

INSTALLER: LEAVE THESE INSTRUCTIONS WITH THE APPLIANCE THIS TERMINAL IS SERVING.
CONSUMER: RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE. THESE INSTRUCTIONS
ARE TO BE USED IN CONJUNCTION WITH THE APPLIANCE AND PVA INSTRUCTIONS.

EN



INSTALLATION INSTRUCTIONS



CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS: ANSI Z21.88 • CSA 2.33 FOR VENTED GAS FIREPLACE HEATERS
 AND ANSI Z21.50 • CSA 2.22 FOR VENTED GAS FIREPLACES.

GAS POWER VENT (GPV)

The GPV is a Direct Vent Terminal designed to allow installation of gas appliances where typical vent configurations cannot be achieved.

GENERAL INFORMATION

These Installation Instructions must be used in conjunction with the appliance and appropriate PVA adapter kit Installation Instructions. Clearances listed in these Instructions supersede those in the appliance's Installation Instructions.

Power venting of direct vent appliances may result in the reduction of efficiencies by as much as ten percent. Consider this in making any venting and heating decisions in any installation application.

SELECTING AND INSTALLING THE APPLIANCE

When selecting a gas appliance for use with the GPV, take into consideration the various requirements and limitations in the venting installation section for the following models:

Models Equipped with an Intermittent Pilot Ignition (I.P.I.)

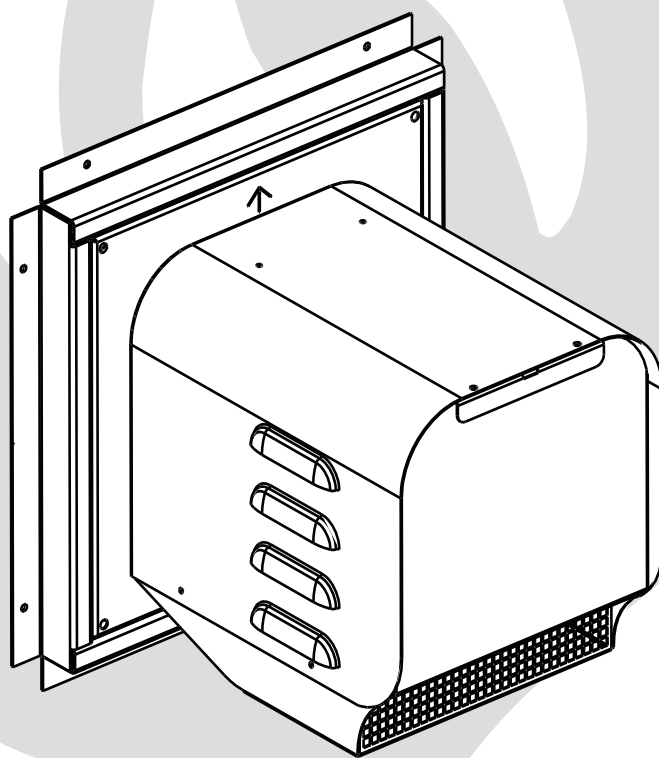
It is recommended that the GPV be used with a gas appliance equipped with an Intermittent Pilot Ignition (I.P.I.). Downward vertical vent runs are permitted with an I.P.I. system. See venting section in appropriate PVA Installation Instructions.

Models Equipped with Millivolt/ Standing Pilot

Downward vertical vent runs are not permitted with a standing pilot system. See venting section in appropriate PVA Installation Instructions.

INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER to conform with local codes. In absence of local codes install to the current National Building Code in Canada or to regional building codes in the United States. It must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 CANADIAN ELECTRICAL CODE in Canada or the ANSI/NFPA 70 NATIONAL ELECTRIC CODE in the United States.

The GPV operates on 120 VAC 60 HZ electrical service which is supplied at the firebox junction box.



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NOTE: Changes, other than editorial, are denoted by a vertical line in the margin.

1.0 VENTING

There are specific adaptors and venting requirements for each appliance, refer to your power vent adaptor leaflet for more information.

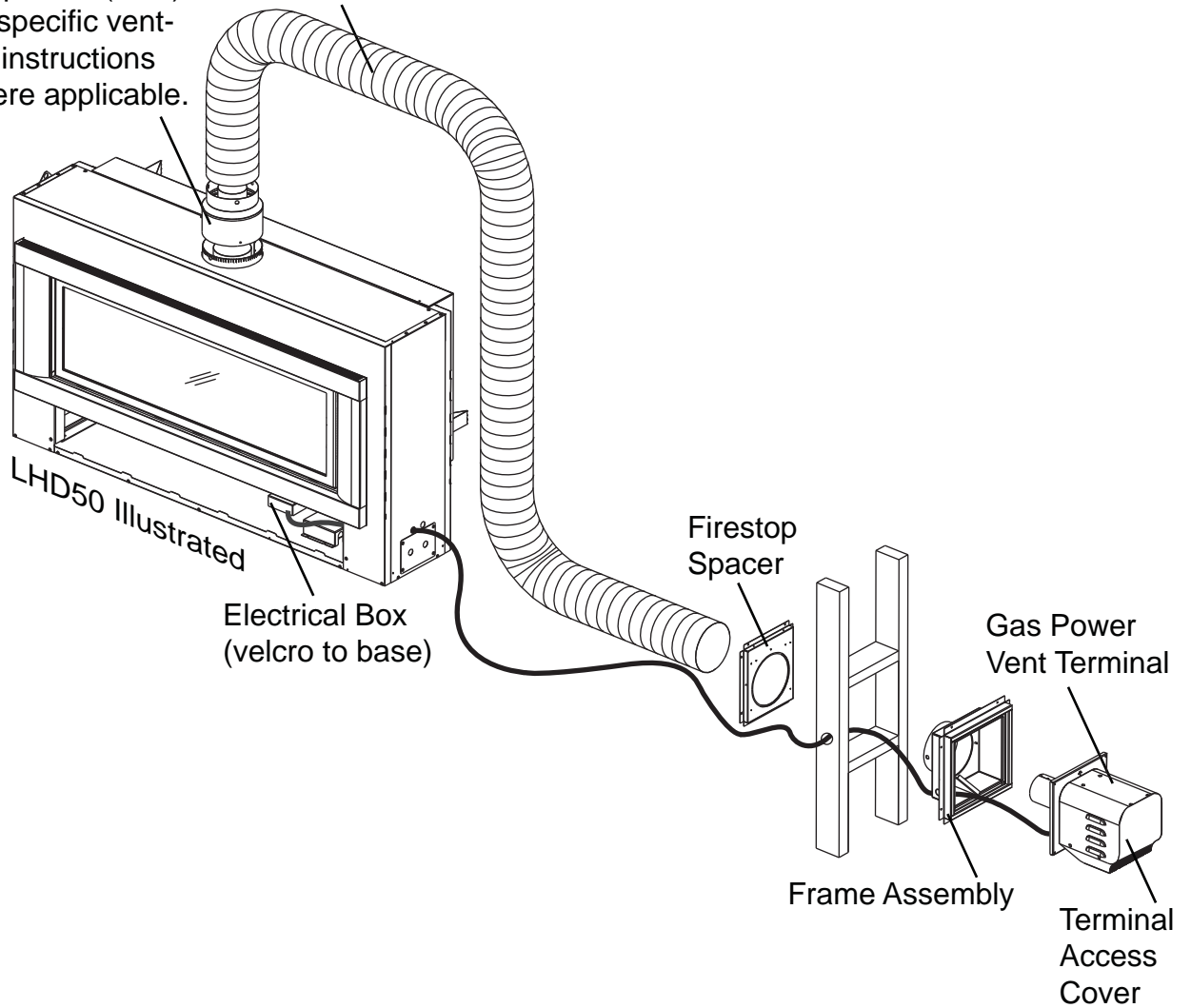
For complete installation instructions refer to the following web sites:

Manufacturer	Website
Napoleon - English	http://www.napoleonfireplaces.com/Tech/installation_manuals/installations.html
Napoleon - French	http://www.napoleonfoyers.com/Fireplaces/powervent.html
Continental	http://www.continentalfireplaces.com/fireplaces/gas/powervent.html

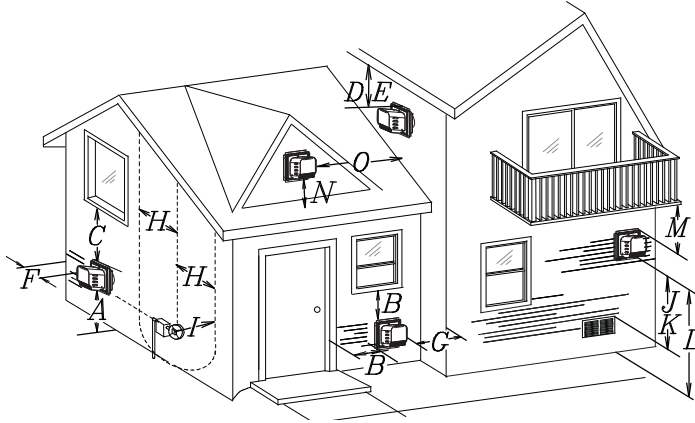
1.1 INSTALLATION OVERVIEW

Reducer, refer to power vent adapter kit (PVA) for specific venting instructions where applicable.

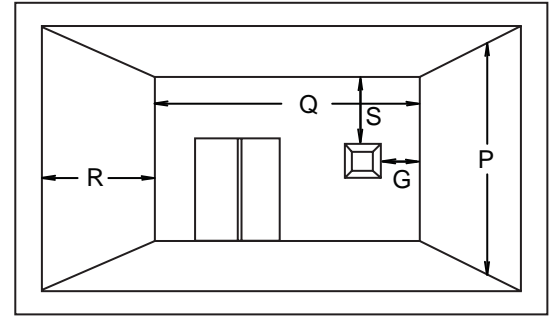
A typical vent configuration



1.2 VENT TERMINAL CLEARANCES



COVERED BALCONY APPLICATIONS ††*



$Q_{\text{MIN}} = 3 \text{ feet}$ (0.9m)	$R_{\text{MAX}} = 2 \times Q_{\text{ACTUAL}}$	$R_{\text{MAX}} \leq 15 \text{ feet}$ (4.6m)
---	---	---

INSTALLATIONS			
	CANADA	U.S.A.	
A	12" (304.8mm)	12" (304.8mm)	Clearance above grade, veranda porch, deck or balcony.
B	12" (304.8mm) ^Δ	9" (228.6mm) ^Δ	Clearance to windows or doors that open.
C	12" (304.8mm)*	12" (304.8mm)*	Clearance to permanently closed windows.
D	18" (457.2mm)**	18" (457.2mm)**	Vertical clearance to ventilated soffits located above the terminal within a horizontal distance of 2' (0.6m) from the center line of the terminal.
E	12" (304.8mm)**	12" (304.8mm)**	Clearance to unventilated soffit.
F	0" (0mm)	0" (0mm)	Clearance to an outside corner wall.
G	0" (0mm)	0" (0mm)	Clearance to an inside non -combustible corner wall or protruding non -combustible obstructions (chimney, etc.).
	2" (50.8mm)	2" (50.8mm)	Clearance to an inside combustible corner wall or protruding combustible obstructions (vent chase, etc.).
H	3' (0.9m)	3' (0.9m)***	Clearance to each side of the center line extended above the meter / regulator assembly to a maximum vertical distance of 15' (4.6m).
I	3' (0.9m)	3' (0.9m)***	Clearance to a service regulator vent outlet.
J	12" (304.8mm)	9" (228.6mm)	Clearance to a non-mechanical air supply inlet to the building or a combustion air inlet to any other appliance.
K	6' (1.8m)	3' (0.9m)	Clearance to a mechanical air supply inlet.
L	7' (2.1m) ‡	7' (2.1m)***	Clearance above a paved sidewalk or paved driveway located on public property.
M	12" (304.8mm)††	12" (304.8mm)***	Clearance under a veranda, porch or deck.
N	12" (304.8mm)	12" (304.8mm)	Clearance above the roof.
O	2' (0.6m) †*	2' (0.6m) †*	Clearance from an adjacent wall including neighbouring buildings.
P	8' (2.4m)	8' (2.4m)	Roof must be non -combustible without openings.
Q	3' (0.9m)	3' (0.9m)	See chart for wider wall dimensions.
R	6' (1.8m)	6' (1.8m)	See chart for deeper wall dimensions. The terminal shall not be installed on any wall that has an opening between the terminal and the open side of the structure.
S	12" (304.8mm)	12" (304.8mm)	Clearance under a covered balcony

Δ The terminal shall not be located less than 6 feet (1.8m) under a window that opens on a horizontal plane in a structure with three walls and a roof.

* Recommended to prevent condensation on windows and thermal breakage

** It is recommended to maximize the distance to vinyl clad soffits.

*** This is a recommended distance. For additional requirements check local codes.

‡ A vent shall not terminate where it may cause hazardous frost or ice accumulations on adjacent property surfaces..

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

†* Recommended to prevent recirculation of exhaust products. For additional requirements check local codes.

††* Permitted only if the balcony is fully open on a minimum of one side.

1.3 VENT LENGTHS

REFER TO POWER VENT ADAPTER KIT (PVA) FOR SPECIFIC VENTING INSTRUCTIONS.

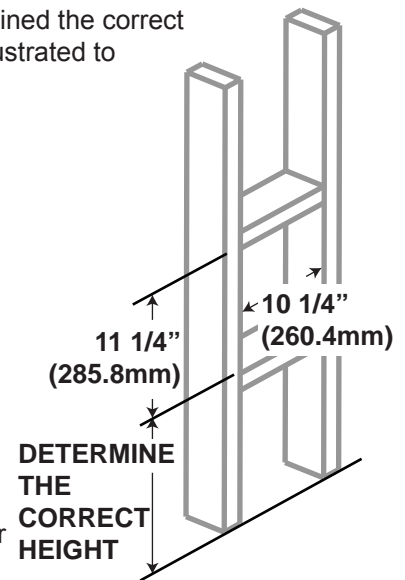
NOTE: If equipped, ACS switch must be disabled if there is any downward venting. Downward venting is not allowed with appliances that use standing pilots.

1.4 POWER VENT TERMINAL

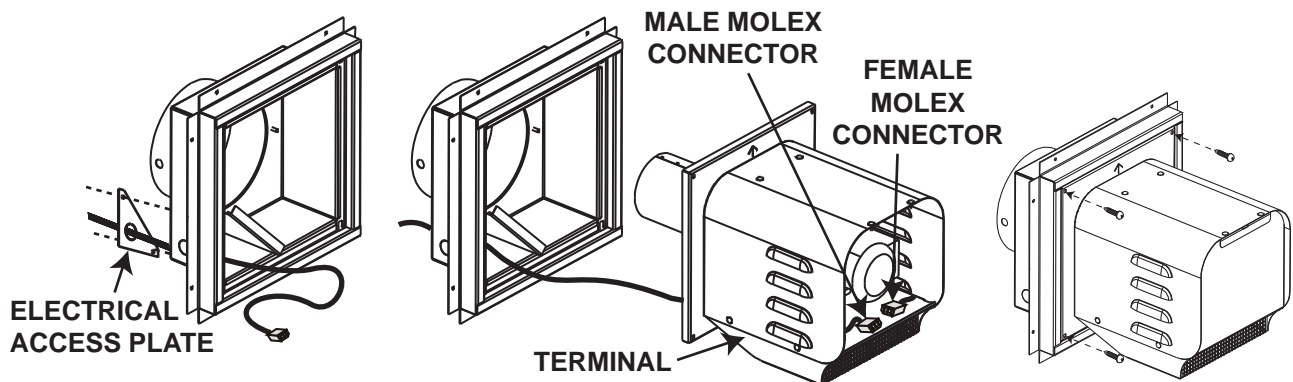
1.4.1 TERMINAL INSTALLATION

This application occurs when venting through an exterior wall. Having determined the correct height for the terminal location, cut and frame a hole in the exterior wall as illustrated to accommodate the GPV.

- A. Remove the electrical access plate from the frame assembly, then remove the knock out from this plate.
- B. Insert the wiring through the electrical access plate and engage the conduit bushing. Re-secure this plate. **NOTE: The GPV includes a 20 foot (6.1m) wire harness cable. If this cable does not reach the appliance, then it may be cut and a splice added.** These connections must conform with local codes or, in the absence of local codes, use the current CSA C22.1 Canadian Electrical Code in Canada or the ANSI/NFPA 70 National Electrical Code in the United States.
- C. Remove terminal access cover, see "INSTALLATION OVERVIEW" for location and route cable through terminal.
- D. Assemble gas power vent terminal to frame assembly.
- E. Connect the male and female connectors.
- F. Replace terminal access cover.



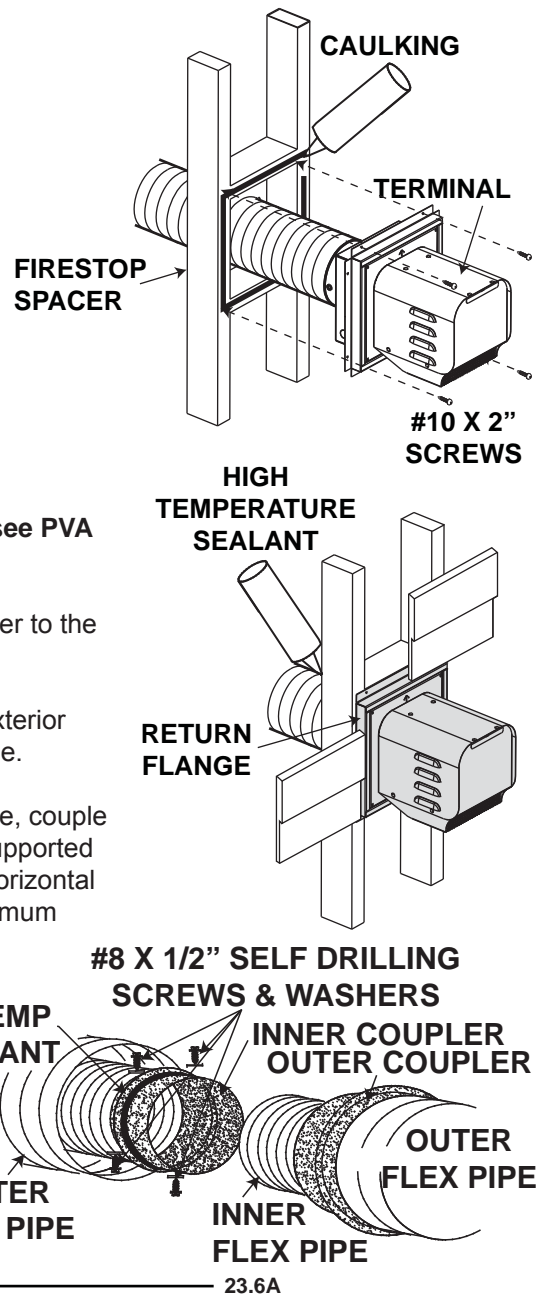
NOTE: Where possible, it is strongly recommended to have an access panel inside the building for servicing the unit.



20.4A

1.4.2 POWER VENT INSTALLATION

- A. Stretch the inner flex pipe to the required length taking into account the additional length needed for the finished wall surface. Slip the vent pipe a minimum of 3" (76.2mm) over the inner sleeve of the terminal and secure with 3 #8 screws. Apply a heavy bead of the high temperature sealant W573-0007 Mill Pac (not supplied).
- B. Using the outer flex pipe, slide over the outer combustion air sleeve of the terminal and secure with 3 #8 screws. Seal using high temperature sealant W573-0002 (not supplied).
- C. Apply a bead of caulking (not supplied) to the framed opening and secure the terminal. Ensure the arrows stamped into the frame assembly are pointing upwards.
NOTE: For firestop spacer installation instructions, see PVA kit or the appliance Installation Manual.
- D. Route venting through framed opening and firestop spacer to the appliance.
- E. The terminal mounting plate may be recessed into the exterior wall or siding no greater than the depth of its return flange.
- F. If more vent pipe needs to be used to reach the appliance, couple them together as illustrated. The vent system must be supported approximately every 3 feet (0.9m) for both vertical and horizontal runs. Use noncombustible strapping to maintain the minimum clearance to combustibles.
- G. Install the reducer (if required) or vent and properly secure and seal to the unit using high temperature sealant W573-0007 Mill Pac (not supplied).



1.4.3 INITIAL FIRING PROCEDURES

! WARNING

ALWAYS LIGHT THE PILOT WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RUN OUT WITH THE GLASS DOOR OPENED OR REMOVED. PURGE SHOULD BE PERFORMED BY A QUALIFIED SERVICE TECHNICIAN. ASSURE THAT A CONTINUOUS GAS FLOW IS AT THE BURNER BEFORE CLOSING THE DOOR. ENSURE ADEQUATE VENTILATION.

In some instances the system may not light pilot/burner with the door open/removed. Partially blocking the exhaust flue collar will allow the safety pressure switch to activate and allow gas flow to the pilot during the initial test firing.

1.4.4 ELECTRICAL CONNECTION

! WARNING
DO NOT USE THIS APPLIANCE IF ANY PART HAS BEEN UNDER WATER. CALL A QUALIFIED SERVICE TECHNICIAN IMMEDIATELY TO HAVE THE APPLIANCE INSPECTED FOR DAMAGE TO THE ELECTRICAL CIRCUIT.
RISK OF ELECTRICAL SHOCK OR EXPLOSION. DO NOT WIRE 110V TO THE VALVE OR TO THE APPLIANCE WALL SWITCH. INCORRECT WIRING WILL DAMAGE CONTROLS.
ALL WIRING SHOULD BE DONE BY A QUALIFIED ELECTRICIAN AND SHALL BE IN COMPLIANCE WITH LOCAL CODES. IN THE ABSENCE OF LOCAL CODES, USE THE CURRENT CSA22.1 CANADIAN ELECTRIC CODE IN CANADA OR THE CURRENT NATIONAL ELECTRIC CODE ANSI/NFPA NO. 70 IN THE UNITED STATES.
ALWAYS LIGHT THE PILOT WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RAN OUT, WITH THE GLASS DOOR OPENED OR REMOVED.

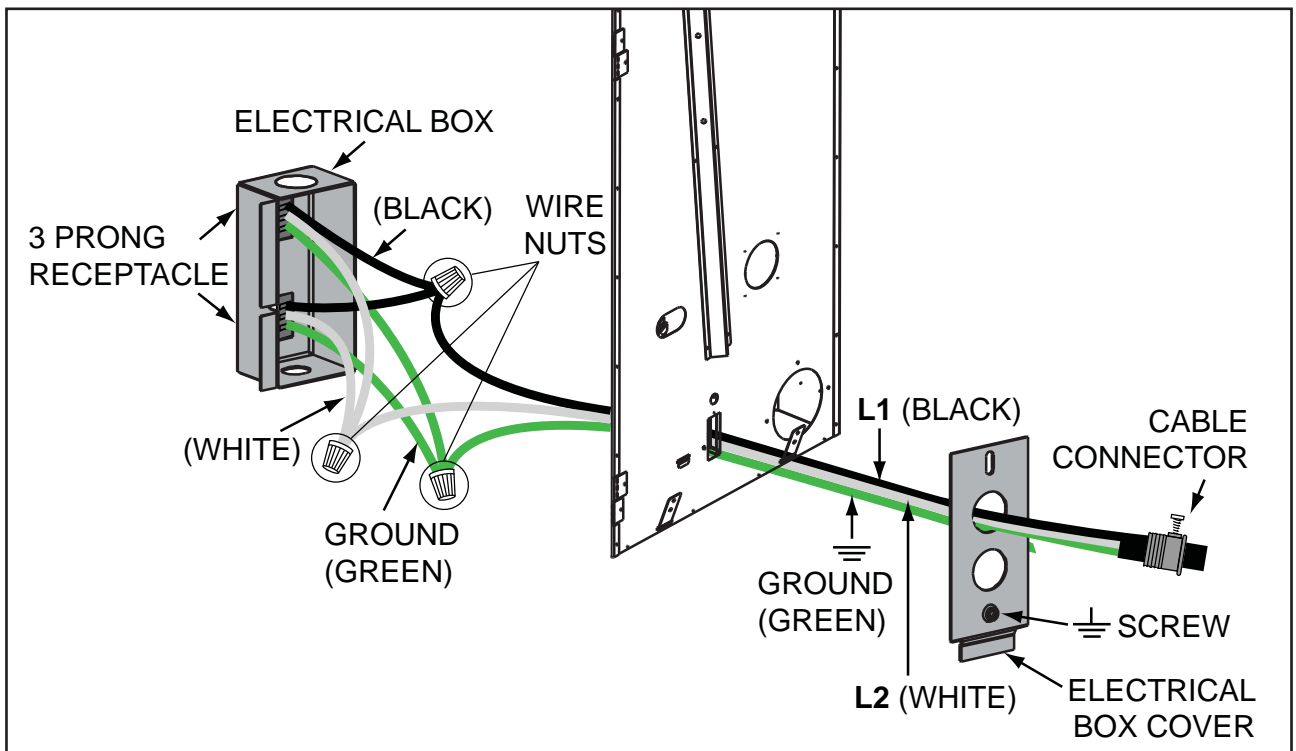
69.2

1.4.5 HARD WIRING CONNECTION

It is necessary to hard wire this appliance.

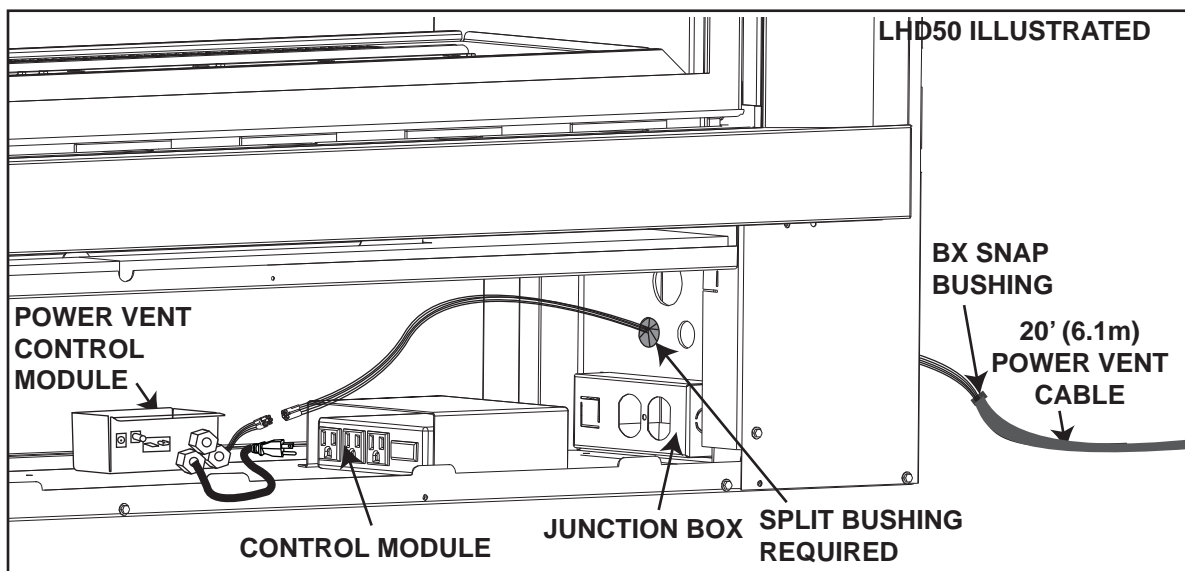
Permanently framing the appliance with an enclosure, requires the appliance junction box to be hard wired. This appliance must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 Canadian electrical code in Canada or the ANSI/NFPA 70-1996 national electrical code in the United States.

1.4.6 RECEPTACLE WIRING DIAGRAM



1.4.7 ELECTRICAL BOX INSTALLATION

NOTE: Before finishing in the appliance, the power vent must be installed.



- A. Start by removing the pre-finishing access panel or opening lower louvre.
- B. Position the Power Vent Control Module in a convenient location (not on top of the heat shield in the LHD50) and Velcro it to the base of the appliance.
- C. Slide the 20' (6.1m) power vent cable through the right side of the appliance and connect the box connector to the side panel, see "INSTALLATION OVERVIEW" section for illustration.
- D. Feed the wires through the inside panel, slide the split bushing over the coated wires and snap into the 7/8" (22.2mm) hole to protect the wires as illustrated. Attach the connections as per the appropriate wiring diagram. See "WIRING DIAGRAM AND INSTALLATION" section.
- E. Plug the power vent control module into either the appliance junction box or the control module, if equipped.

1.5 RESTRICTOR PLATE INSTALLATION

REFER TO PVA KIT FOR APPLIANCE SPECIFIC INSTRUCTIONS.

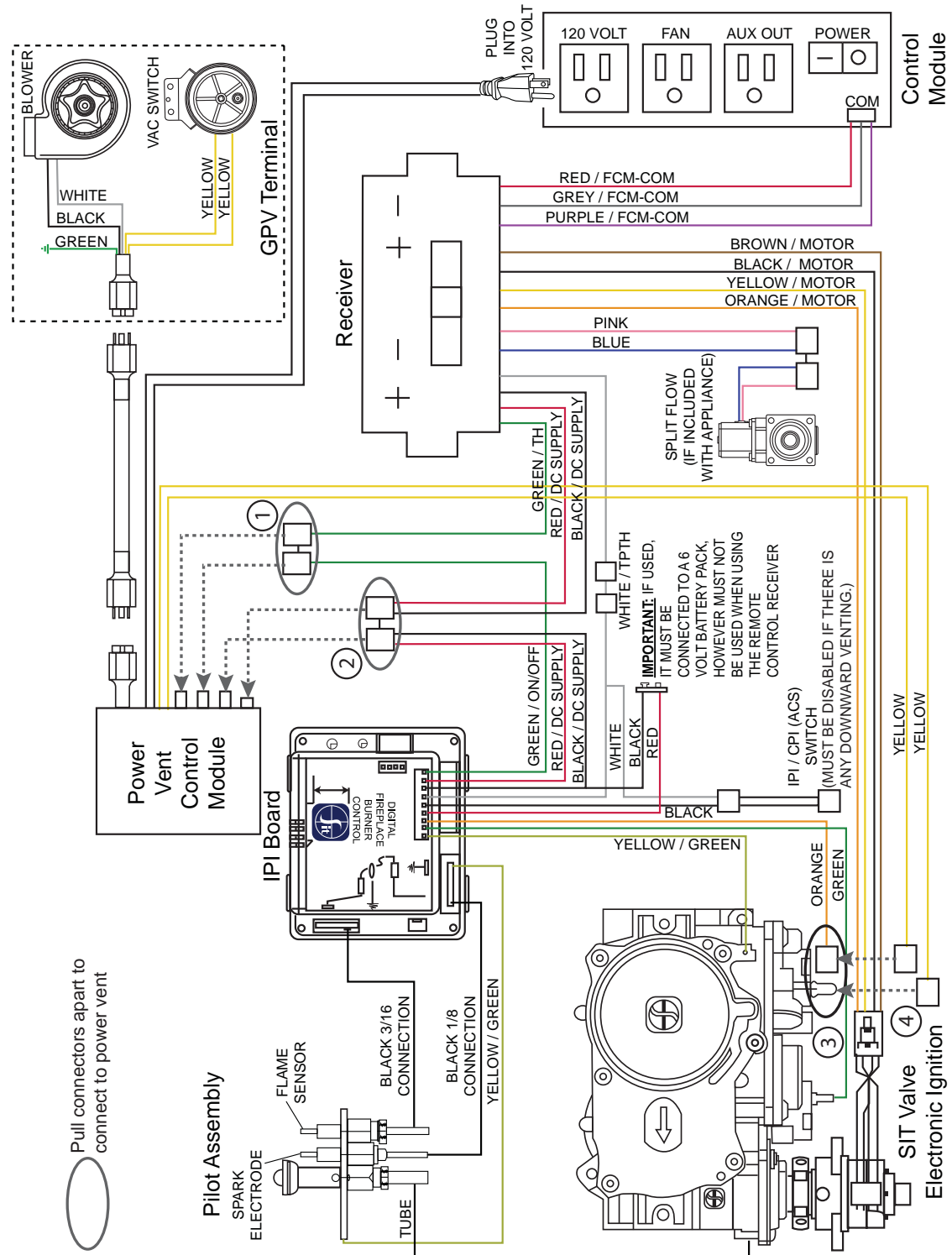
1.6 WIRING DIAGRAM AND INSTALLATION

Connect the wiring to the power vent termination as outlined in the previous section, and connect the wiring to the appliance as outlined in the schematic below. Ensure that the proper clearances are maintained for the wiring and conduit. When installing the wiring it must never run above the vent run and it must be a minimum 1" (25.4mm) from all venting.

NOTE: The GPV includes a 20 foot (6.1m) wire harness. If this harness does not reach the appliance, then it may be cut and a splice added. These connections must conform with local codes or, in the absence of local codes, use the current CSA C22.1 Canadian Electrical Code in Canada or the ANSI/NFPA 70 National Electrical Code in the United States.

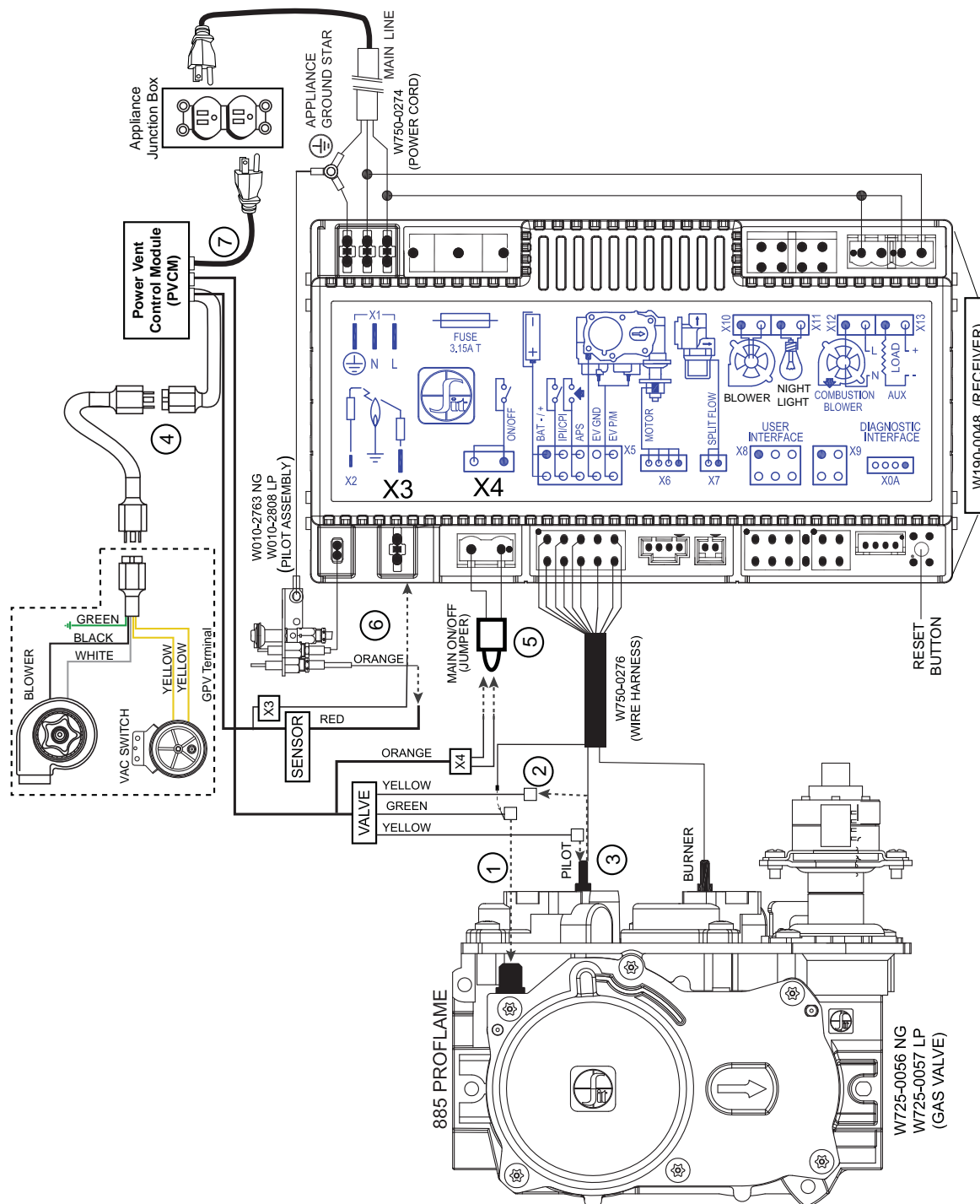
1.6.1 SIT IPI 885 PROFLAME 1

1. Disconnect the wires labeled ON/OFF (White/Green) and TH (Green). Reconnect them to the corresponding male/female connectors on the Power vent control module.
2. Disconnect the two D/C (Red/Black) wires from each other and reconnect them to the corresponding D/C connectors on the Power vent control module.
3. Disconnect the Orange wire from the gas valve and reconnect it to the Yellow wire (female connector) from the Power vent control module.
4. Connect the remaining Yellow wire (male connector) from the Power vent control module to the tab on the gas valve where the Orange wire was removed.



1.6.2 SIT IPI PROFLAME 2

1. Disconnect the (yellow/green) ground wire from the valve and connect it to the (green) ground wire, with piggy back connector, from the PVCM and then reconnect to the valve.
2. Disconnect the (orange) wire from the valve and connect it to the (yellow) wire, with male end, from the PVCM.
3. Connect the other (yellow) wire from the PVCM to the valve.
4. Connect the wire harness from the GPV terminal to the harness from the PVCM.
5. Disconnect the MAIN ON/OFF (JUMPER) from "X4" and discard. Connect the (orange) wire from the PVCM to the "X4" location on the receiver.
6. Disconnect the (orange) sensor wire from "X3" of the receiver and connect it to the (red) sensor wire from the PVCM. Connect the (red) lead from the PVCM to "X3" of the receiver.
7. Plug in the power cord from the PVCM.

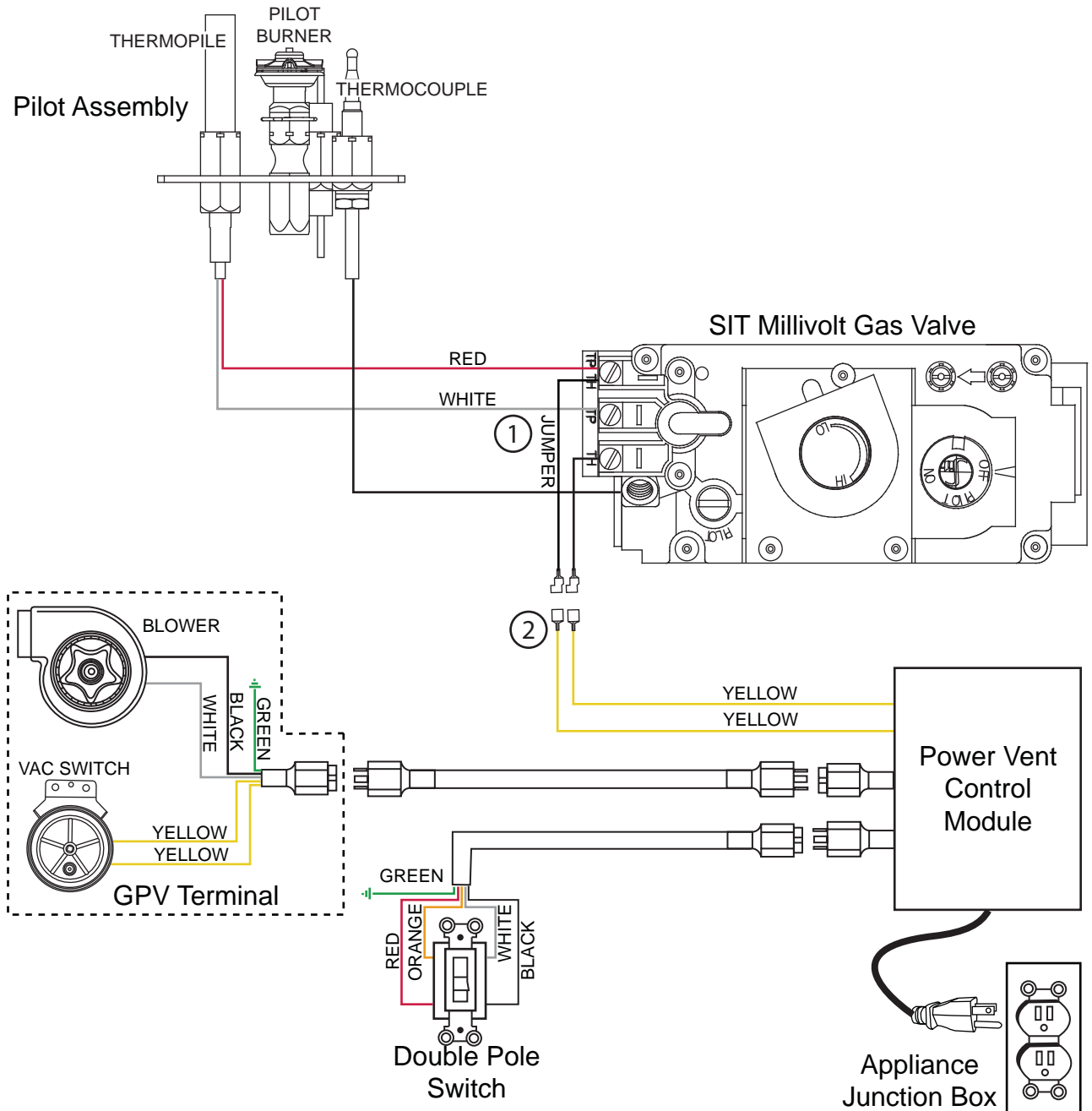


1.6.3 SIT MILLIVOLT 820 REQUIRING A DOUBLE POLE SWITCH

NOTE: Must use double pole switch (supplied) or double pole thermostat (not supplied) with specific power vent adaptor kit.

NOTE: Downward venting is not allowed with appliances that use a standing pilot.

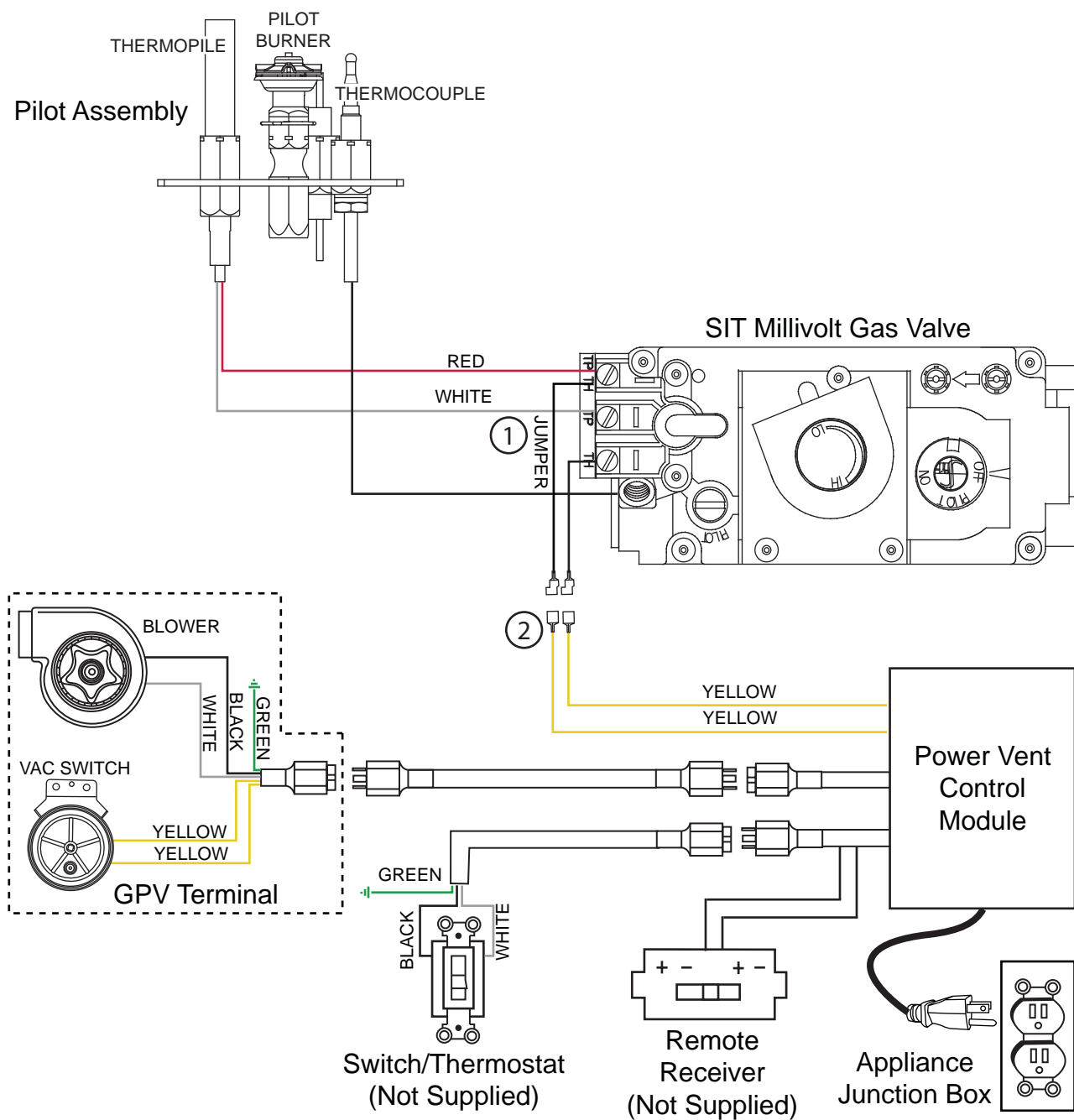
1. Connect the jumper wires to tabs TP/TH and TH on the gas valve.
2. Connect the jumper wire to the two Yellow wires from the Power vent control module.



IMPORTANT: A RECEPTACLE MAY NEED TO BE INSTALLED AS A POWER SOURCE FOR THE GPV.

1.6.4 SIT MILLIVOLT 820 NOVA FOR SINGLE POLE SWITCH

NOTE: Downward venting is not allowed with appliances that use standing pilots.

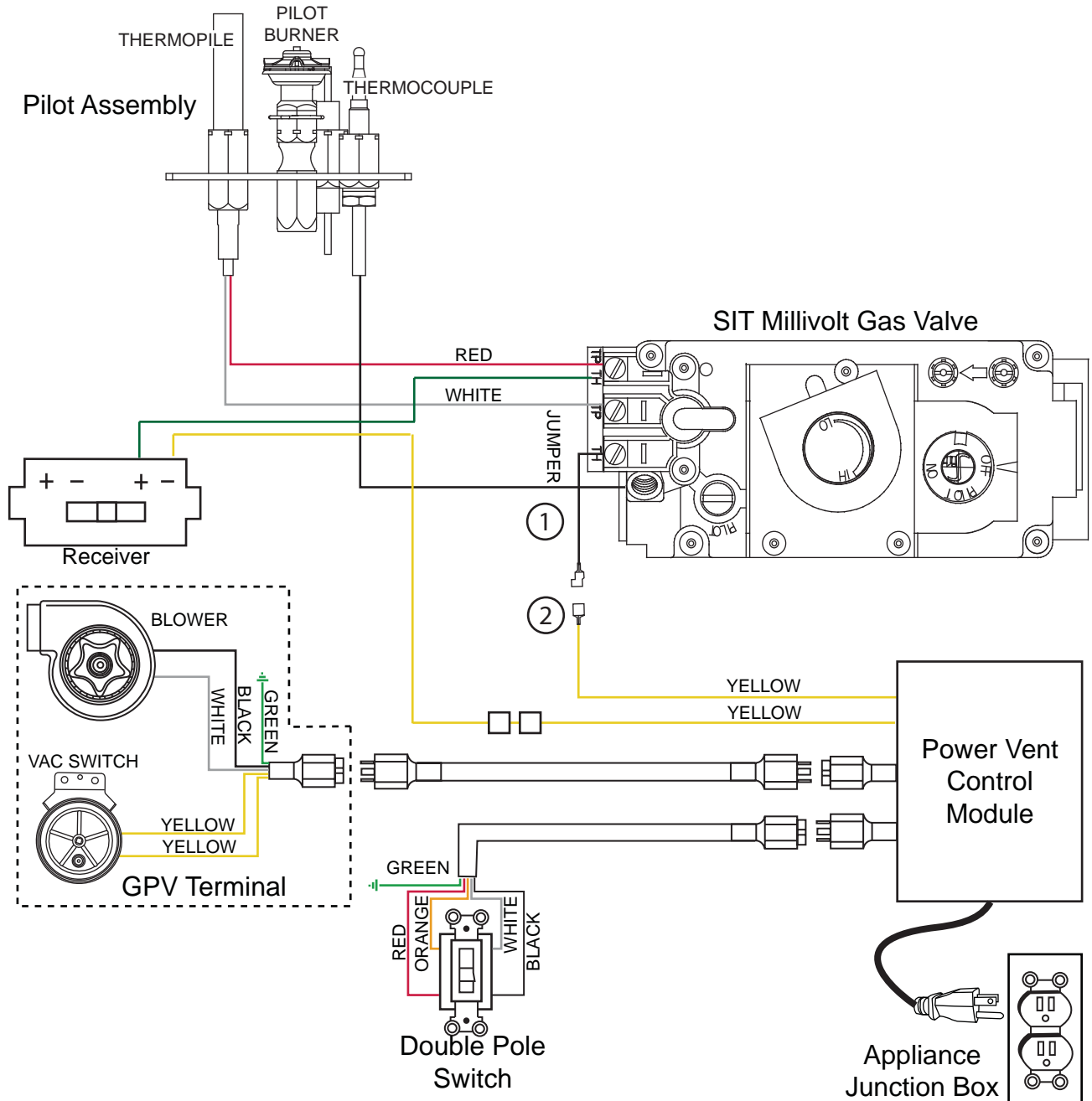


1. Disconnect one of the two wires from the receiver to the valve. Connect it to one of the yellow wires from the power vent control module.
2. Connect a jumper wire to the valve where the receiver wire was disconnected and to the other yellow wire from the power vent control module.

1.6.5 SIT MILLIVOLT 820 NOVA REMOTE CONTROLLED SYSTEM REQUIRING A DOUBLE POLE SWITCH

NOTE: Must use double pole switch (supplied) or double pole thermostat (not supplied) with specific power vent adaptor kits.

NOTE: Downward venting is not allowed with appliances that use standing pilots.

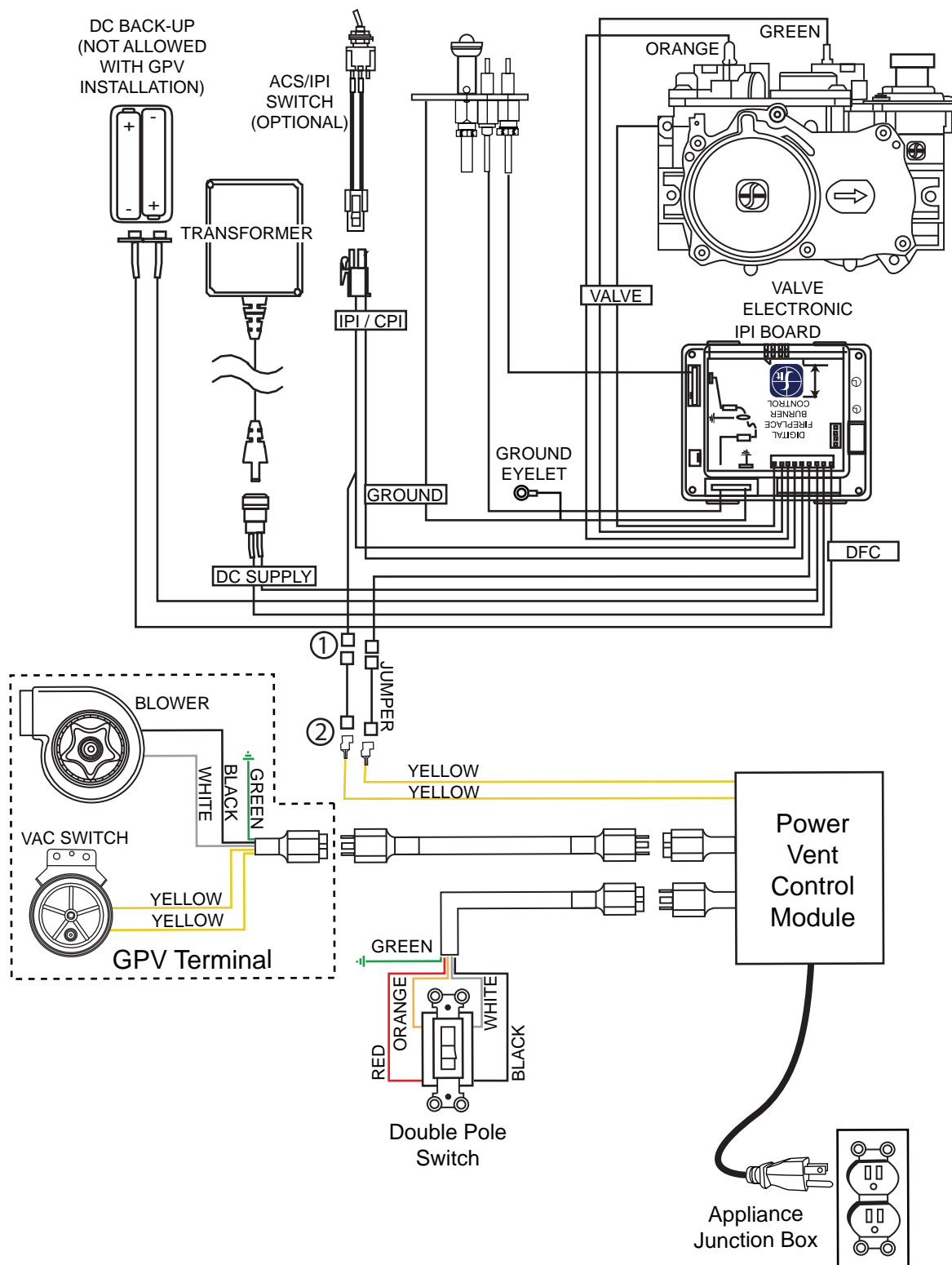


1. Disconnect one of the two wires from the receiver to the valve. Connect it to one of the yellow wires from the power vent control module.
2. Connect a jumper wire to the valve where the receiver wire was disconnected and to the other yellow wire from the power vent control module.

1.6.6 SIT IPI 880/886 PROFLAME REQUIRING A DOUBLE POLE SWITCH

NOTE: Must use double pole switch (supplied) or double pole thermostat (not supplied) with specific power vent adaptor kit.

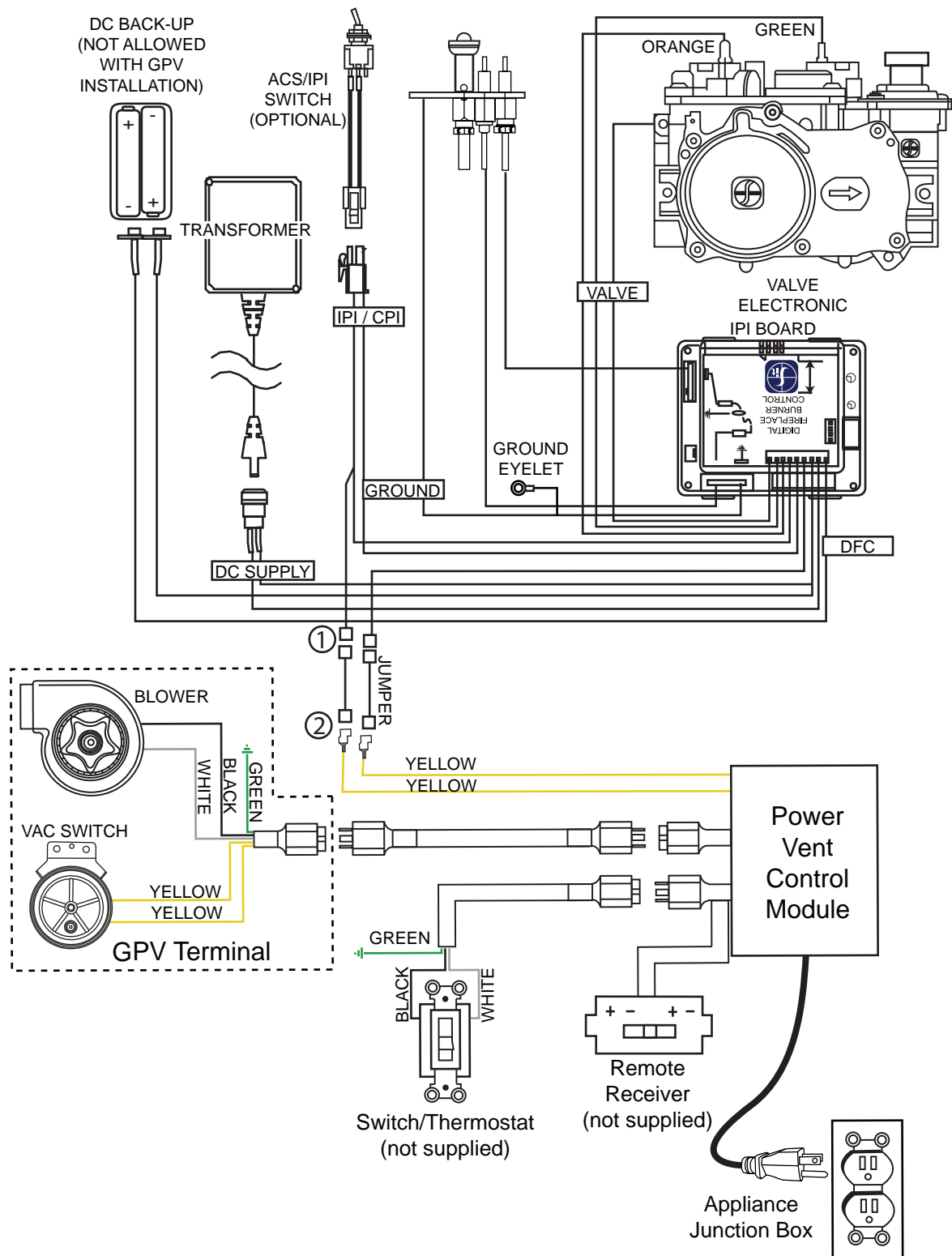
1. Connect the jumper wires to the wire labeled ON/OFF (Green/White) and the wire labelled TH (Green).
2. Connect the other end of the jumper wires to the Yellow wires from the Power vent control module.



IMPORTANT: A receptacle may need to be installed as a power source for the GPV.

1.6.7 SIT IPI 880/886 FOR SINGLE POLE SWITCH

1. Connect the jumper wires to the wire labeled ON/OFF (Green/White) and the wire labelled TH (Green).
2. Connect the other end of the jumper wires to the Yellow wires from the Power vent control module.



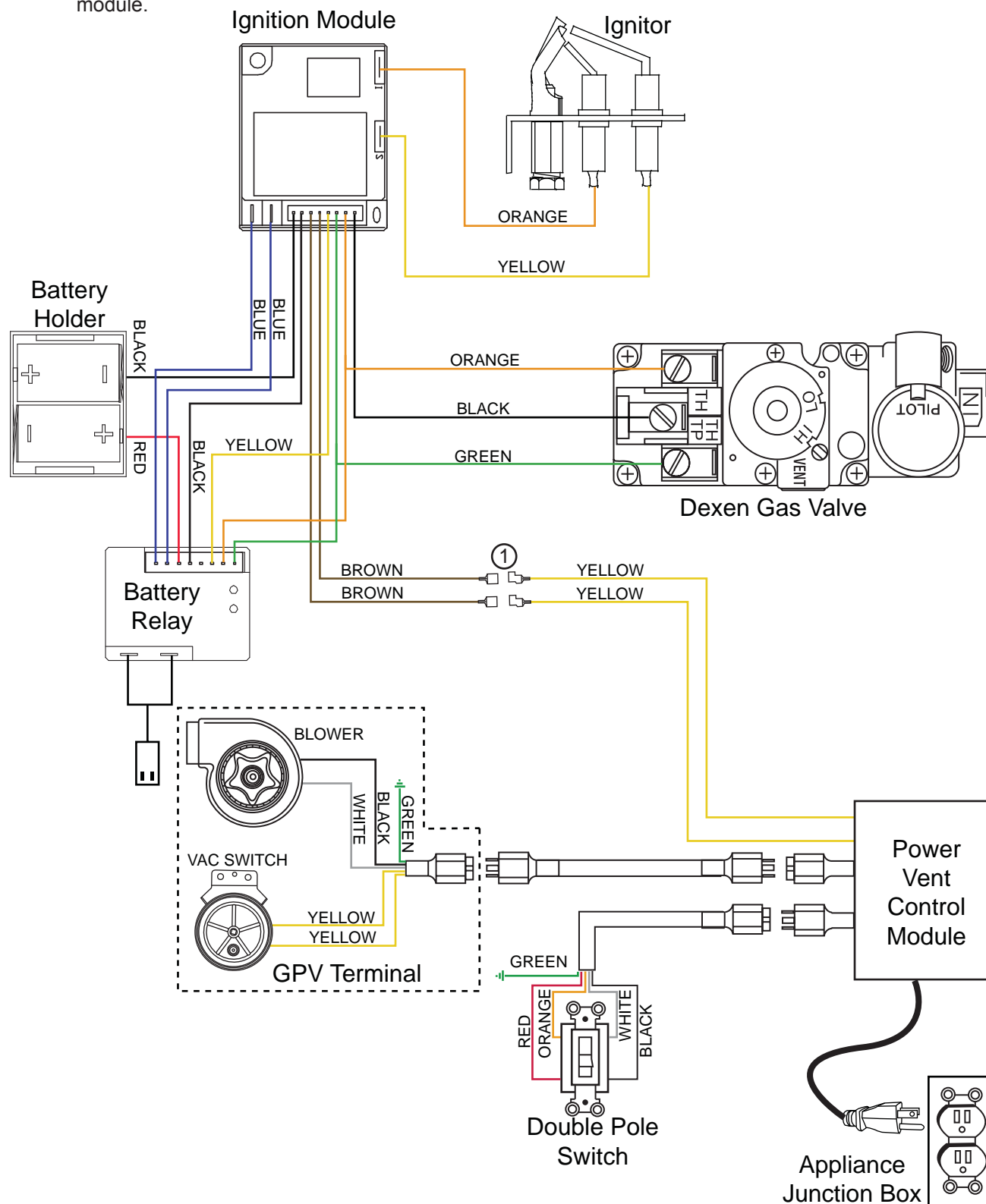
IMPORTANT: A receptacle may need to be installed as a power source for the GPV.

1.6.8 DEXEN IPI 6003-3V REQUIRING A DOUBLE POLE SWITCH

NOTE: Must use double pole switch (supplied) or double pole thermostat (not supplied) with specific power vent adaptor kit.

NOTE: Downward venting is not allowed with appliances that use a standing pilot.

1. Connect the Brown wires from the Ignition module to the yellow wires from the Power vent control module.

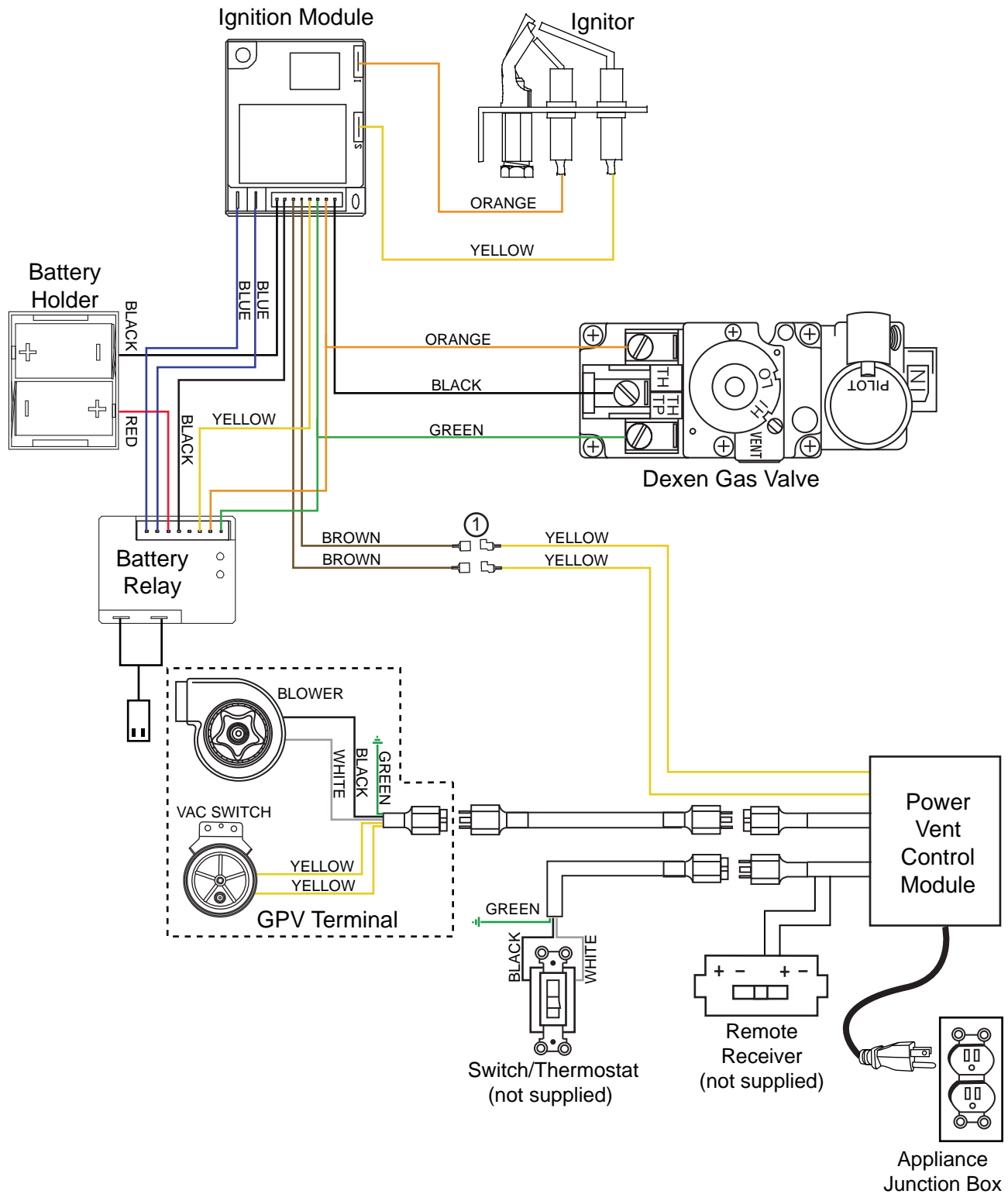


IMPORTANT: A receptacle may need to be installed as a power source for the GPV.

1.6.9 DEXEN IPI 6003-3V REQUIRING A SINGLE POLE SWITCH

NOTE: Downward venting is not allowed with appliances that use a standing pilot.

1. Connect the Brown wires from the Ignition module to the yellow wires from the Power vent control module.



2.0 ADJUSTMENTS

2.1 VENTURI ADJUSTMENTS

REFER TO PVA KIT FOR SPECIFIC APPLIANCE INSTRUCTIONS.

3.0 REPLACEMENTS

Contact your dealer or the factory for questions concerning prices and policies on replacement parts. Normally all parts can be ordered through your Authorized dealer / distributor.

FOR WARRANTY REPLACEMENT PARTS, A PHOTOCOPY OF THE ORIGINAL INVOICE WILL BE REQUIRED TO HONOUR THE CLAIM.

When ordering replacement parts always give the following information:

- Model & Serial Number of appliance
- Installation date of appliance
- Part number
- Description of part
- Finish

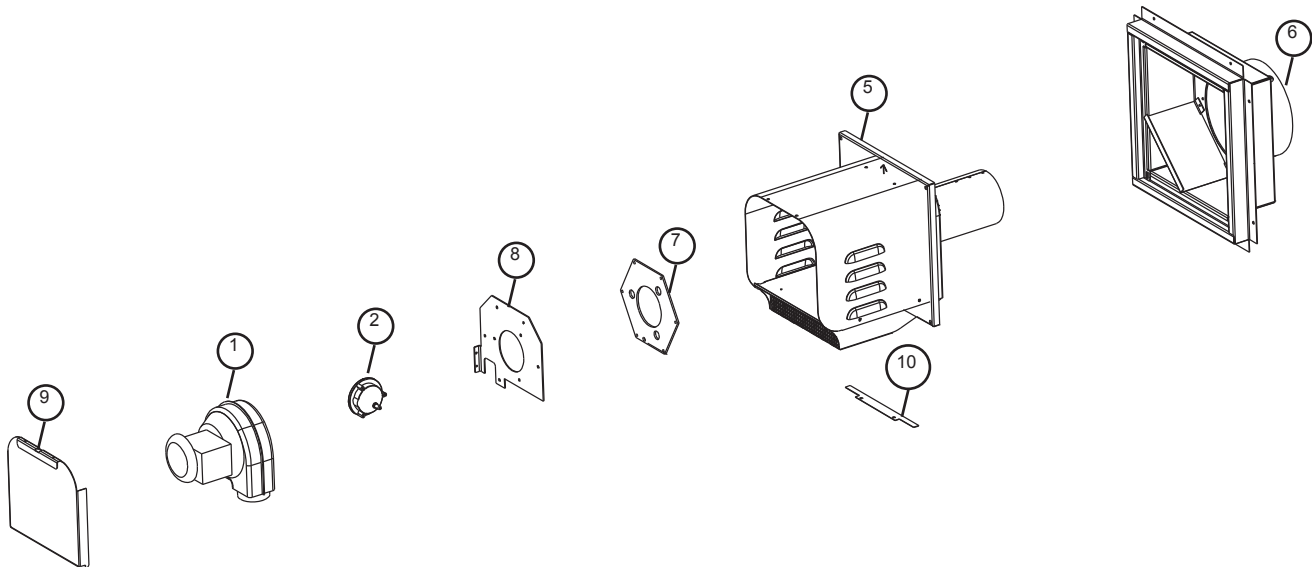
**WARNING**

FAILURE TO POSITION THE PARTS
IN ACCORDANCE WITH THIS
MANUAL OR FAILURE TO USE ONLY
PARTS SPECIFICALLY APPROVED
WITH THIS APPLIANCE MAY
RESULT IN PROPERTY DAMAGE OR
PERSONAL INJURY.

*** IDENTIFIES ITEMS WHICH ARE NOT ILLUSTRATED. FOR FURTHER INFORMATION, CONTACT YOUR AUTHORIZED DEALER.**

41.1

COMPONENTS		
REF	GPV PART NO.	DESCRIPTION
1	W062-0026	BLOWER
2	W660-0056	SWITCH, VACUUM
3*	W750-0195	WIRE HARNESS, TERMINAL
4*	W750-0209	20' (9.1m) WIRE HARNESS CABLE FROM UNIT TO TERMINAL
5	W010-1924PW	PEWTER MAIN BODY
6	W010-1925PW	PEWTER FRAME
7	W290-0138	BLOWER GASKET
8	W500-0400	BLOWER MOUNTING PLATE
9	W200-0256PW	PEWTER ACCESS COVER
10	W500-0419	DILUTION AIR PLATE
11*	W345-0008	HOSE



4.0 TROUBLESHOOTING

WARNING

ALWAYS LIGHT THE PILOT WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RAN OUT, WITH THE GLASS DOOR OPEN OR REMOVED.

IN SOME INSTANCES THE SYSTEM MAY NOT LIGHT PILOT/BURNER WITH THE DOOR OPEN/ REMOVED. PARTIALLY BLOCKING THE EXHAUST FLUE COLLAR WILL ALLOW THE SAFETY PRESSURE SWITCH TO ACTIVATE AND ALLOW GAS FLOW TO THE PILOT DURING THE INITIAL TEST FIRING.

SYMPTOM	PROBLEM	TEST SOLUTION
Main burner flame is a blue lazy transparent flame.	Leak in exhaust vent.	- Check exhaust vent pipe and all connection seals.
	Incorrect installation.	- Refer to PVA kit for appliance specific restrictor.
Carbon is being deposited on glass or combustion chamber surfaces.	Air shutter has become blocked or incorrect setting.	- Ensure air shutter opening is free of lint or other obstructions or has correct setting.
	Flame is impinging on the logs or combustion chamber.	- Check that the media is correctly positioned. - Open air shutter to increase the primary air. - Check the input rate: Check the manifold pressure and orifice size as specified by the rating plate values. - Check that the door gasket is not broken or missing and that the seal is tight. - Check that both 4" (101.6mm) and 7" (177.8mm) vent liners are free of holes and well sealed at all joints. - Check that the proper restrictor is used
White / Grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	- Clean the glass with a gas appliance glass cleaner. DO NOT CLEAN GLASS WHEN HOT. - If deposits are not cleaned off regularly, the glass may become permanently marked.
Exhaust fumes smelled in room, headaches.	Appliance is spilling.	- Check door seal and relief flap seal. - Check for proper restrictor. - Check that the paint curing process is complete.
Main burner will not light.	Main door is not installed.	- Install main door.
Main burner flames are very aggressive.	No restrictor.	- Add restrictor. - Remove restrictor plate on the power vent.
Main burner won't light.	Vacuum switch not activated.	- Remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed as required. - Test vacuum switch and replace as required.

IMPORTANT: Prove all systems check before completely enclosing unit.

5.0 NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.