
- 5. 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:

If this power vent is to be installed in a TC30 then it should use the full restrictor as shown in Figure 10. For all other units use the restrictor shown in Figure 11.



Figure 10: Restrictor for the TC30.



Figure 11: Restrictor for all other units.

## **Pressure Switch Hose Connection**

Attach the silicone tube from the upper pressure tap on the power vent adaptor (Figure 9 on page 12) 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 (Figure 12).

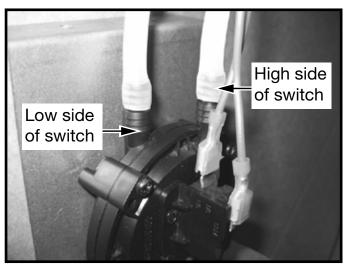


Figure 12: High and low sides of switch for Series D.

## Selecting Natural Vent and Power Vent Modes

The NV / PV (Natural Vent / Power Vent) switch (Figure 12) on the interface board (Figure 13) 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" must be selected.

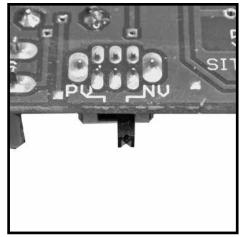


Figure 13: Vent mode selection switch.

## **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.

**DO NOT** install batteries into the wall switch while using a power vent.

## Power Vent Wiring at Fireplace

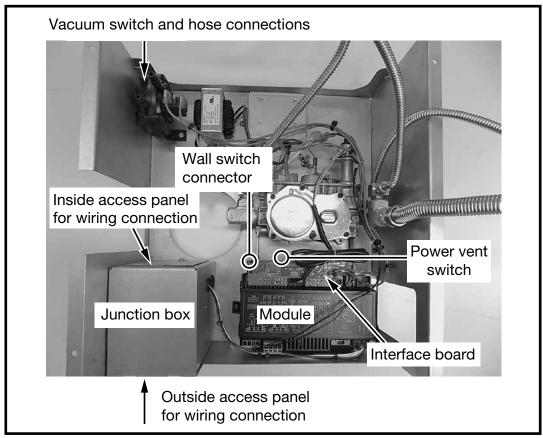


Figure 14: Control box.

Run a 14 - 2 wire from the fireplace to the power vent. Connect wires to the blue and white wires in the junc-

tion box.

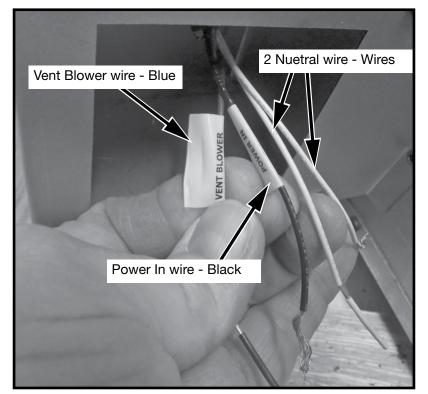


Figure 15: Wiring to power vent at fireplace junction box.

## Power Vent Wiring

The 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 4 hex screws holding the top cover in place (Figure 16) and remove the cover.
- 2. Remove the internal cover plate (Figure 17)by removing 4 screws and slipping the plates slot around the motor wiring to remove. This exposes the electrical wiring entry point.
- 3. Run the electrical supply wire from the fireplace up through the bottom of the power vent and to the connector block inside the power vent assembly (Figure 18). Connect wires as shown in Figure 19 and Figure 20. Connect ground to ground screw and tighten strain relief.
- 4. Reposition Internal cover plate and blower cover and secure in place with previously removed screws.

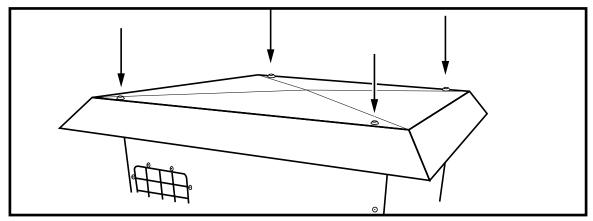


Figure 16: Fan access cover.

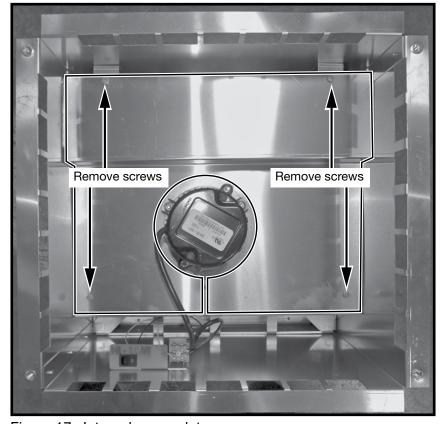


Figure 17: Internal cover plate.

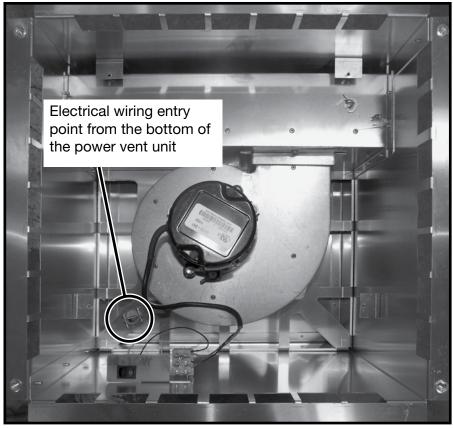


Figure 18: Electrical wiring entry point.

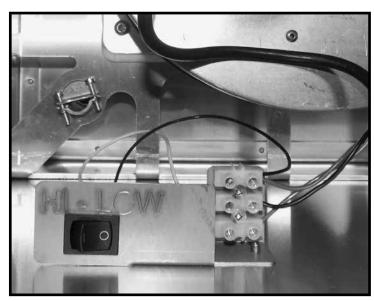


Figure 19: High - Low Switch wiring.

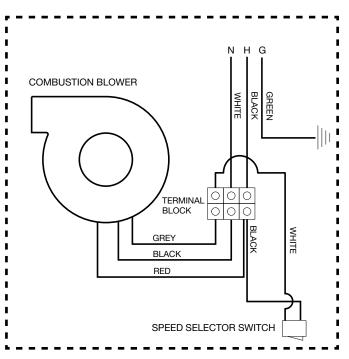


Figure 20: Power vent wiring diagram.

#### SIMPSON DURAVENT COMPONENTS

Number	Description
1208	6" Pipe Length
1207	9" Pipe Length
1206	
1204	24" Pipe Length
1203	36" Pipe Length
1202	48" Pipe Length
121111" to	14-5/8" Pipe, Adjustable
1217	4-10" Pipe, Adjustable
1245	
1290	90° Elbow
1240Round Ceiling Sup	port /Wall Thimble Cover
1241Cathe	edral Ceiling Support Box
1242	Wall Firestop
1247	Wall Thimble
1263	Ceiling Firestop
1288	
	•

#### **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
	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	
SV5SD	Floor support
SV5BM	Wall band
SV5RSA	Attic radiation shield
	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
TC-5DLF	
TC-5DLT	12" Pipe, Adjustable, Galvalume
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	Ceiling 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

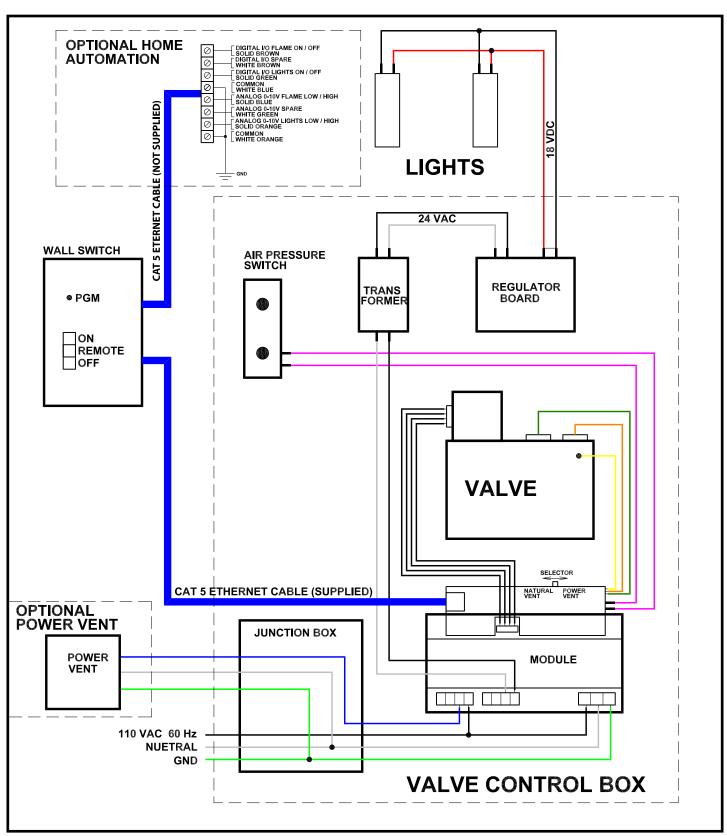


Figure 21: Town & Country Series D wiring diagram.

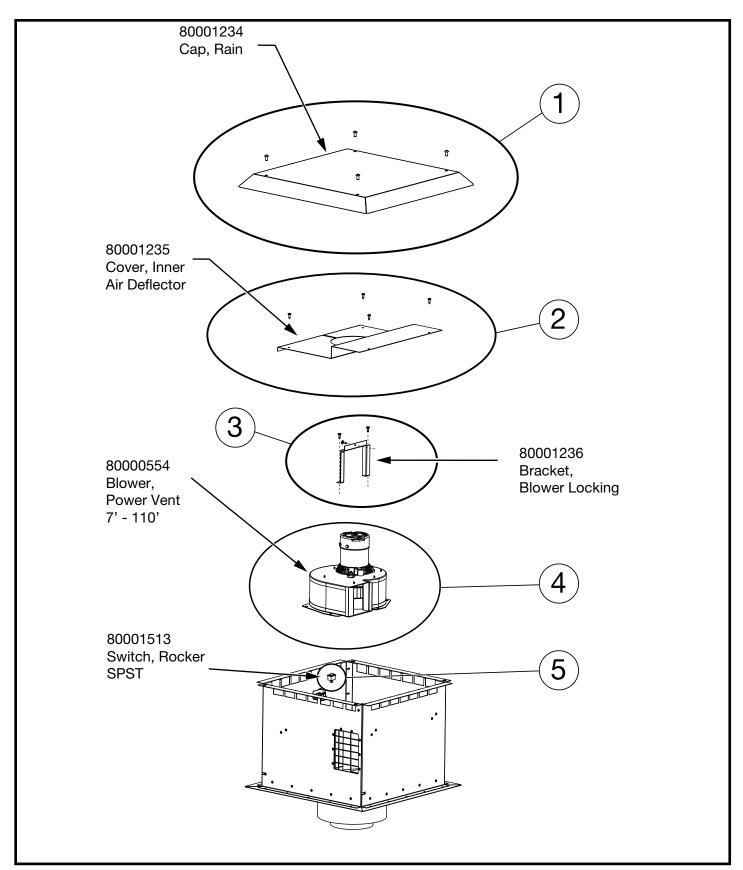


Figure 22: TCVT.PVVT Parts.

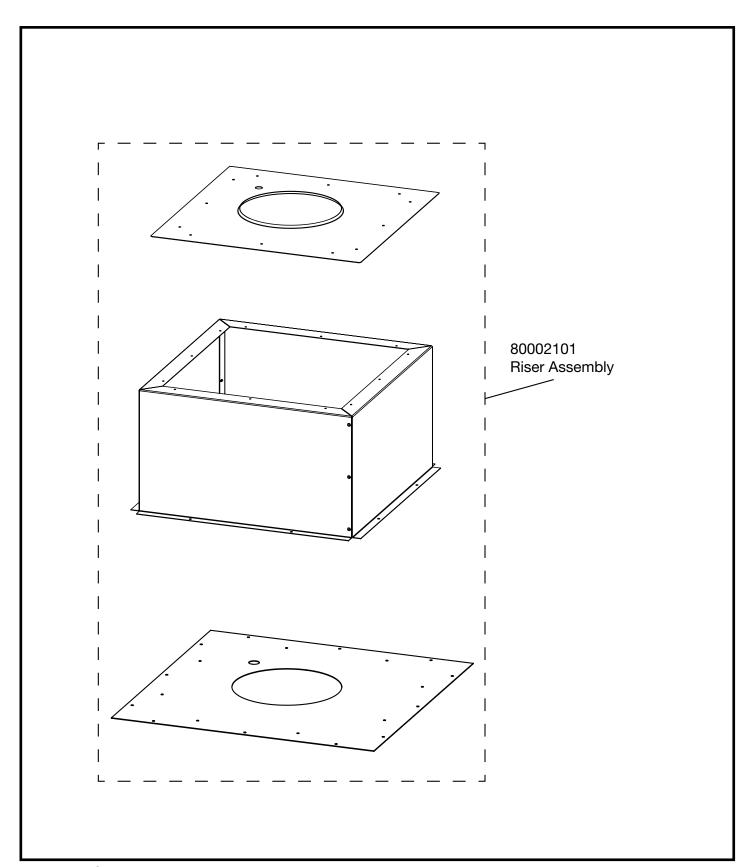


Figure 23: Chase.

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