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



FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Leave the building immediately.
- Immediately call your gas supplier from a neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

This appliance may be installed in an aftermarket permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a **certified kit is used**.

This appliance is suitable for installation in a bedroom or bed sitting room.

WARNING: If the information in these **instructions is not followed exactly, a fire** or explosion may result causing property damage, personal injury or death.





SERIAL #



MODEL: TN24 SERIES: A DIRECT VENT FREE STANDING GAS STOVE INSTALLATION AND OPERATING INSTRUCTIONS

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

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HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with the appliance and shall be installed for the protection of children and other at-risk individuals.



We recommend that our gas hearth products be installed and serviced by professionals who are certified in the United States by the National Fireplace Institute[®] (NFI) as NFI Gas Specialists

Important Note for the Commonwealth of Massachusetts:

From Massachusetts Rules and Regulations 248 CMR 5.08:

(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied.

1. INSTALLATION OF CARBON MONOXIDE DETECTORS. At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed, in addition, the installing plumber or gas fitter shall observe that a battery operated or hard-wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard-wired carbon monoxide detectors.

a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard-wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

b. In the event that the requirements of this subdivision cannot be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed as IAS certified.

3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.089(2)(a) 1 through 4.

(b) EXEMPTIONS. The following equipment is exempt from 248 CMR 5.089(2)(a) 1 through 4.

1. The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and

2. Product Approved side wall horizontal vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) MANUFACTURER REQUIREMENTS – GAS EQUIPMENT VENTING SYSTEM PROVIDED. When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

1. Detailed instructions for the installation of the venting system design or the venting system components; and

2. A complete parts list for the venting system design or venting system.

(d) MANUFACTURER REQUIREMENTS – GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the fuel gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer.

1. The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and

2. The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

(e)) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.



Owner Information

Congratulations on your purchase of a True North Gas Stove

Your gas stove has been professionally installed by:

Dealer name: _____

Phone Number: _____

If you discover any problems with your gas stove contact your dealer immediately to have the unit repaired.

Caution: Do not attempt to repair the gas stove because you may cause injury to yourself or others, and risk causing damage to the unit.

Before operating your gas stove carefully read this manual and pay close attention to all Safety Warnings. The manual contains important information on the stove's safe operation and maintenance.

Caution —

FOR YOUR SAFETY - Do not install or operate your True North gas stove without first reading and understanding this manual. Any installation or operational deviation from the following instructions voids the Pacific Energy Fireplaces Warranty and may prove hazardous.

This gas stove and its individual shut off valve must be disconnected from gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psig (3.5 kPa).

This gas stove must be isolated from the gas supply piping system by closing its individual manual shut off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than $\frac{1}{2}$ psig (3.5 kPa).

Do not use the gas stove if any part has been under water. Immediately call a qualified service technician to inspect the gas stove and to replace any part of the control system and any gas control which has been under water.

Proposition 65 note



WARNING: This product can expose you to chemicals including ceramic fibers, which are known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm.

For more information go to www.P65Warnings.ca.gov.

This warning is applicable to all Pacific Energy Fireplace Products

Safety

Due to high temperatures, this gas stove should be located out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burns or clothing ignition.

Young children should be carefully supervised when they are in the same room as the gas stove. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to a gas stove or fireplace, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of the room and away from hot surfaces.

Clothing or other flammable material should not be placed on or near the gas stove.

Any grill, panel or door removed for servicing the unit must be replaced prior to operating. Failure to do so may create a hazardous condition.

Installation and repair should be done by a qualified service person. The gas stove should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageways of the gas stove be kept clean.

It is our policy that no responsibility is assumed by the Company or by any of its employees or representatives for any damages caused by an inoperable, inadequate, or unsafe condition which is the result, either directly or indirectly, of any improper operation or installation procedures.

This gas stove must not be connected to a chimney flue serving a separate solid fuel burning stove.

- First Fire -

When lit for the first time, the gas stove will emit a slight odour for a couple of hours. This is due to the curing of paints, sealants, gaskets, and lubricants used in the manufacturing process. This condition is temporary. Open doors and windows to ventilate the area. Odour caused by the curing process may cause discomfort to some individuals.

It is normal for gas stoves fabricated from steel to give off some expansion and/or contraction noises during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or cook stove oven.



Manufactured (Mobile) Homes

In some jurisdictions, the TN24 gas stove may be installed in Manufactured Homes after the "first sale". Consult local codes for approval. The gas stove must be fastened in place.

Install in accordance with the current standard Mobile Homes, CAN/CSA Z240 MH (in CANADA), and the Manufacturer's Home Construction and Safety Standard, Title 24 CFR, Part 3280 or the current Standard for Fire Safety Criteria for Manufactured Home Installations, Sites and Communities ANSI/NFPA 501A (in the USA).

Installation Requirements

The TN24 Gas Stove installation and venting must conform to the current CAN/CGA-B149 installation code (in Canada) or the current National Fuel Gas Code, ANSI Z223.1 (in the USA), and approved per local codes. Only qualified (licensed or trained) personnel should install this product.

In the state of Massachusetts, only a licensed Plumber and Gas Fitter may install this product.

- Special Operator Note

NOTE: the pilot may take up to 30 seconds to ignite each time the "ON" button has been selected.

Remote Control Operation

System Description

The Proflame Remote Control System consists of 4 elements:

- 1. Proflame Remote Transmitter.
- 2. A receiver / battery holder
- 3. Proflame Integrated Fireplace Control (IFC) module.
- 4. A wiring harness to connect the IFC to the gas valve and stepper motor.

Transmitter (Remote Control with LCD Display)

The Proflame Remote Transmitter uses a streamline design with a simple button layout and informative LCD display (Figure 1). The remote transmitter is powered by 3 AAA type batteries. A mode key is provided to index between the features and a thermostat key is used to turn on/off or index through thermostat functions (Figure 1) & (Figure 2).

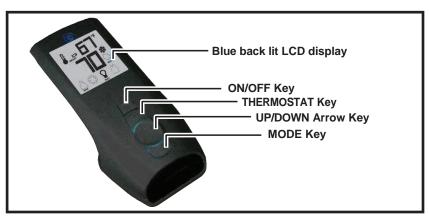


Figure 1: Proflame 2 handset.

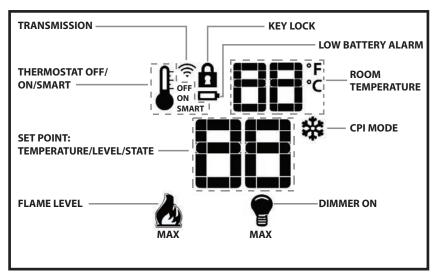


Figure 2: Proflame 2 LCD screen details.



Owner Information

Temperature indication Display

With the remote transmitter in the "OFF" position, press the thermostat key and the mode key at the same time. Look at the LCD screen on the remote transmitter to verify that a C or F is visible to the right of the room temperature display (Figure 3) & (Figure 4).

Turn on the Gas Stove

With the system OFF, press the ON/OFF Key on the remote transmitter. The remote transmitter display will show some other active Icons on the screen. At the same time the Receiver will activate the gas stove. A single "beep" from the Receiver (IFC module) will confirm reception of the command.

Figure 3: Display in

Figure 3: Display in Fahrenheit.

Turn off the Gas Stove

With the system ON, press the ON/OFF Key on the Remote transmitter. The Remote transmitter LCD display will only show the room temperature (Figure 3) or (Figure 4). At the same time the Receiver (module) will turn off the gas stove. A single "beep" from the Receiver confirms reception of the command.

Manual Bypass of the Remote System

If the batteries of the receiver or remote transmitter are low or depleted, the gas stove can be turned off manually using the ON/OFF switch located on the battery holder at the rear of the TN24 (Figure 65 on page 32) & (Figure 67 on page 32). This will bypass the remote transmitter.

Key Lock

This function will lock the keys to avoid unsupervised operation. To activate this function, press the MODE and UP keys at the same time. The lock icon will appear (Figure 5). To de-activate this function, press the MODE and UP keys at the same time.

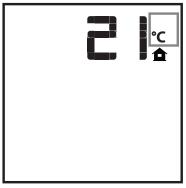


Figure 4: Display in Celsius.

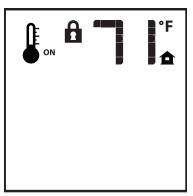


Figure 5: Key lock.

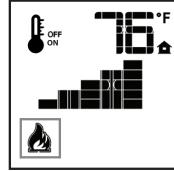
Remote Control Operation

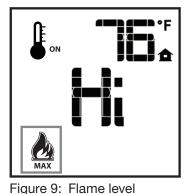
The Proflame has six (6) flame levels. With the system turned on, and the flame level at maximum in the gas stove, press the down arrow key once to reduce the flame height by one step until the flame is turned off.

The up arrow key will increase the flame height each time it is pressed. If the up arrow key is pressed while the system is on but the flame is off, the flame will come on in the high position.(Figure 9). A single "beep" will confirm reception of the command.









maximum.

Figure 6: Flame off.

Figure 7: Flame level 1.

Figure 8: Flame level 5.

ROOM TEMPERATURE

level in 1). The LCD the room red (Figure tys until the

SET TEMPERATURE

Figure 10: Room temperature.



Figure 11: Smart flame function.

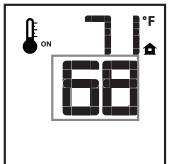


Figure 12: Smart flame adjusting temperature.



ROOM THERMOSTAT (Transmitter Operation)

The remote control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in a room.

To activate this function, press the thermostat key (Figure 1). The LCD display on the remote transmitter will change to show that the room thermostat is "ON" and the set temperature is now displayed (Figure 10). To adjust the set point, press the up or down arrow keys until the desired set point temperature is displayed on the LCD screen of the remote transmitter.

Smart Thermostat (Transmitter Operation)

The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point and the room temperatures. As the room temperature gets closer to the set point, the Smart Function will modulate the flame down. If the room temperature is cool, the Smart Function will modulate the flame up. To activate this function, press the THERMOSTAT key (Figure 1) until the word "SMART" appears to the right of the temperature icon (Figure 11). To adjust the set point, press the up or down arrow keys until the desired set point temperature is displayed on the LCD screen of the remote transmitter (Figure 12).

Owner Information

Comfort Fan Speed Control

If the gas stove is equipped with a hot air circulating fan, the speed of the fan can be controlled by the Proflame System. The fan speed can be adjusted through six (6) speeds. To activate this function use the Mode Key (Figure 1) to index to the fan control icon (Figure 13). Use the Up/Down Arrow Keys (Figure 1) to turn on, off or adjust the fan speed (Figure 13) & (Figure 14). A single "beep" will confirm reception of the command.

Figure 13: Fan off.



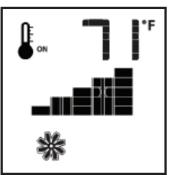
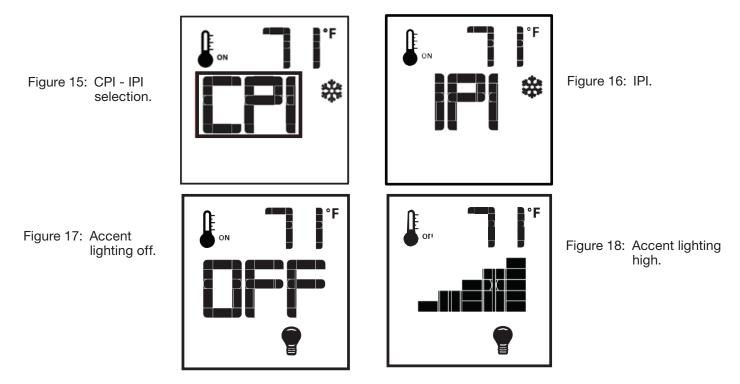


Figure 14: Fan level HI.

Continuous Pilot/Intermittent Pilot (CPI/IPI) selection

With the system in the "OFF" position, press the Mode Key (Figure 1) to index to the CPI mode icon (Figure 15). Pressing the Up Arrow Key will activate the Continuous Pilot Ignition mode (CPI). Pressing the Down Arrow Key will return to IPI (Figure 16). A single "beep" will confirm the reception of the command.



Remote dimmer control (Light)

The light bulb function controls the exterior accent lighting. To activate this function use the Mode Key (Figure 1) to index to the light bulb icon (Figure 17). The intensity of the output can be adjusted through six (6) levels. Use the Up/Down Arrow Keys (Figure 1) to adjust the output level (Figure 18). A single "beep" will confirm reception of the command.

Low Battery Power Detection

Remote Transmitter

The life span of the remote control batteries depends on various factors: quality of the batteries used, the number of ignitions of the gas stove, the number of changes to the room thermostat set point, etc.

When the remote batteries are low, an icon will appear on the LCD display of the remote (Figure 19) before all battery power is lost. When the batteries are replaced this icon will disappear.

°F ∎₫

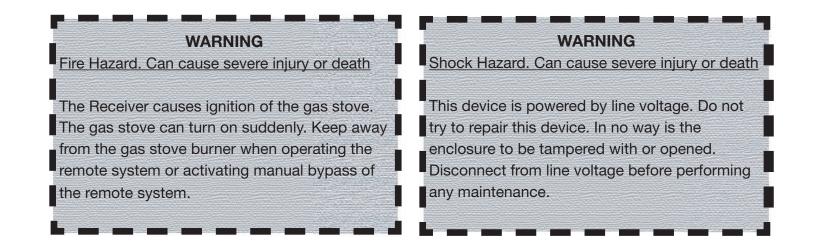
Figure 19: Low battery power.

IFC Module (Receiver)

The life span of the IFC module batteries depends on various factors: quality of the batteries used, the number of ignitions of the gas stove, the number of changes to the room thermostat set point, etc.

When the IFC batteries are low, a "double-beep" will be emitted from the IFC module when it receives a command from the remote. This is an alert for a low battery condition for the IFC board. When the batteries are replaced, a single "beep" will be emitted from the IFC module when a key is pressed. (See initializing the system for the first time on page 30).

Warnings and Cautions



Maintenance -

Turn off gas and electrical power supply (if applicable) and allow ample time for the gas stove to cool before servicing. It is recommended that the gas stove and its venting should be inspected at least once a year by a qualified service person.

Glass Door:

Warning: Do not operate gas stove with glass door removed, cracked or broken. Replacement of the glass door should be done by a licensed or qualified service person.

Do not strike or otherwise impact the glass in any way that may cause it to break. If the glass becomes cracked or broken it must be replaced before using the gas stove. A replacement glass door can be obtained from your nearest True North dealer. Do not substitute with any other type.

To replace broken glass door, refer to Glass Door removal on page 22 and Glass Door installation on page 26.

Annual Inspection:

Remove glass door and decorative media (such as logs and embers). Inspect decorative media and burner assemblies for soot buildup. If excessive buildup of soot is present, have a qualified service person inspect and adjust unit for proper combustion. Clean burners with a brush or vacuum cleaner, paying close attention to burner ports.

Check the pilot system for proper flame size and operation. Clean pilot of soot, dust or any other deposits.

- a. Check that the vent pipe and vent terminal are open and free from blockage or debris. If the venting is disassembled for cleaning, it must be properly re-assembled and re-sealed.
- b. Check glass panel gasket, replace if necessary. It is important that the glass seal be maintained in good condition.
- c. Check and replace batteries as needed.

Note: The gas stove area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Periodically:

- a) Viewing glass may be cleaned as necessary with fireplace glass cleaner.
- b) Exterior finish may be cleaned with mild soap and water.

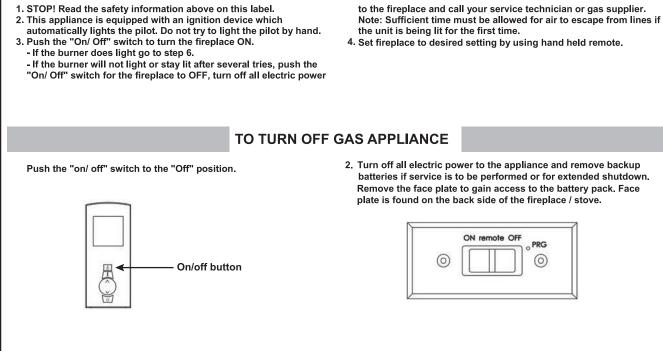
CAUTION:

Do not use abrasive cleaners on glass or any other part of the gas stove.

Do not clean glass when hot.

TRUE NORTH TN24.BODYA





, PRG \bigcirc \odot

ON remote OFF

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causingproperty damage, personal injury, or loss of life.

- A. This appliance is equiped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- **B. BEFORE LIGHTING**, smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

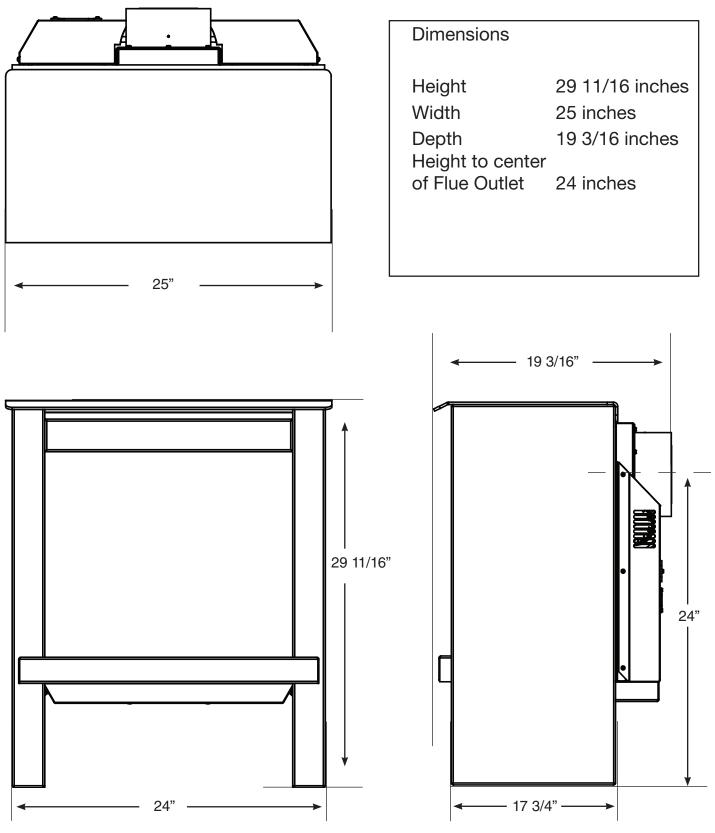
WHAT TO DO IF YOU SMELL GAS:

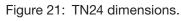
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.

- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. - If you cannot reach your gas supplier, call the fire department."
- C. Use only your hand to push in or turn the gas control knob, Never use tools, If the knob will not push in or turn by hand, do not try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

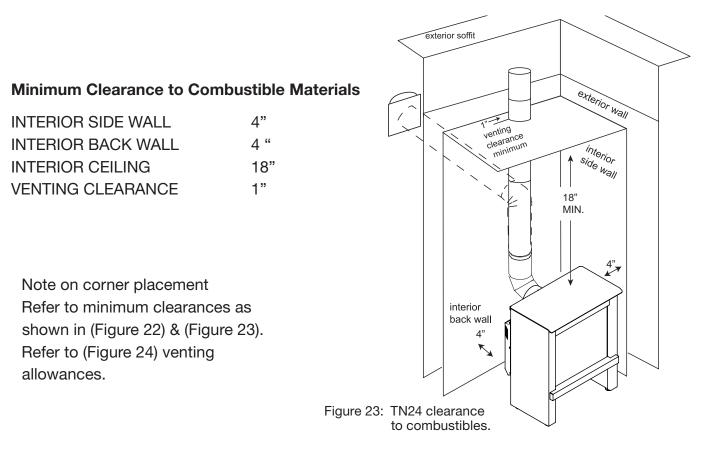
Figure 20: TN24 lighting instructions.

– TN24 Gas Stove Dimensions

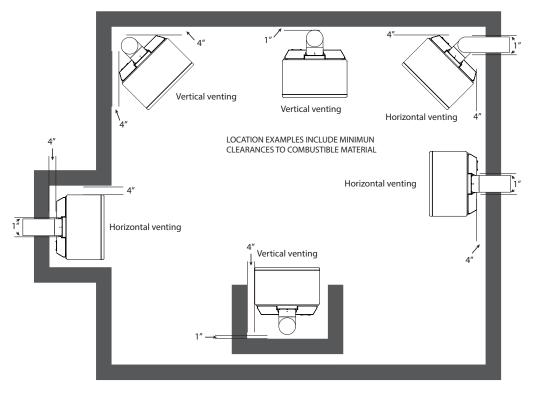




Clearances to Combustibles



Locating the Gas Stove



Location Note:

The TN24 can be installed directly onto any flooring material without an additional floor protector. Only requirement is that the floor be stable and strong enough to support the stove

Figure 22: TN24 common locations & minimum allowances.



- Vent Terminal Clearance

Minimum clearances to the vent terminal must be maintained as shown in (Figure 24) and Roof pitch table. Measure clearances to the nearest edge of termination hood.

NOTE: Vent terminal must not be recessed **NOTE:** LOCAL CODES OR REGULATIONS MAY REQUIRE DIFFERENT CLEARANCES.

Roof Pitch Table	(minimum)	
	ft	m
Flat to 6/12	1.00	0.30
Over 6/12 to 7/12	1.25	0.38
Over 7/12 to 8/12	1.50	0.46
Over 8/12 to 9/12	2.00	0.61
Over 9/12 to 10/12	2.50	0.76
Over 10/12 to 11/12	3.25	0.99
Over 11/12 to 12/12	4.00	1.22

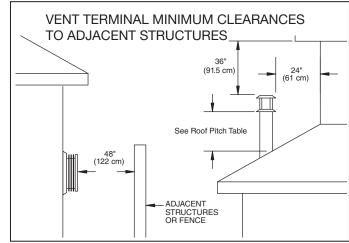
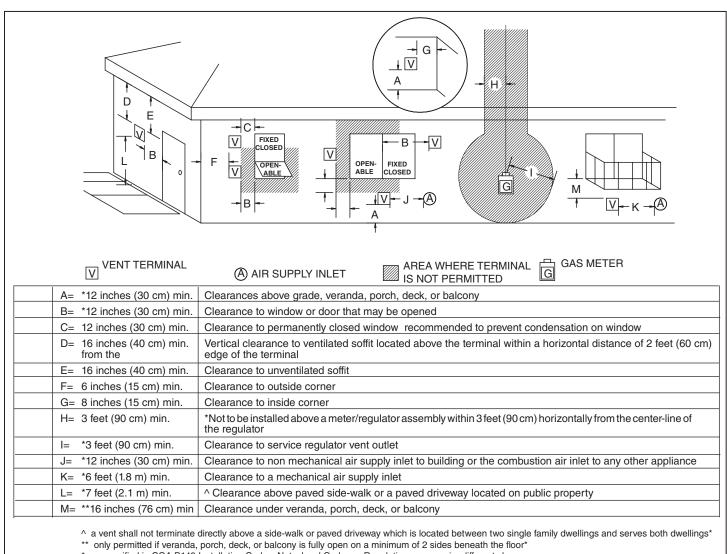


Figure 24: Vent terminal minimum clearances.

• Vent Terminal Minimum Clearances



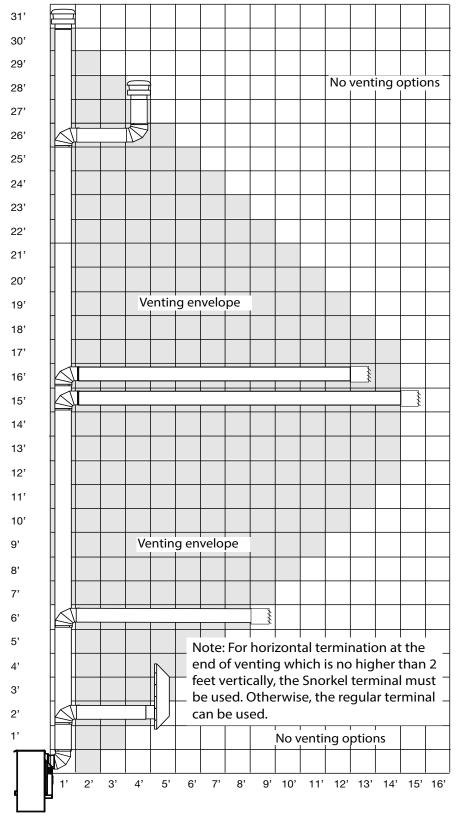
* as specified in CGA B149 Installation Codes, Note: local Codes or Regulation may require different clearances

* for U.S.A. Installations follow the current National Fuel Gas Code, ANSI Z223.1

Figure 25: Vent terminal minimums table.



TN24 Co-Axial Venting Chart



Note: The vent must not exceed a total length of 30 feet. Any combination of rise and run may be used but must be constrained to the boundaries of this chart. A Maximum of three (3) 90° elbows may be used. Only one (1) 90° elbow or combination of other elbows equaling 90° can be used without reducing horizontal run. For each additional 90° elbow. or an equal combination of elbows, reduce horizontal vent run by 2 feet. Ensure vent pipe is properly supported.

Damper Note: The damper position is factory set to the closed position. Every venting configuration is different, and the damper setting may need slight adjustment. (See page 31 for damper adjustment).

Figure 26: True North venting chart examples.



TN24 Co-Linear Venting

Simpson Duravent High-Wind (cap style) Co-Linear Kit w/Flex (46DVA-CL33) or Simpson Duravent Prairie (cap style) Co-Linear Kit w/Flex (46DVA-CL33P) are recommended for use with this appliance. Visit http://www.duravent.com for kit details.

- 1. Measure chimney height, cut flex liner (min.10' to termination) as required. Mark one pipe at both ends to identify combustion air intake pipe from flue outlet pipe.
- 2. Attach marked flex liner pipe to the intake side of vent terminal. Seal and secure with sealant and screws provided. Attach the other pipe to the outlet side of vent terminal. Seal and secure with sealant and screws provided.
- 3. Insert both flex liners from top of the chimney, down through the damper opening.
- 4. Before attaching vent terminal to top of chimney, apply a bead of caulking to top of clay liner. Slip vent terminal over liner and secure in place with lateral retaining bolts.
- 5. For larger chimneys, flashing will need to be constructed according to local building codes.

NOTE:

If venting the TN24 through an existing fireplace opening using a co-axial to colinear adapter, the customer will have a couple of aesthetic options which include:

- 1. Sealing up the existing fireplace opening with a cover or other material, leaving room in the cover or other material to accommodate the adapter so that it is positioned flush (Figure 27) with the cover or other material.
- 2. Positioning the TN24 so that it and the adapter are located outside of the existing fireplace opening.

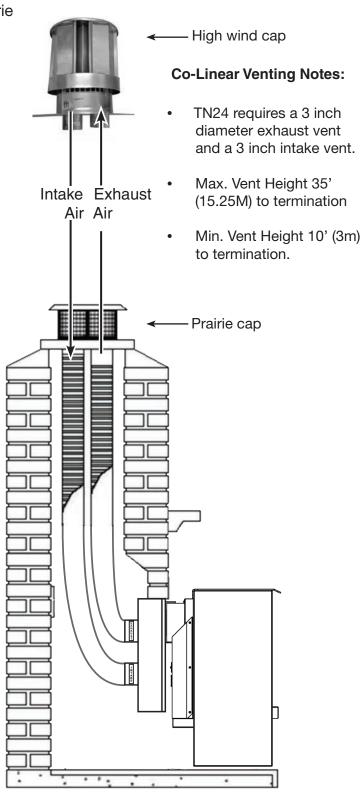


Figure 27: TN24 co-linear venting configuration.

Optional Direct Vent Termination "Snorkel" ------

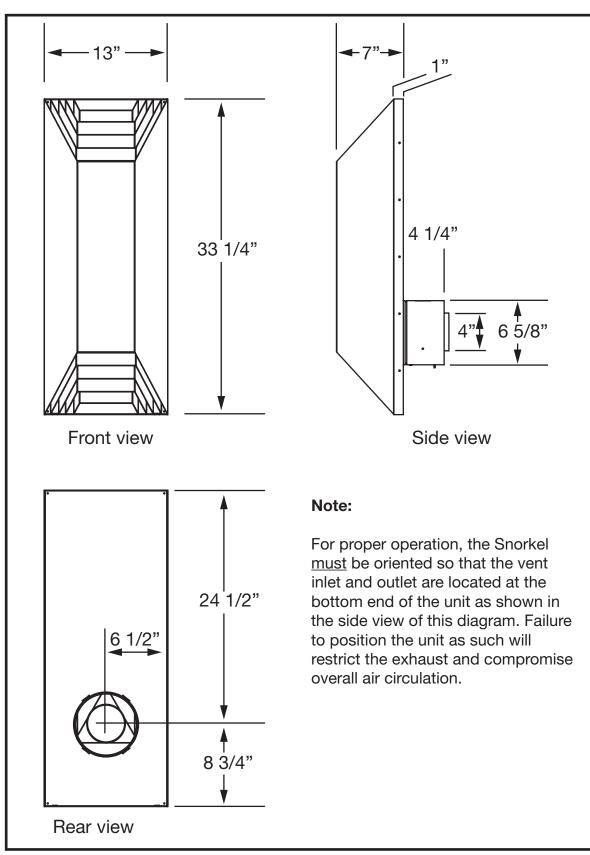


Figure 28: Snorkel dimensions.

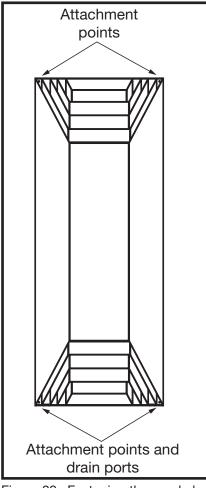


Figure 29: Fastening the snorkel.

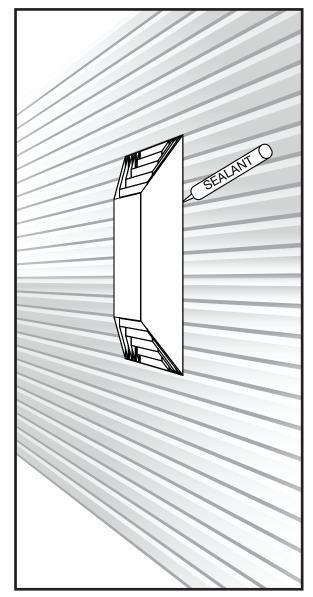


Figure 30: Caulking the snorkel.

Installation:

The Snorkel can be attached to an exterior wall using 4 supplied screws. Be sure to position the Snorkel correctly so that the drain ports are located at the bottom of the unit.

Exterior facing or siding can butt right up to the sides of the unit and can extend up to 1" from the wall to which the unit is attached.

Exterior caulking should be applied to the unit both at the wall where the unit attaches and where the exterior facing or siding meets the unit.

NOTE: Mixing venting components from different manufacturers is inadvisable.

Description	IC	C	Metal-I	ab®	Secu	rity	Selk	tirk	Dur	aVent
	EXCEL	Direct®	Sure-S	eal	Secure	Vent™	Direct-Temp™		DirectVent Pro®	
	Galvanize d	Black	Galvanized	Black	Galvanized	Black	Galvanized	Black	Galvanized	Black
6" Pipe Length	4DL6	4DL6B	4D6	4D6B	SV4L6	SV4LB6	4DT-06	4DT-06B	46DVA-06	46DVA-06B
9" Pipe Length	N/A	N/A	N/A	N/A	N/A	N/A	4DT-09	4DT-09B	46DVA-09	46DVA-09B
12" Pipe Length	4DL1	4DL1B	4D12	4D12B	SV4L12	SV4LB12	4DT-12	4DT-12B	46DVA-12	46DVA-12B
18" Pipe Length	N/A	N/A	4D18	4D18B	N/A	N/A	4DT-18	4DT-18B	46DVA-18	46DVA-18B
24" Pipe Length	4DL2	4DL2B	4D24	4D24B	SV4L24	SV4LB24	4DT-24	4DT-24B	46DVA-24	46DVA-24B
36" Pipe Length	4DL3	4DL3B	4D36	4D36B	SV4L36	SV4LB36	4DT-36	4DT-36B	46DVA-36	46DVA-36B
48" Pipe Length	4DL4	4DL4B	4D48	4D48B	SV4L48	SV4LB48	4DT-48	4DT-48B	46DVA-48	46DVA-48B
60" Pipe Length	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	46DVA-60	46DVA-60B
Adjustable Length (<12")	4DLT	4DLTB	4DAL	4DALB	SV4LA SV4LA12	SV4LBA SV4LBA12	4DT-AJ12	4DT-AJ12B	46DVA-08A	46DVA-08AB
Adjustable Length (>12")	N/A	N/A	N/A	N/A	SV4LA24	SV4LBA24	N/A	N/A	46DVA-16A	46DVA16AB
Telescopic Pipe	N/A	N/A	N/A	N/A	N/A	N/A	4DT-TL14 4DT-TL38	4DT-TL14B 4DT-TL38B	46DVA-17TA 46DVA-24TA	46DVA-17TAB 46DVA-24TAB
45° Elbow	4DE45	4DE45B	N/A	N/A	N/A	SV4EBR45	4DT-EL45	4DT-EL45B	46DVA-E45	46DVA-E45B
45° Elbow (Swivel)	N/A	N/A	4D45L	4D45LB	SV4E45	SV4EB45	N/A	N/A	N/A	N/A
90° Elbow	4DE90	4DE90B	N/A	N/A	N/A	SV4EBR90	4DT-EL90S	4DT-EL90SB	46DVA-E90	46DVA-E90B
90° Elbow (Swivel)	N/A	N/A	4D90L	4D90LB	SV4E90	SV4EB90	N/A	N/A	N/A	N/A

Figure 31: 4" x 6" Rigid Piping Cross Reference Chart.

Description	ICC	Metal-Fab [®]	Security	Selkirk	DuraVent
	EXCELDirect [®]	Sure-Seal	Secure Vent™	Direct-Temp™	DirectVent Pro®
Ceiling Support	4CS	4DSP	SV4SD	4DT-CS	46DVA-DC
Ceiling Support Box	4SS	4DRS	SV4CSB	4D5-CSS	46DVS-CS
Wall Support	4WS	4DWS	SV4BM	4DTWS/B	46DVA-WS
Offset Support	40S	N/A	SV4SU	4DT-OS	46DVA-ES
Wall Thimble	4WT	4DWT	SV4RSM	4DT-WT	46DVA-WT
Firestop Spacer	4FS	4DFS	SV4BF	4DT-FS	46DVA-FS
Trim Plate	4TP	4DCP	SV4PF	4DT-TP	N/A
Attic Insulation Shield	4AS	N/A	SV4RSA	4DT-AIS	46DVA-IS
Storm Collar	4SC	4DSC	SV4FC	4DT-SC	46DVA-SC
Flat Roof Flashing	4F	N/A	SV4F	4DT-AF	46DVA-FF
Adjustable Flashing (0/12-6/12)	4FA	4DF	SV4FA	4DT-AF6	46DVA-F6
Adjustable Flashing (6/12-12/12)	4FB	4DF-12	SV4FB	4DT-AF12	46DVA-F12
Vinyl Siding Standoff	4VSS	4DVS	SV4VS	4DT-VS	46DVA-VSS
High Wind Vertical Cap	4VT	N/A	N/A	N/A	46DVA-VCH
High Wind Horizontal Cap	4DHT	N/A	N/A	N/A	46DVA-HSCH
Vertical Termination Cap	4VT	4DVT	SV4CGV	4DT-VT	46DVA-VC
Horizontal Termination Cap	4HT	4DHT	SV4CHC	4DT-HC	46DVA-HC
Snorkel Termination Cap	4ST14	4DST14	SV4STC14	4DT-ST14	46DVA-SNK14
	4ST36	4DST36	SV4STC36	4DT-ST36	46DVA-SNK36
Horizontal Termination Kit	4HTK	4DHTKA	SVOHK	4DT-HKA	46DVA-KHA
		4DHTKB	SV0HK2	4DT-HKB	46DVA-KHC
Vertical Termination Kit	N/A	4DVTK	SVOFK	4DT-VKC	N/A
			SVOFAK/SVOFBK		

Figure 32: 4" x 6" Rigid Pipe Components Cross Reference Chart.

This gas stove is certified for use with 4" x 6-5/8" coaxial venting components. It is permitted to only use certified venting for this gas stove. See charts on page 19 for a list of approved venting components.



Figure 33: Co-axial venting components.

TN24 Gas Stove rear components

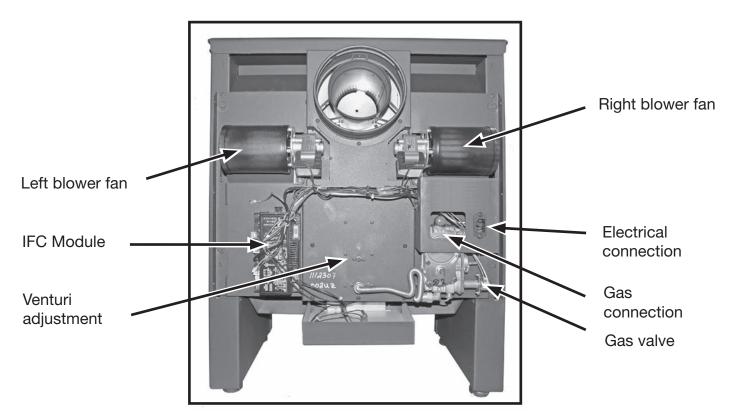


Figure 34: TN24 rear side components.

Gas and Electrical Connection

Note: Do not plug the power cord in until installation has been completed.

Note: Do not turn on the gas supply until installation has been completed.

Gas connection

To make the required electrical and gas connections, start by positioning the gas stove. Connect the gas supply line (not included) to the 3/8" NPT flare fitting at the rear of the unit as seen in (Figure 35). See "Gas Supply" on page 32 of this manual for gas supply requirements.

Electrical connection

An IEC power cord is provided for connection to a standard wall outlet.

Note: Gas connector is not included.

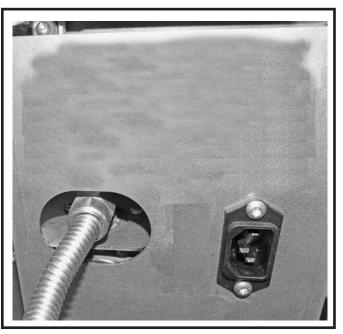


Figure 35: Gas and electrical connections.



Packaging

The TN24 gas stove comes with the ceramic panels and gas burner already installed. The log set and glowing embers are packaged in protective styrofoam and secured in place by the glass door and screen. The glass door and screen must be removed before the log set and embers can be accessed.



Figure 36: TN24 gas stove with packaging.



Figure 37: TN24 top cover.

Screen mesh removal

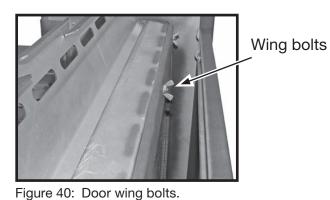


Figure 38: TN24 mesh cover plate.

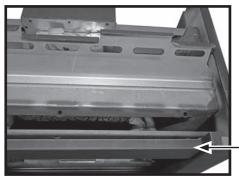


Figure 39: TN24 mesh removal.

- 1. Remove the top cover as shown in (Figure 37).
- 2. Raise the screen mesh cover as shown in (Figure 38). and lift the screen mesh out (Figure 39).



Glass door removal



Glass door retainer frame moved away from posts prior to lifting and removing.

Figure 41: TN24 glass door frame.



- 1. Remove the mesh screen as described on page 22.
- 2. Remove the wing bolts (Figure 40) holding the glass door retainer frame to the gas stove frame and tilt the glass door (Figure 41) so that it can be removed
- 3. Remove the glass door together with the retainer frame that it is affixed to.

Log set pieces

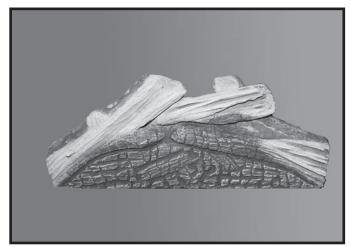


Figure 42: Number one log.



Figure 43: Smaller logs in packaging.

The large number one log (Figure 42) comes wrapped separately from the smaller logs (Figure 43) & (Figure 44). The logs will be assembled in a specific order along with the glowing embers, glass door and mesh screen.

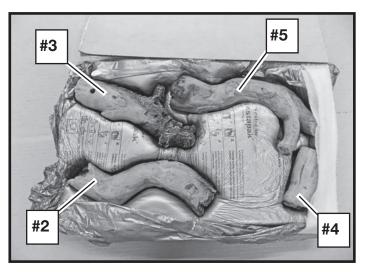


Figure 44: Smaller logs in styrofoam.



Installer Information

Log Set Installation

Installation of log set

- 1. Fill burner basket (Figure 45) with embers so that the basket is filled and overflowing the burner front row (Figure 46). Reserve a small amount of embers for final placement.
- 2. Place first log onto the ledge in the firebox taking care that the log is completely set against the rear wall of the firebox (Figure 47).



Figure 45: Burner with basket for embers. Tab located on left side of burner for #3 log placement.



Figure 46: Burner basket with embers.



Figure 47: Number 1 log set in place.

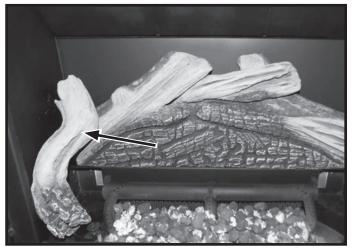


Figure 48: 2nd log placement and location of its hole.

3. Fit the hole in the back of the 2nd log (Figure 48) over the post located on the left hand side of the first log (indicated by the arrow). Once the 2nd log is mounted to the first log, position the lower portion of 2nd log so that it is resting on the tab beside the pilot and is close to the front of the firebox without interfering with the glass door once installed.



Figure 49: 3rd log placement.

- 4. Position 3rd log as shown in (Figure 49) making sure that the log does not cover the holes of the back row of the burner.
 3rd log has a hole in its underside which will fit onto a protruding tab on the burner (Figure 45) & Inset of tab.
- 5. Place 4th log as shown in (Figure 50). The black charcoal side of the piece must face inwards. This log will act as a support for the final log.



Inset of tab.



Figure 50: 4th log placement.

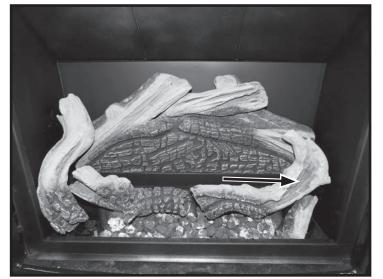


Figure 51: 5th log placement.

6. Place 5th log as shown in (Figure 51) making sure that the log does not cover the holes of the back row of the burner.





Figure 52: Back row of burner.

(Figure 52) shows the burners back row as not being covered by the logs.

At this time, the small amount of embers reserved at the beginning of log placement can be used to fill any left over spaces.

NOTE: do not place embers between the back row of the burner and the back-side of the 3rd and 4th logs as this will interfere with airflow and result in a sooty flame.



Figure 53: Glass door - front side.

Glass door frame fits in the horizontal slot behind this tab

Glass Door Installation

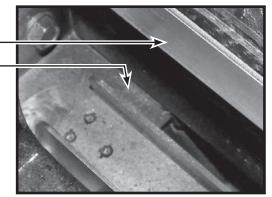


Figure 54: Glass door positioning.

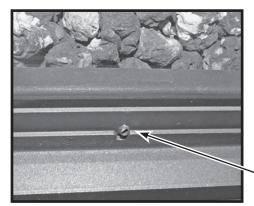


Figure 55: Glass panel position tab.

- Lower the glass door frame into place (Figure 54) making sure that the frame fits into the horizontal slot on the floor of the firebox.
- Align the glass door frame laterally so that its protruding positioning stud (Figure 55) fits into the slot in the firebox. This will line up the bolt holes of the glass door frame to the firebox frame.
- 3. Insert and tighten the bolts to secure the glass door frame to the firebox.

CAUTION: Over-tightening the wing bolts could result in the glass door fracturing.

Screen Mesh Installation

The screen mesh is positioned in front of the glass door. It's purpose is to provide protection from the heat radiating from the glass door. The screen has a front side and a rear side and must be oriented correctly for a proper fit.

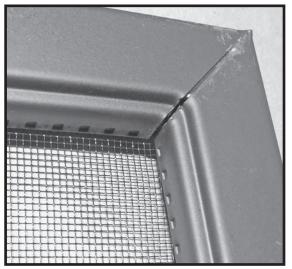


Figure 56: Rear side of screen mesh.

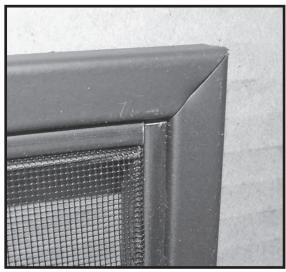


Figure 57: Front side of screen mesh.

(Figure 56) shows the rear side of the screen mesh. This side must be facing toward the log set once it is in place. (Figure 57) shows the front side of the screen mesh. This side must be facing outward once it is in place.

The screen mesh frame is not square and so it is important that it be oriented the correct way before insertion. (Figure 58) shows the screen mesh resting at a point where it is higher than the firebox frame and glass door frame immediately to its right. (Figure 59) shows the screen mesh properly installed.

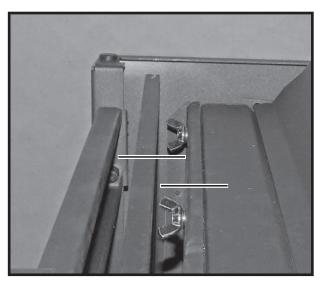


Figure 58: Improper orientation of screen mesh.

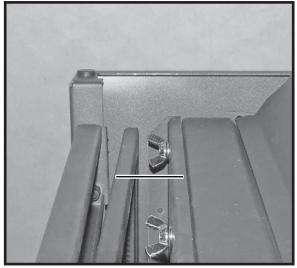


Figure 59: Proper orientation of screen mesh.



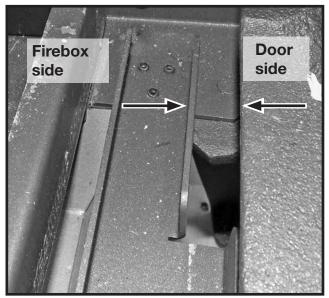


Figure 60: Screen mesh location channel.

The bottom edge of the screen mesh must fit firmly into the channel provided for it in the fire box frame (Figure 60) shows the location of the screen mesh channel.

The screen mesh top holder (Figure 61) positions the screen mesh so that there is the correct distance between the screen mesh and the glass door. The holder has channels which will secure the top of the screen mesh once the holder is lowered into position.

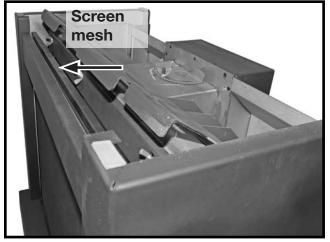


Figure 61: Screen mesh holder.

(Figure 62) shows the screen mesh holder in place with the holder channels keeping the screen mesh in its proper position.

Note: it may be necessary to use a small amount of force to get the top of the screen mesh to fit into position of the screen mesh holder.

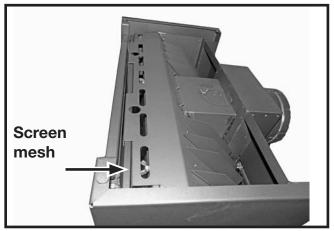


Figure 62: Screen holder in correct position.

Return the top cover to its proper position.

Accent Lighting Glass Plates

The TN24 Gas Stove comes with an assortment of glass plates of various colours. Accent lighting is controlled via the remote control transmitter included with the TN24 Gas Stove (Figure 1 on page 7). The glass plate tray is located underneath the stove (Figure 63) and is held in place by two wing nuts - one on each side of the tray.



Figure 63: TN24 glass plate holder location.



Figure 64: Light tray access.

Changing the glass plate

- 1. The glass plate is easily installed from the front of the stove (Figure 64).
- 2. Slide a new glass plate into the holder located under the light tray.

CAUTION: Let the glass plate cool before changing.

- IFC Module

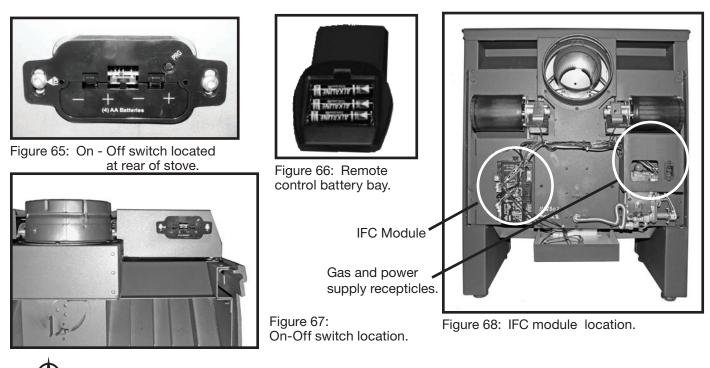
The Proflame 2 Integrated Fireplace Control (IFC) module is a device that allows automatic ignition and pilot flame supervision, and commands the functions of the gas stove. It's configured to control the ON/OFF main burner operation, giving the choice of both IPI (intermittent pilot ignition), and CPI (continuous pilot ignition) modes. The Proflame 2 IFC module controls and connects directly to the pilot assembly and the automatic valve using low electric power.

The IFC module can be powered by both an AC power supply and battery pack for back up. The Proflame 2 offers the added ability to control the comfort fan speed from OFF through six (6) speeds, and a dimmable light. The external batteries can provide DC power to the IFC allowing the stove to be used during an AC power interruption.

Operating Procedure -

Initializing the System for the first time

- 1. Install 4 AA batteries into the TN24 battery bay (Figure 65) located on the rear side of the TN24. Make sure that the selection switch is on the "Remote" setting so that the remote control handset can be used.
- 2. Install 3 AAA batteries into the Proflame 2 Remote hand held transmitter (Figure 66) .
- 3. Plug the TN24 power cord into a wall socket and open the gas supply line.
- 4. Insert a straightened paper clip into the opening marked "PRG" of the ON/OFF battery bay cover (Figure 65) and press the program button once. The IFC module, also located on the rear of the TN24, will beep 3 times indicating that it is ready to synchronize with a remote transmitter.
- 5. On the Remote hand held transmitter, push the power on button once. The remote transmitter will beep 4 times to indicate that the remote transmitter and the control module are now synchronized. The Remote hand held transmitter is now ready to use.



Damper Adjustment

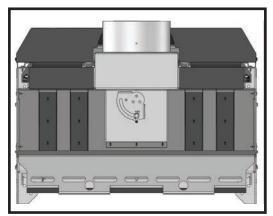


Figure 69: TN24 Damper.

Damper Adjustment

Damper adjustment is located under the top cladding cover plate.

(Factory setting is closed; slowly open and adjust as necessary to eliminate a sagging, sooting flame).

Venturi Adjustment

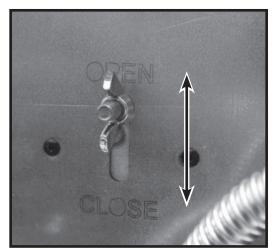


Figure 70: Venturi adjustment.

Venturi adjustment is accessible through an opening in the rear cover (Figure 34 on page 22).

Some adjustment may be required

Adjustment

Loosen the wing nut and move post up to open venturi, and down to close venturi. Tighten wing-nut once adjustment is complete.

Venturi should be closed when using natural gas and open when using liquid propane.

Note: Some adjustment may be necessary.



Gas Supply

Servicing of the gas stove can be performed from the rear of the unit by removing the access panel from the unit.

- **Caution:** The gas line should be installed by a qualified service person in accordance with all building codes. This section is intended as a guide for qualified technicians installing this gas stove. Consult local and/or national building codes before proceeding.
 - Gas supply line connection is located on the rear of the gas stove. Gas connection accepts a 3/8" 45° flare fitting. Correct gas line diameter must be used to assure proper operation and pressure.
 - The gas stove input rating is shown in the chart below.
 - A drip leg must be installed in the gas supply line going to the gas control valve to minimize the possibility of any loose scale or dirt within the gas supply line from entering the control valve.
 - It is essential that a union or flanged connection (not provided) be installed just upstream of the valve to allow for repair or replacement of the gas valve.

Check local codes for additional requirements.

Turn on the gas supply and check that all connections are tight and leak free.

Gas Pressure Check

Gas pressure requirements						
Input Pressure	Natural Gas	Propane				
Minimum	5.0" WC	12.5" WC				
Maximum	13.9" WC	13.9" WC				
Manifold Pressure						
High	3.8" WC	11" WC				
Low	1.1" WC	2.9" WC				

<u>TN2</u>	24	
Gas	Orifice	Output
<u>AFUI</u>		
NG	2.26 mm	24,000 btu/hr73.0%
LP	1.40 mm	24,000 btu/hr73.0%

Gas Pressure Testing Procedure

Note: To test the gas pressure, turn off the gas supply to the gas stove before loosening test point screws. Verify gas pressures with the gas stove lit and at the highest setting.

- 1. Remove rear panel and locate the valve as seen in (Figure 72).
- 2. Locate the inlet and outlet test points on the valve which can be seen in (Figure 73). After locating test ports loosen the screws within the ports using a flat-tip screwdriver.
- 3. Attach pressure gauge to the test ports.
- 4. Turn gas supply back on and test pressures.
- 5. After testing is finished, turn off gas supply, remove the pressure gauges and re-tighten the test point screws.



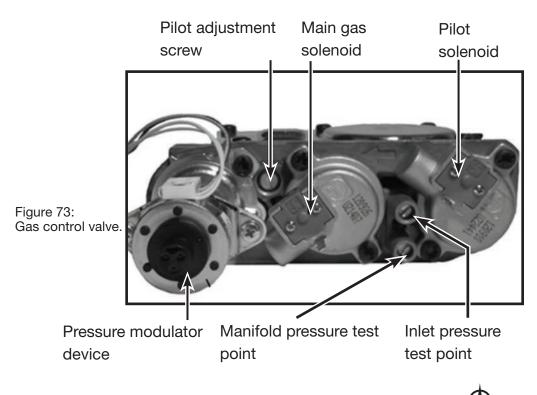
Pilot Flame Adjustment

The pilot flame level can be adjusted by turning the adjustment screw located on the valve in (Figure 73).

Figure 71: TN24 Pilot assembly.



Figure 72: Control valve location.



TN24.BODYA TRUE

NORTH

Propane Conversion

Before starting the conversion make sure to shut off the gas supply to the unit and allow gas stove to cool to room temperature.

To convert the gas stove from natural gas to propane the (TN24.LPKITA) kit is required. This kit comes with new pilot and burner orifices as well as a new pressure modulator for the valve.

To switch the pressure modulator, follow the instructions that are provided with the conversion kit.

To change the orifices you are required to remove the mesh and glass doors, log-set, embers and burner. Please refer to the appropriate sections of this manual and follow instructions on how to correctly remove these components.

After removing the components listed in the above paragraph, you will have access to the burner orifice located at the lower inside rear of the firebox. The orifice can be removed using a ½" socket. Before installing the new orifice, Loctite 567 Thread Sealant needs to be applied to the threads of the new orifice to ensure a proper seal when installed.

To replace the pilot orifice you will need to remove the pilot hood which is held in place by a spring. First remove the spring, and then remove the hood by pulling it up from the pilot bracket, seen in (Figure 75). To remove the existing orifice, insert a 5/32" or 4mm Allen wrench into the hexagonal key-way of the orifice and rotate counter-clockwise until free. Insert the new orifice using the same Allen wrench and tighten it until a torque of 9 lbf in (1 Nm) is achieved. Replace the pilot hood by aligning the tab on the base of the hood with the slot in the side of the pilot journal, and push the hood down onto the pilot bracket. Replace the spring by pushing it onto its seat.

To complete the conversion, the venturi shutter will have to be adjusted to the correct opening. Refer to ("Venturi Adjustment" on page 33) for correct adjustment of venturi.



Figure 74: TN24 Pilot assembly.

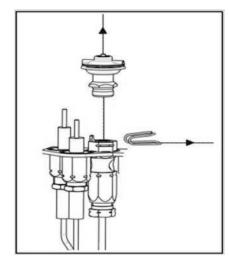


Figure 75: Pilot hood removal.

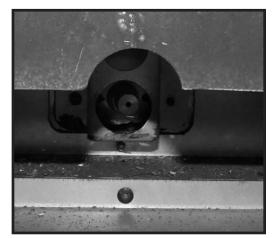


Figure 76: Orifice from inside the firebox.

- Replacement Parts -

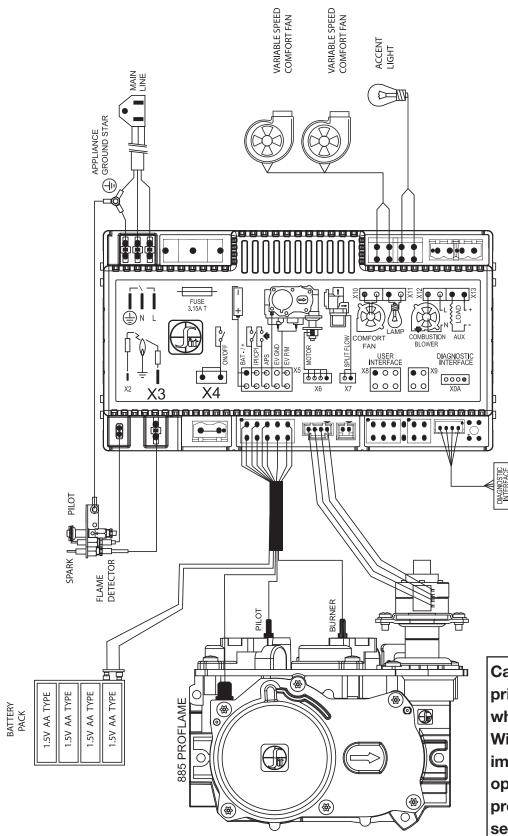
DESCRIPTION	SALES CODE
True North 24 unit complete	3201.0001
Optional	
True North LP Conversion Kit (TN24.LPKITA)	32180001
Replacement	
True North Door with glass	8000.0609
True North Screen	8000.0612
True North Control Tray Complete	8000.0608
True North Black Porcelain Panel Set	8000.1327
True North Burner	8000.0607
True North Log Set with Embers	8000.0611
True North Blower Right	5024.54-00
True North Blower Left	5024.53-00
True North Light Housing with Bulb	8000.0610
True North Decorative Tinted Glass Kit	TN24.DECGLSA
SIT Remote Transmitter	8000.0191
SIT Pilot Assembly	8000.0193

Optional Venting Components:

Co-axial to co-linear Adapter	5096.817
Direct Vent Terminal "Snorkel"	11270002



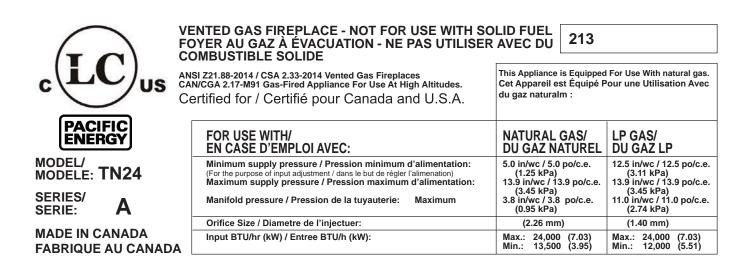
Wiring Diagram



Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

Rating Label

The Rating label - as shown - is located on the rear of the gas stove.



Blower electrical rating: 115v, 60hz, 1.1 A / Normes electriques du ventilateur: 115v, 60hz, 1.1 A This appliance equipped for altitudes 0 - 4500 ft. (0 - 1372 m) / Cet unité est conçu pour des altitudes variant entre 0 - 4500 pieds (0 - 1372 m). In Canada, also certified for installation in a bedroom or a bedsitting room / Aussi certifié pour installation dans une chambre à coucher ou une salle de séjour. This appliance must be installed in accordance with local codes, if any; if none, follow the current CAN/CGA-B149 (Canada), or ANSI Z223.1 (USA) Installation Codes. Installer l'appareil selon les codes ou règlements locaux, ou, en l'absence de tels règlements, selon les codes d'installation CAN/CGA-B149 (Canada), or ANSI Z223.1 (USA) en vigeur.

MANUFACTURED (MOBILE) HOME: This appliance is only for use with the type of gas indicated on the rating plate and may be installed in an aftermarket, permanently located, manufactured (mobile) home where not prohibited by local codes. See owners manual for details. FABRIQUEZ (MOBILE) MAISON: Cet appareil doit être utilisé uniquement avec le type de gaz indiqué sur la plaque signalétique et peut être installé dans une maison préfabriquée (mobile) installée à demeure si les règlements locaux le permettent. Voir la notice du propriétaire pour plus de détails. Cet appareil ne peut être converti à d'autres gaz sauf si une trousse de conversion certifiée est utilisée. Install in accordance with the current standard Mobile Homes,CAN/CSA Z240 MH (in CANADA), and the Manufacturer's Home Construction and Safety Standard, Title 24 CFR, Part 3280, or the current Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities ANSI/NFPA 501A, (in the U.S.A.). Cet appareil diot être installé conformemént aux exigences de la norme CAN/CSA Z240 MH en vigueur de l'ACNOR, Installations de gaz dans les Constructions Mobiles. FOR USE WITH THE GLASS AND SCREEN BARRIER CERTIFIED WITH THE APPLIANCE ONLY / POUR UTILISATION UNIQUEMENT AVEC LES PORTES IN VERRE CERTIFIEES AVEC L'APPAREIL Pacific Energy

MINIMUM CLEARANCES TO COMBUSTIBLES / CLAIRANCES MINIMALES AVEC LES COMBUSTIBLE Left and Right side are determined when facing the front of the appliance. / Les côtés droit et gauche se déterminent en se mettant devant l'appareil et en lui faisant face.			D	Pacific Energy Fireplace Products Ltd Duncan, British Columbia Canada					
For installation as free standing appliance only / Pour l'installation comme appareil autonome seulement Sidewall / Back wall to Appliance / Du mur latéral a l'appareil Ceiling to Appliance / Plafond a l'appareil Vent Pipe / Déchargez le Tuyau	4 in./ 4 po. 18 in./ 18 po. 1.0 in./ 1.0 po.	18 po. (457 mm)							
*See Installation Manual for more detail / Voyez des Directive de l'Installation pour plus détaux.			JAN	FEB	MAR	APR	2014		
WARNING: Improper installation, adjustment, alteration, service or maintenance ca Refer to the owner's information manual provided with this appliance. For assistance qualified installer service agency or the gas supplier	n cause injury or pro e or additional inform	perty damage. nation, consult a	MAY	JUN	JUL	AUG	2015		

AVERTISSEMENT: Une installation, un réglage, une modification, une réparation ou un entretien mal effectué peut causer des dommages matériels ou des blessures. Voir la notice de l'utilisateur qui accompgne l'appareil. Pour de l'aide ou des renseignements supplémentaires, consultez un installateur, un technicien agréé ou le fournisseur de gaz.

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For technical support, please contact your retailer

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