## **INSTALLATION MANUAL**

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

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

### FOR YOUR SAFETY

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

### 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.
- 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.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

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.



# TOWN & COUNTRY

## TC54D2 INSTALLATION MANUAL



## MODEL TC54 SERIES D2 DIRECT VENTED DECORATIVE GAS APPLIANCE

This is a decorative product and is not intended to be used as a heating appliance.

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

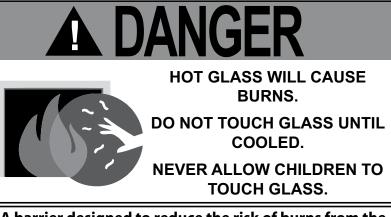
## Table of Contents

Caution3Safety3Important Note for the Commonwealth ofMassachusetts:4Fireplace Dimensions5Minimum Clearances to Combustible Material5Installation Requirements6Manufactured (Mobile) Home6Door Frame Removal6Top Standoffs7Locating The Fireplace7Framing and Finishing8Steel Stud Framing Kit10Frame Assembly11Fixed Lintel12Fireplace Facing Allowance13Hearth Extension13Electrical14Wall Switch and Remote Control15Home Automation16Gas Supply17
Gas Supply17 Gas Pressure Check17
Horizontal Termination Venting (Power Vented)

Roof Termination Venting Chart	20
Ceiling Opening:	21
Ceiling Firestop:	21
Roof Support Bracket:	
Vent Pipe Sealant	22
Insulated Collar Shield	22
Roof Vent Terminal:	23
Vent Terminal Clearance	24
Roof Pitch Table	24
Vent Restrictor Adjustment	25
Roof Termination Kit	26
Vent Pipe Dimensions	27
Vent Offset Chart	27
Firebox Panels Installation	28
TC54 PANELS	28
Finishing Touch Trim Kit Installation	30
Linking Remote Handset to the Fireplace	32
Step 1: Procedure for linking / pairing wall	
switch to fireplace	32
Step 2: Procedure for linking / pairing wall	
switch to remote handset	
Maintenance	34
Glass Panel:	34
Annual Inspection:	
Periodically:	34
Replacement Parts	
Replacement Parts – Control System	
Wiring Diagram	
Rating Label	38

### Attention!

- Turn off the main gas supply for the appliance during installation or maintenance of the receiver/ module device.
- Turn off main gas supply for the appliance prior to removing or reinserting the batteries.
- In case of remote control malfunction, turn off the fireplace using the "on/off" main switch located on the wall.
- For installation/maintenance, turn off the fireplace at the on/off switch located on the wall and at the fireplace power supply circuit breaker.



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.

2

## Caution

**FOR YOUR SAFETY -** Do not install or operate your Town & Country fireplace without first reading and understanding this manual. Any installation or operational deviation from the following instructions voids the Town & Country Fireplaces Warranty and may prove hazardous.

This appliance 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 1/2 psig (3.5 kPa).

This appliance 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 1/2 psig (3.5 kPa).

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

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



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 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

Due to high temperatures, this gas appliance 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.

Safety

Young children should be carefully supervised when they are in the same room as the appliance. 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 fireplace or stove, 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 appliance.

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 appliance 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 appliance 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 appliance must not be connected to a chimney flue serving a separate solid fuel burning appliance.



## Important Note for the Commonwealth of Massachusetts:

From Massachusetts Rules and Regulations 248 CMR 5.08:

- (a) For all side wall horizontally vented gas fuelled 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 fuelled 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 fuelled 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 fuelled 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.
- 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 fuelled 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".
- INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fuelled 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 fuelled 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 fuelled 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 fuelled 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.

## Fireplace Dimensions

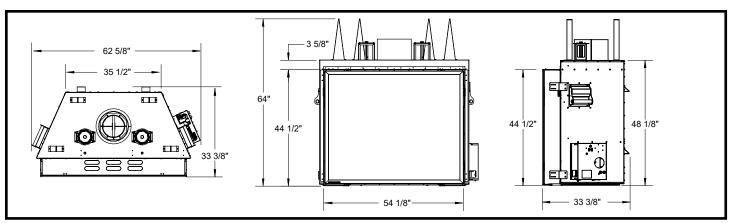


Figure 1: TC54 Dimensions.

## Minimum Clearances to Combustible Material

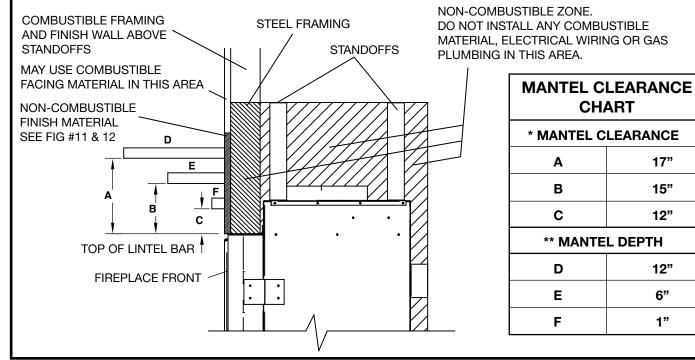
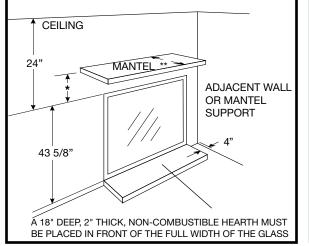


Figure 2: TC54 Mantle clearances.



#### NOTE:

To ensure that the hearth does not interfere with the door frame, the fireplace must be raised.

**Refer to** 'Hearth Extension' section for details.

#### **Minimum Clearances:**

Side standoffs	0 in	(0 mm)
Back standoffs	0 in	(0 mm)
Top standoffs	0 in	(0 mm)
Bottom of appliance	0 in	(0 mm)
Adjacent side wall	4 in	(102 mm)
Ceiling to appliance	24 in	(610 mm)
*Mantel to appliance	See Fig.#2	
**Maximum Mantel extension	See Fig.#2	
Mantel support	4 in	(102 mm)
Vertical vent pipe	1 3/4" in	(45 mm)
Horizontal Vent pipe		
(Top, sides and bottom)	1 3/4" in	(45 mm)

17"

15"

12"

12"

6"

1"

Figure 3: Mantel clearances.

## Installation Requirements

The Town & Country Fireplace 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.

## Manufactured (Mobile) Home

In some jurisdictions, the Town & Country Fireplace may be installed in Manufactured Homes after the "first sale". Consult local codes for approval. The fireplace 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).

## Door Frame Removal

Warning: Turn off the fireplace, and allow ample time for the unit to cool before proceeding.

Caution: The ceramic glass is very fragile, and should be handled with care.

The door frame is held in place by two spring-loaded latches that are operated by a one-piece latch handle.

- 1. Remove safety barrier screen (Figure 4) by prying the top portion of the screen toward you, then lift the screen from its tabs (inset) located at the base of the door frame.
- 2. Remove the TC Finishing Touch Trim Kit from the door frame. (If installed)
- 3. Using a screwdriver (Figure 5) or other similar object, push against the notch in the top of the latch and grab the bottom of the latch handle as it protrudes (Figure 6). Lift handle until latch hook disengages. Repeat for other side while holding glass so it does not tip out.
- 4. Tilt the top of the door frame out to clear the top edge of the unit. Grasp the sides of the frame and lift up and out to disengage from its bottom track.
- 5. Place the door frame in a safe place to avoid damage.
- 6. Re-assemble in reverse order. Latch handle should snap into place and be flush with door frame when engaged correctly.
- 7. Reinstall Trim Kit if required.
- 8. Reinstall safety barrier screen

TIP:

To ensure glass is properly latched, grasp the top left and right sides of the glass frame, under moderate pressure it should pull forward and return to original position evenly on both sides.

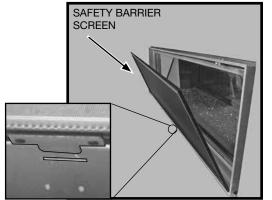




Figure 4: Safety barrier screen. Figure 5: Accessing handle.

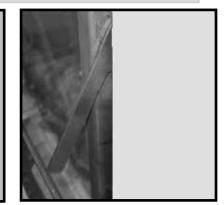
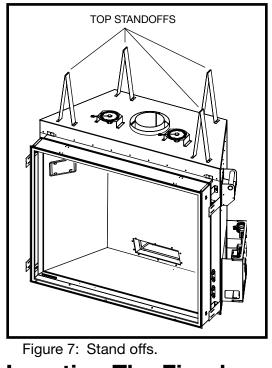


Figure 6: Handle.

## **Top Standoffs**

The top standoffs are shipped loose inside the fireplace and must be installed on top of the fireplace (Figure 7). Do this once the fireplace is on site and in position.



**Locating The Fireplace** 

In planning the installation for the fireplace, it is necessary to determine where the unit is to be installed, location of vent system and where gas supply piping may be plumbed. Various installations are possible, such as, into an existing wall, a corner, a built-in wall or a wall projection (Figure 8). Due to high temperatures, do not locate this fireplace in areas of high traffic or near furniture or draperies.

## The minimum clearances from the fireplace to combustible surfaces must be adhered to and are shown in Figure 2 & Figure 3.

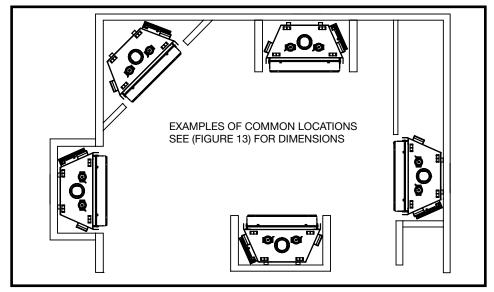


Figure 8: Common installation examples.



### Framing and Finishing

Note: The fireplace should be in place and venting installed before framing in or building an enclosure around the unit.

The Town & Country fireplace must be framed in as described below or totally enclosed with non-combustible material, such as facing brick.

Determine the total thickness of facing material to be used. A thickness of 3/4" will allow the finishing surface to be flush with the front of the unit. If preferred, additional masonry type non-combustible material can be installed above and to the sides up to 4 1/2 inches proud of the appliance.

## The finishing material must not interfere with glass frame access or movement.

A Steel Stud Framing Kit is supplied with the fireplace and must be used unless the fireplace is totally enclosed with non-combustible material. Assemble the framing kit as per the instructions on pages page 10 of this manual. Attach the steel frame to the fireplace once the fireplace is in its final position. Secure the steel frame to the framing brackets on each side of the unit. Ensure that the studs are set back far enough to allow for thickness of finishing surface.

The sides, back and top of the fireplace can be framed in up to the steel studs and the fireplace standoffs using conventional lumber. Consult local building codes for specific requirements.

Due to high temperatures, noncombustible backer board, such as cement board or its equivalent, must be used to sheet in the front of the fireplace, extending 18 3/4" above and 5 " to the side of the framing edge bars (Figure 11). Standard sheet rock (dry wall) may be used beyond this.

If the backer board is not to be finished with other non-combustible material such as tiles, it is recommended that the instructions in (Figure 10) be followed closely. **Chase Insulation:** When installing this fireplace against a non-insulated exterior wall or chase, it is recommended that the outer walls be insulated to same degree as other exterior walls. Do not place fireplace directly against the insulation. Cover the insulation and plastic vapour barrier with a solid surface, such as dry wall (sheet rock). Consult local codes. Do not insulate or use plastic vapour barrier within the framing kit.

#### CAUTION: See Figure 10 on page 9 BEFORE PROCEEDING.

### NOTE:

The chase must be properly sealed at the ceiling level or between floors in a multilevel installation.

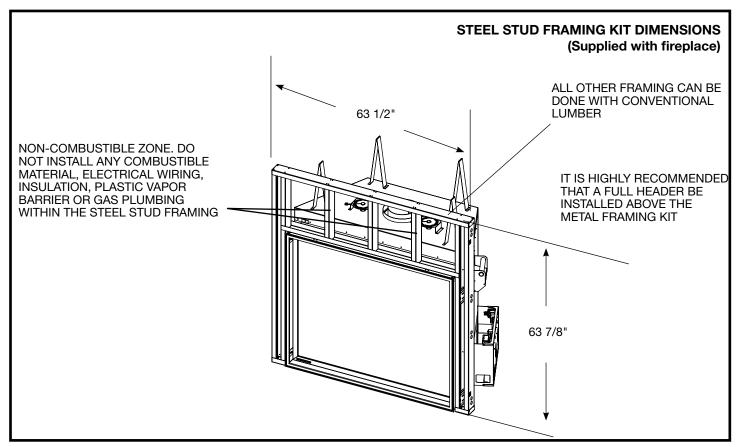
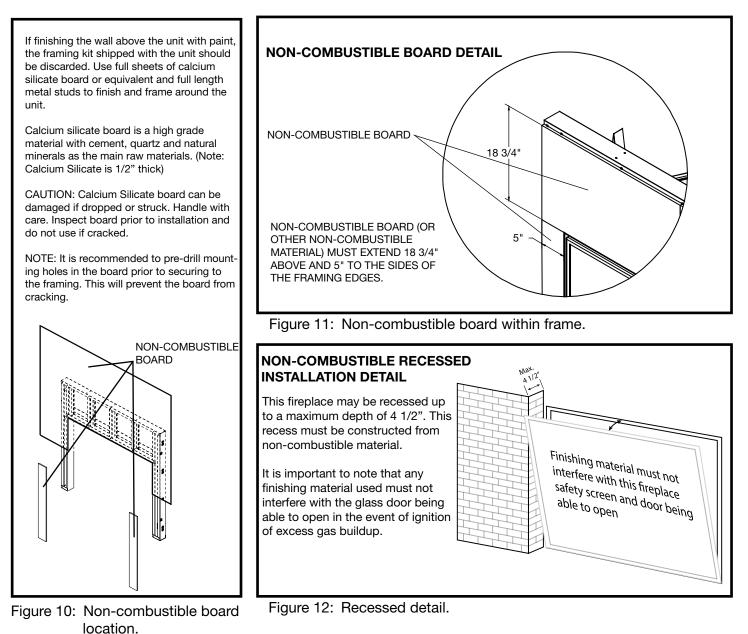
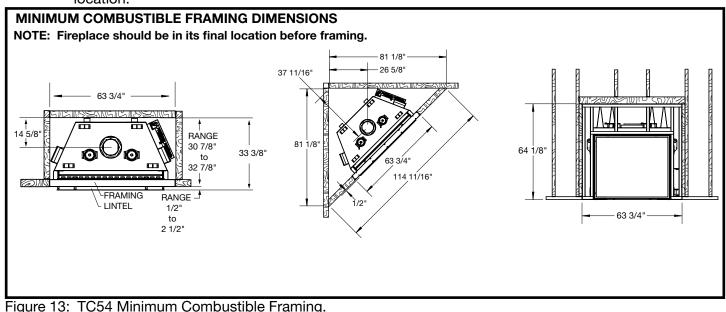


Figure 9: TC54-D with frame.





Steel Stud Framing Kit

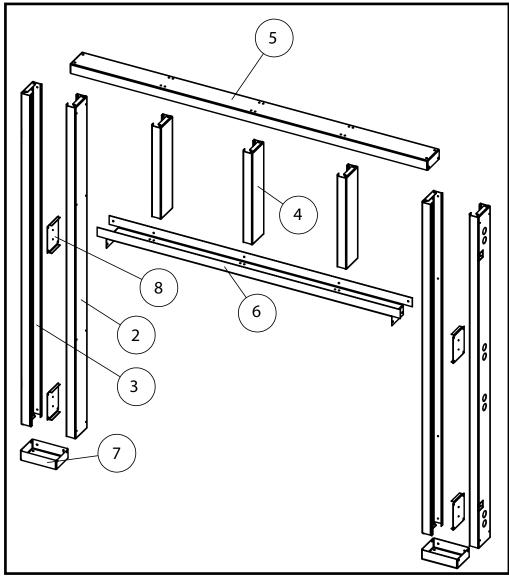


Figure 14: TC54 Steel frame assembly.

Item	Description	Qty.
1	SCREW, TEKS #8 x 1/2 (Not shown)	Pkg 40
2	STUD, INNER SIDES 63 3/4"L	2
3	STUD, OUTER SIDES 63 3/4"L	2
4	CENTER STUD, VERTICAL SHORT 19 7/16"L	3

### **Each Kit Contains:**

Item	Description	Qty.
5	STUD, HEADER HORIZONTAL 58 1/4" L	1
6	STUD PLATE, HORIZONTAL	1
7	BASE PLATE 5 15/16" L	2
8	FRAMING PLATE	4

### **Frame Assembly**

### 1. Top Frame Assembly

- Lay out the horizontal header stud (5) on a large flat surface. (Position all pieces on their narrow edges as shown in the illustration in (Figure 14).
- Position the three short, vertical center studs (4) perpendicular to the horizontal header stud, and align with the corresponding sets of screw holes. Fasten with the screws (1) provided.
- Position the shorter horizontal plate stud (6) at the bottom end and perpendicular to the vertical center studs (4). Align the bottom ends of the vertical center studs to the corresponding sets of screw holes and fasten with the screws provided.

### 2. Attach Side Studs (Legs)

- Lay the inner vertical side stud (2) so that it's top end aligns with the 2nd set of screw holes of the horizontal header stud (5). The side stud should attach to, and be perpendicular to the short plate stud end (6). Fasten with the screws provided.
- Fasten the vertical outer side studs (3) to the ends of the header stud (5).
- Position the base plate (7) at the bottom of the inner and outer side stud legs and fasten with the screws provided.
- Turn the assembled frame over and install screws to the remaining fastening points.

### 3. Attach the Assembled Frame to the Unit

• Align the assembled frame to the unit framing brackets (Figure 15). Align the framing plates (8) to the fastening points through the access holes in the outer side studs (3).

### 4. Secure to Existing Framing

• Secure the frame assembly to existing framing through the header stud (5) and the base plates (7).

### 5. Install Non-combustible Board

• Use drywall screws to install the concrete board (Figure 16).

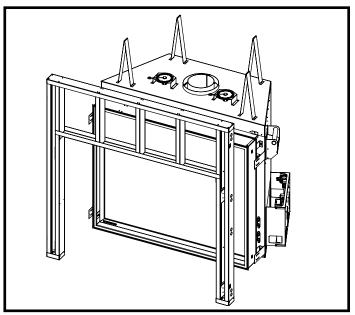


Figure 15: Align the assembled frame with the fireplace.

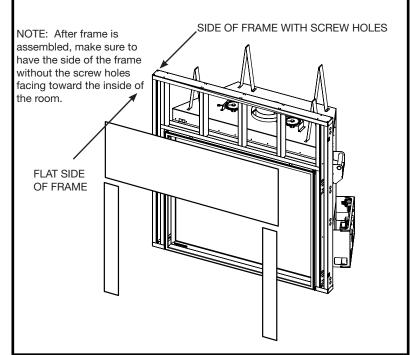


Figure 16: Aligning the frame so that the flat surface is facing outward.

## **Fixed Lintel**

### Framing Kit Adjustment

The lintel on the TC54D2 is in a fixed position on the fireplace and there is no adjustment to move the lintel toward you or away from you once the fireplace has been located in its final position. Instead, the fireplace itself must be manoeuvered so that the front face of the lintel determines the final position of the fireplace.

The Framing Kit allows for a 1 7/8 inch adjustment along the Framing Brackets. Use this range to help determine the front of the facing material.

The thickness of the facing material, whether 1/2 inch calcium silicate board or a rock facing must be taken into consideration before settling on a final position of the fireplace. See "Fireplace Facing Allowance" on page 13.

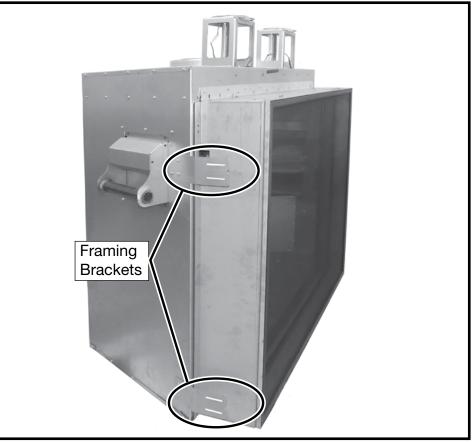


Figure 17: TC54D2 Fixed lintel.

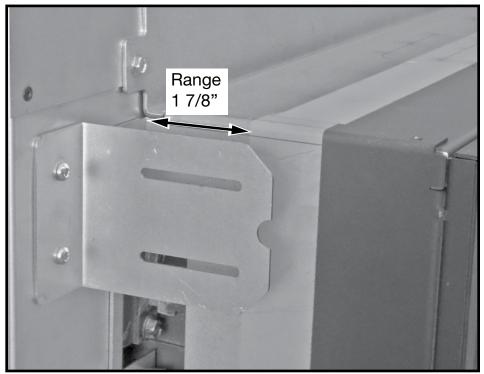


Figure 18: Framing bracket.

### **Fireplace Facing Allowance**

This fireplace is designed to finish either flush with the facing material or can be installed with a 4 1/2 inch recess, see See "Figure 12: Recessed detail." on page 9.

The fireplace can accommodate facing material thickness from 1/2 of an inch to 2 1/4 inches if installing flush.

Care should be taken to correctly determine the facing material thickness so that the fireplace is positioned so that the front of the fireplace is flush with the facing material.

Facing material must not interfere with the ability for the door or the screen to open.

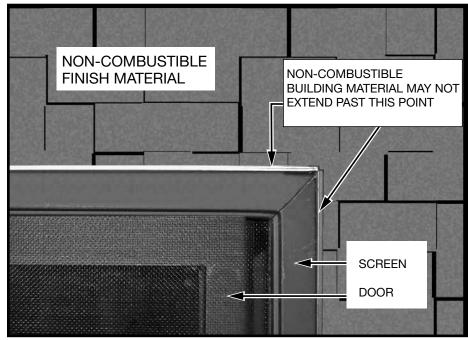
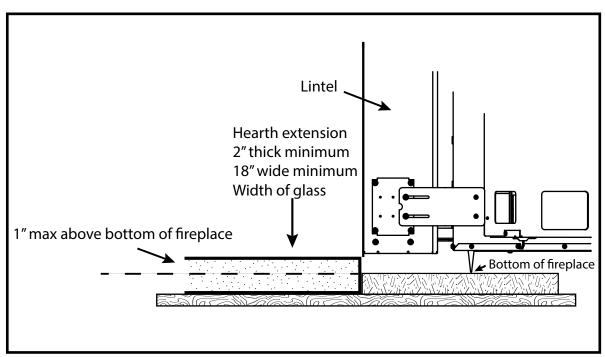


Figure 19: Facing edge location.



## Hearth Extension

Figure 20: TC54D Hearth extension.

### Caution:

A minimum 2" thick non-combustible hearth extension extending 18" in front of this fireplace must be fitted if a combustible sub floor extends in front of the fireplace. To ensure that the hearth does not interfere with the safety screen, the fireplace must be raised to ensure that the hearth extension is no more than 1" above the bottom of the fireplace.

The fireplace can be raised using combustible or non-combustible materials ensuring that it is fully supported along the full width and depth of the fireplace.

## Electrical

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

## Note: Installation must be performed by a qualified installer, service agency or gas supplier.

The wall control is connected to the fireplace by a 50 ft. communication cable supplied with the fireplace.

## Using a communication cable extention in addition to the 50 ft cable included with the fireplace is not recommended

### Installation

- 1. Place the fireplace in the desired location.
- 2. Remove the door from the fireplace.
- 3. Remove access panel from right hand side of the firebox (Figure 21).
- 4. Connect 110 V. AC electrical supply to the wires installed inside the junction box (Figure 22). The fireplace is rated at 110 volts, 60Hz, 0.25A. The optional power vent kit is rated at 115 volts, 60Hz, 1.8A.

The electrical wires can be accessed from both inside and outside the junction box by removing one of the two small access panels (Figure 22 & Figure 23) .

- 5. Attach the wall switch (Figure 24) to the framing in the desired location (50 ft is supplied with fireplace).
- 6. Route the wall switch control cable (supplied) as required to the wall switch (Figure 25).
- 7. Attach one end of the wall switch control cable to the wall control (Figure 25), and the other end to the interface board (Figure 23).
- 8. Insert the 4 supplied "AA" batteries into the battery pack of the wall switch (Figure 26).
- 9. If not already installed, install the burner using the instructions supplied with the burner kit.
- 10. Turn on the gas supply and check that all connections are tight and leak free.
- 11. Turn on gas and electrical supplies.



Figure 21: Access to firebox.

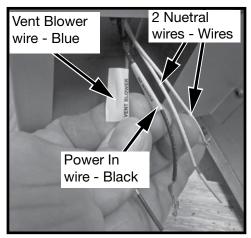


Figure 22: Junction box wiring.

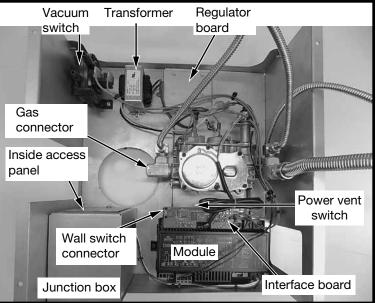


Figure 23: Valve assembly components.



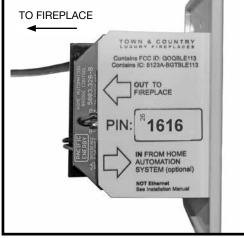


Figure 25: Wall switch - interface side.

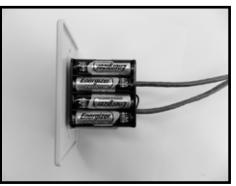


Figure 26: Wall switch - battery side.

Figure 24: Town & Country wall switch.

If the wall switch is being connected to a Home Automation system, two cables will be used; the top cable will go from the wall switch to the fireplace and the bottom cable will go from, the wall switch to the Home Automation system (Figure 28).

If not using a Home Automation system, only the upper cable will be used to go from the wall switch to the fireplace (Figure 25).

## Selecting Natural Vent and Power Vent Modes

The NV / PV (Natural Vent / Power Vent) switch (Figure 27) on the interface board (Figure 23) 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 must be set to "NV". If using a power vent, "PV" must be selected. Follow the instructions provided with the power vent kit for proper installation.

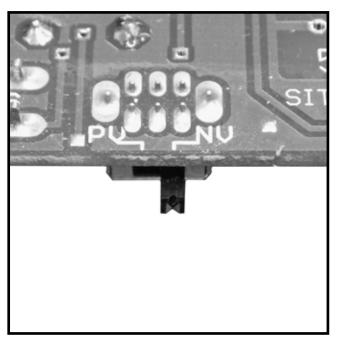


Figure 27: Vent mode selection switch.



## **Home Automation**

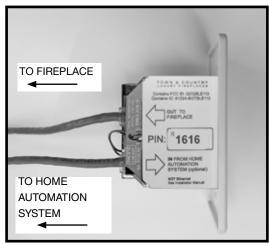


Figure 28: Complete communication wiring.

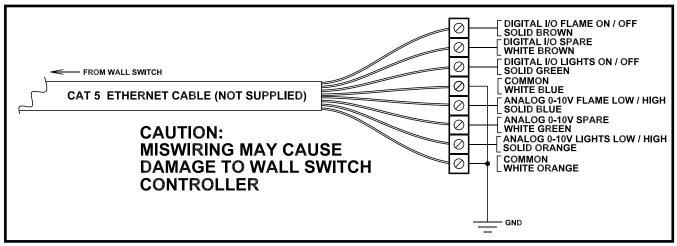
The home automation feature supplied with this fireplace is capable of controlling the flame and light on/off function with the use of a dry contact relay common to home automation systems. Furthermore, the flame and light level may be modulated from high to low using the 0 - 10 volt analog output available on most home automation systems.

(Figure 29) shows the wire designations required to connect the fireplace to a home automation system.

Note: Leave the wall switch on the "Remote" setting when using home automation.

### NOTE:

When a signal has been supplied by the home automation system, the fireplace control will repeat the signal every 2 hours or until a new command has been received.





- Digital I/O must be connected to a dry contact relay.
- Analog flame and light input through 0 10 volt DC signal scaled as follows:

Low = 1 volt High = 10 volts

## **Gas Supply**

**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 appliance. Consult local and / or national building codes before proceeding.

Gas supply line access holes are located at the top and left sides of the Control Box. Gas valve inlet accepts a 3/8" N.P.T. fitting. Correct gas line diameter must be used to assure proper operation and pressure.

NOTE: A sediment trap, as per national fuel gas code, must be installed in the gas supply line no more than 6 feet from the gas control valve to minimize the possibility of any loose scale or dirt within the gas supply line from entering the control valve.

DO NOT HARD PIPE GAS LINE TO VALVE. A method of disconnecting the valve from the gas line such as a union or flare fitting must be provided to allow for repair or replacement of the gas valve.

Check local codes for additional requirements.

- 1. Connect the gas supply to the valve (Figure 23).
- 2. Turn on the gas supply and check that all connections are tight and leak free.

## WARNING: The access panel including gasket must be reinstalled after conversion/installation or servicing has been completed. Failure to do so will cause overheating and premature failure of the control system.

### **Gas Pressure Check**

**Note:** To test the gas pressure, turn off the gas supply before removing the plug from the supply pressure test port or manifold pressure test port. There are four ports on this fireplace. The top two are connected to the rear burner and the bottom two are to the front burner. Manifold pressures should be checked on both to ensure they are correct.

#### Verify gas pressures with the fireplace lit and on the highest setting.

Please refer to the Burner Installation Manual for gas pressure testing procedure.

Correct gas pressure requirement:		
	Natural Gas	Propane
Min. Pressure	5.0" WC	12.5" WC
Max. Pressure	13.9" WC	13.9" WC
Manifold Pressure		
Maximum	3.5" WC	10" WC
Minimum	1.6" WC	6.4" WC

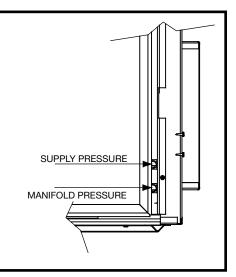


Figure 30: Gas test ports.

## - Horizontal Termination Venting (Power Vented)

This unit can be vented horizontally (wall termination) ONLY with an approved High Capacity Power Vent Kit (SKU 22270007) using TC 8x11 Vent Pipe.

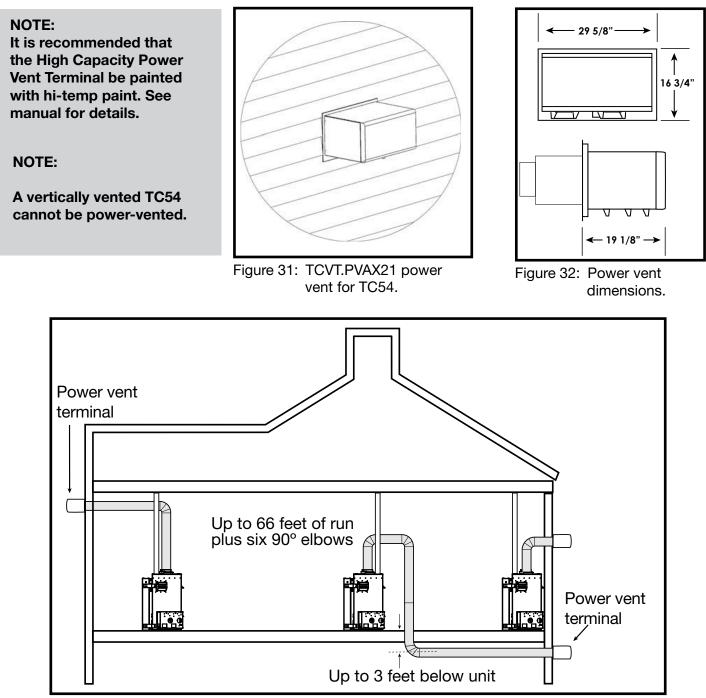


Figure 33: TC54D Optional venting.

Maximum vent length is 66 ft plus six 90 degree elbow or combination of other elbows equaling 90 degrees. Minimum vent length is 10 ft plus one 90 degree elbow. The vent can be installed with any combination of rise and run between the above figures including 3ft below the unit. Ensure vent pipe is properly supported.

The premium Power Vent fan runs quietly outside, at the exterior terminal.

## Vertical Termination Venting

Before installing vertical venting (roof termination) for this unit, the installer should read these instructions to insure that the proper vent configuration has been selected.

Use only Town and Country Termination kit:

TCVT.RTA - Roof Termination Kit

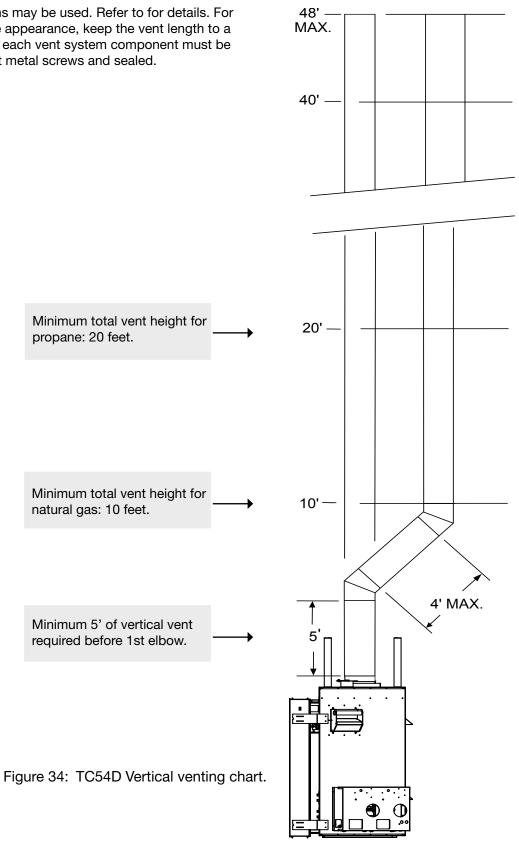
Vent system components approved for use with the Town and Country Fireplace are shown in the table below.

Vent System Components C	Town & Country Code
<ul> <li>12" Pipe Length</li></ul>	TCVT.811X18 TCVT.811X24 TCVT.811X48 CVT.811X12ADJ TCVT.811XLB45 TCVT.811XOS
Roof Termination Kit Wall Shield / Ceiling Firestop Roof Flashing, Adjustable Roof Flashing, Flat Roof Flashing, Steep or any t	TCVT.THIMA TCVT.811FLADJ .TCVT.811FLFLT

## NOTE: A vertically vented TC54 cannot be power-vented

## **Roof Termination Venting Chart**

Various combinations of vent runs may be used. Refer to for details. For optimum performance and flame appearance, keep the vent length to a minimum. Connections between each vent system component must be tightly joined, secured with sheet metal screws and sealed.



### **CAUTION:**

**Under no condition** should combustible material be closer than 1 3/4 inches from any part of the vent pipe.

Only 45° elbows can be used in this vent system. Maximum number of elbows is 2.

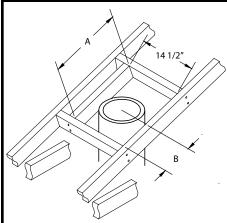


Figure 35: Roof opening frame.

Size of the opening will have to increase with the pitch of the roof to ensure a 1 3/4" inch air space clearance between vent pipe and combustibles.

Roof Pitch	А	В
0/12	14 1/2"	7 1/4"
4/12	16 1/2"	8 3/4"
6/12	18"	10"
8/12	19 3/4"	11"
12/12	24"	13 3/4"

### **Ceiling Opening:**

- Determine the exact position of the fireplace so that the vent pipe is centred (if possible) between two building framing members. Lay out the vent system path, minimizing the number of elbows and length of vent. Consult your local building codes prior to proceeding.
- 2. Cut and frame a 14 1/2" opening in the floor, ceiling or roof where the vent system will pass. Size of the opening in the roof may need to be increased as the pitch of the roof increases. Avoid cutting rafters.

### **Ceiling Firestop:**

Where a vent pipe passes through a floor or ceiling, a ceiling firestop must be used to retain insulation and maintain proper clearances.

From below, push the ceiling firestop through the opening and secure in place. If the firestop is used to penetrate a floor, the outer shield may be trimmed in length. If the firestop penetrates into an attic, leave the shield full length to keep insulation away from the vent pipe. (Attic Insulation Shield may be required. SKU #22270029, page 26. Additionally, after the vent pipe is in place, install a storm collar on top of the shield. This will prevent loose insulation from falling into the area between the vent pipe and the shield.

### Vent Pipe Installation:

- Install the first section of vent pipe into the collar on top of the fireplace. Secure in place with screws and seal with approved "High Temperature" self-adhesive aluminium tape provided.
- 2. Continue adding vent pipe lengths up and through the firestop(s) and through the roof. The vent pipe must extend at least 12" above the roof. Vent pipe may need to extend further depending on the roof pitch. See table in (Figure 35) for precise lengths.
- 3. Seal the vent pipe as per "Vent Pipe Sealant" on page 22.

### **Roof Support Bracket:**

Slip the roof support bracket down over the vent pipe. Rotate the 90° brackets to accommodate roof pitch. Attach the brackets to the roof joists with nails or building screws. Tighten the band around the vent pipe and secure in place with screws.

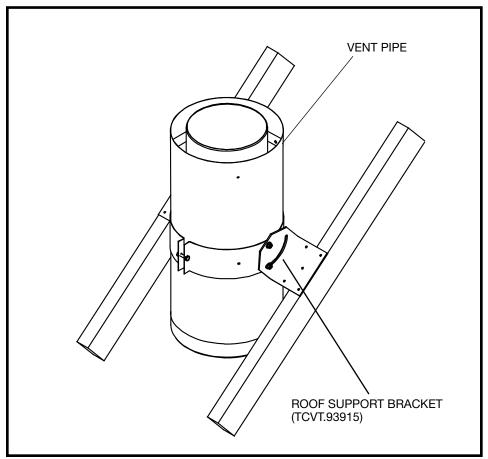


Figure 36: Roof support bracket.

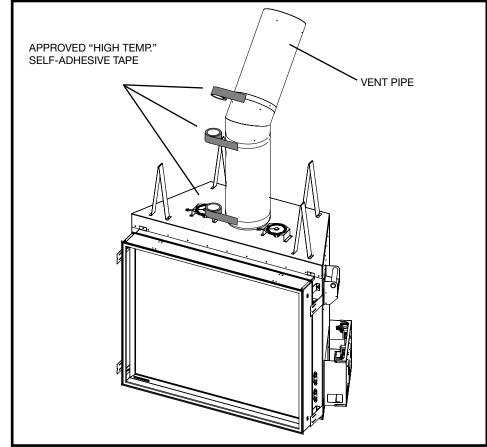


Figure 37: Sealing TC54D vent joints.

### Vent Pipe Sealant

All outer joints of the vent pipe must be sealed with the approved "High Temperature" self-adhesive aluminium tape provided. Wrap the tape completely around the joint and press firmly in place.

### **Insulated Collar Shield**

(Included Pt# TC36.9709)

After sealing the vent pipe, an insulating blanket and cover must be installed around the vent pipe. Place flush with the top of the unit and secure by fitting tabs through slots and bending over tabs 180° as shown in (Figure 38) The parts required are included.

**NOTE:** Bend tabs to 90° away from arc bend prior to installation to ease the process.

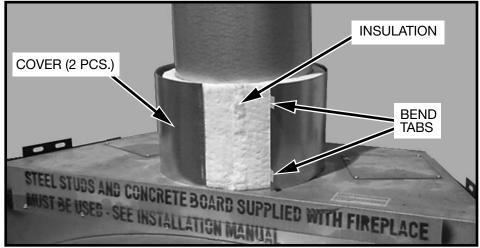


Figure 38: Collar shield.

### **Roof Vent Terminal:**

- 1. Place the roof flashing over the vent pipe, secure and seal it to the roof using the methods and materials appropriate for the type of roof on the building. Shingle roof example shown (Figure 39).
- 2. Place the storm collar down over the vent pipe until it is level. Tighten storm collar for a snug fit. Apply a thick horizontal ring of mastic around the pipe at top of the storm collar.
- 3. Lower the roof vent terminal cap over the vent pipe and secure in place with screws provided. Seal screw heads and joint with caulking to prevent any moisture entering the venting system.

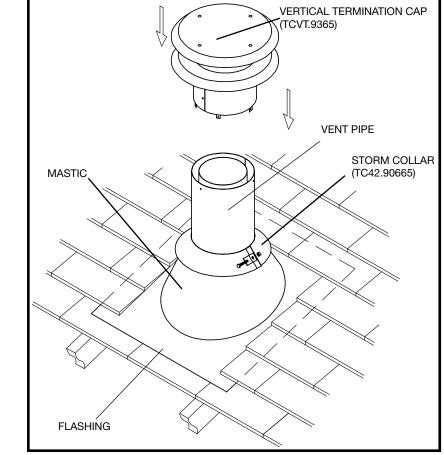
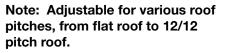


Figure 39: Roof vent terminal.



## **Vent Terminal Clearance**

NOTE: Vent terminal must not be recessed

NOTE: LOCAL CODES OR REGULATIONS MAY REQUIRE DIFFERENT CLEARANCES.

Roof Pitch Table		
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

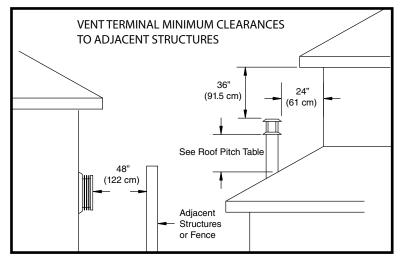


Figure 40: Vent roof clearance.

## Vent Restrictor Adjustment

### **CAUTION:**

The vent restrictor must be fully open when using the power vent

The vent restrictor is located on the underside of the firebox top. The unit leaves the factory with the vent restrictor wide open. The restrictor is built into the appliance for secondary air flow adjustment. Adjustment enables tuning the airflow for optimum flame appearance and performance for a wide variety of vent configurations.

Setting:

- Determine the vent height.
- Determine the vent horizontal length.
- From the chart determine the restrictor position.

Refer to the chart in Figure 41 for the correct position of restrictor for the vent configuration of your installation. Restrictor positions are based upon lab tests. The ideal position may vary slightly with installation.

Restrictor position is too closed if the flame has the following characteristics:

- Flame is excessively tall and lifting.
- Flame lacks movement.
- Flame soots.

Restrictor position is too open if the flame has the following characteristics:

- Flame height is low.
- Flame has excessive movement.

To adjust the restrictor:

- Loosen the screw holding the restrictor.
- Move the restrictor to its intended opening.
- Re-tighten the screw.

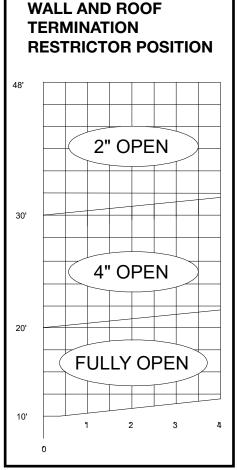


Figure 41: Restrictor rise and run chart.

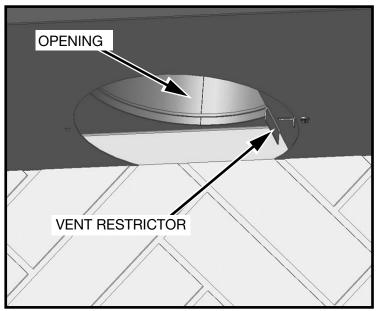


Figure 42: Vent restrictor.

## Roof Termination Kit

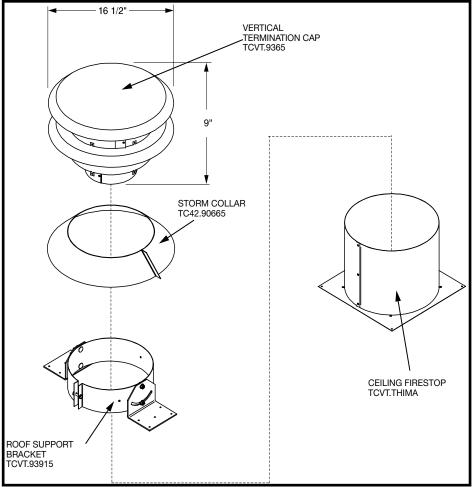


Figure 43: Roof termination kit.

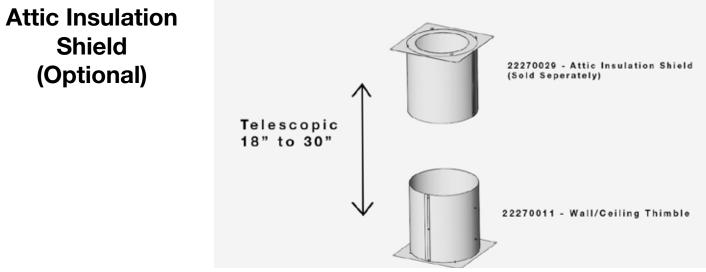


Figure 44: Attic Insulation Shield

## - Vent Pipe Dimensions

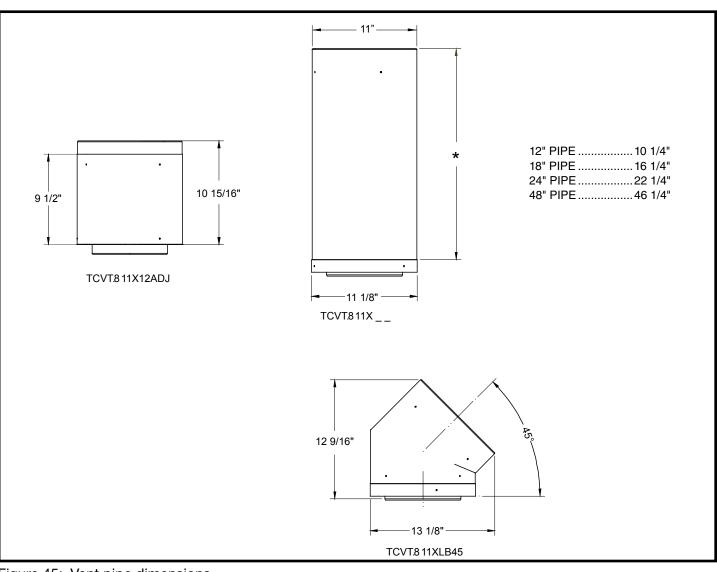


Figure 45: Vent pipe dimensions.

## Vent Offset Chart

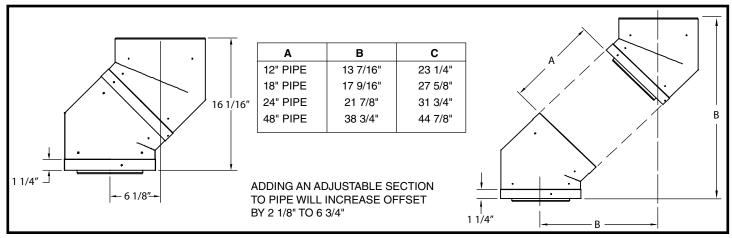


Figure 46: TC54 Vent offset chart.

## **Firebox Panels Installation**

### TC54 PANELS

PARK AVE. BEIGE HERRING BONE 2	
MOUNT VERNON RED BRICK 2	
MANHATTAN STACKED BRICK 2	
MADISON	
BLACK PORCELAIN	
COFFEE BEAN BROWN PORCELAIN	
COPPER PORCELAIN	
TITANIUM PORCELAIN	

(See Porcelain panel instruction manual for specific instructions for these panels)

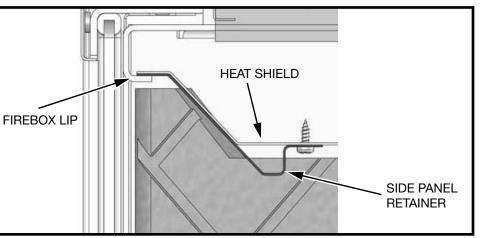


Figure 48: Side retainer.

A Firebox Panel Set must be installed for safe operation. Do not use the fireplace without panels. Unpack and inspect all panels. The panels need to be installed before the logs are in place.

Caution: The Firebox Panels are very fragile, and should be handled with care.

- 1. Remove the Side Panel Retainer (Figure 48) located on the underside of the firebox heat shield. The retainer slips between the lip of the firebox and the heat shield and is retained in place by two screws (Figure 49).
- 2. Install the Lower Rear Panel

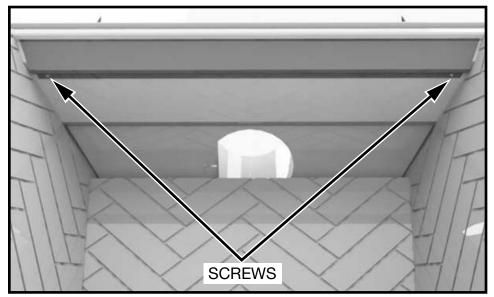


Figure 49: Retainer panel screws location.

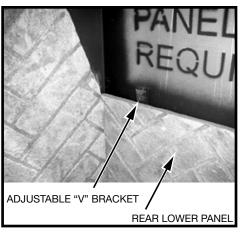


Figure 47: Panel brackets.

The lower rear panel is held tight against the side panels by two "V" brackets located on the firebox rear wall. Although the brackets are adjusted at the factory for the best fit, some adjustment may be necessary. Adjust the angle of the bracket by hand to ensure a snug fit.

Due to manufacturing tolerances from the supplier, ceramic panels made need to be trimmed to fit in the unit. Install the Lower Rear Panel.

Install the Right Side Panel by inserting the bottom of the panel in first and then angling it up into position. It may be necessary to push the firebox shield up to allow panel to move freely into place.

Install the Rear Upper Panel.

Install the Left Side Panel by inserting the bottom of the panel in first and then angling it up into position.

Re-install the Side Panel Retainers.

Install the Left and Right Front Panels.

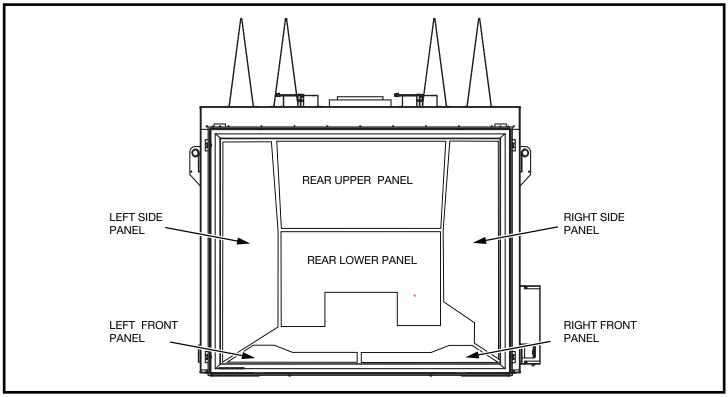


Figure 50: Panel locations.

## **Finishing Touch Trim Kit Installation**

The trim kit includes two side pieces, a top piece, and a bottom meshed piece which will be placed onto the fireplace floor and in front of the glass once the fireplace door is installed.

### Installation

- 1. With the door in place, begin by setting out the two side trim pieces and the top piece. Each of these three trim pieces require 2 small button magnets which are included with the trim pieces.
- 2. Install the two side trim pieces first using two smaller magnets on each piece as shown in Figure 51 and Figure 52.



Figure 51: Installing the side trim.



Figure 52: Side trim in place.



Figure 53: Installing top trim.

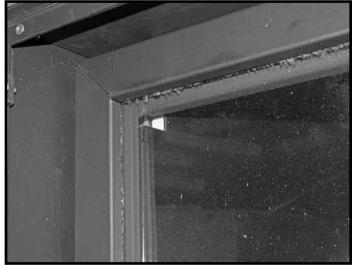


Figure 54: Top trim in place.

3. Install the top trim piece over top of the two side trim pieces using two larger magnets (Figure 53 and Figure 54).



Figure 55: Installing bottom trim.



Figure 56: Bottom trim in place.

4. The meshed trim piece for the bottom rests on the floor and in the gap between the outer-most door frame and the fireplace glass (Figure 55 and Figure 56).



Figure 57: Town & Country magnetic badge.

- The trim kit comes with a Town & Country badge (Figure 57).
   Affix this badge to the right hand side of the lower meshed trim piece as shown in Figure 58.
- 6. Attach the magnetic safety barrier screen (Figure 59) to the outer-most door frame.



Figure 58: T&C badge on right side of trim piece.

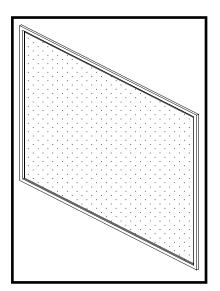


Figure 59: Safety barrier screen.

31

## Linking Remote Handset to the Fireplace

Town & Country Fireplaces can be operated remotely by using the remote handset that came with the fireplace, and by using a BlueTooth® enabled Apple® mobile device and the "TC Fire" app which can be downloaded free from the Apple® app store. For linking to the fireplace using a BlueTooth® enabled apple mobile device, refer to the user manual that came with this fireplace. For linking the remote handset that came with this fireplace, complete the following two steps:

### Step 1: Procedure for linking / pairing wall switch to fireplace

- 1. Set the wall switch selector to the "Remote" setting.
- 2. Press and hold **Program** button (Figure 60) on the wall switch for up to 10 seconds. Use a straightened paper clip to access the button.
- 3. The wall switch will beep 5 times. Release the button following the beeps.
- 4. The fireplace will beep 3 times repeated by another 3 beeps.
- 5. The fireplace and wall switch are now linked/paired.

If there is cross communication with another nearby fireplace causing the other fireplace to activate instead of the intended fireplace, repeat above procedure to automatically switch to another one of three available channels.



Figure 60: Town and Country wall switch.

### Step 2: Procedure for linking / pairing the wall switch to remote handset

- 1. Press and release **Program** button on the wall switch once (Figure 60).
- 2. You will hear 3 beeps from the wall switch.
- 3. Press and release the **on/off** button (Figure 61) on the remote handset (within 60 sec.)
- 4. The wall switch will beep 3 times.
- 5. The remote handset is now linked/paired to the wall switch and is ready to activate the fireplace.



Figure 61: Remote handset.

### CAUTION:

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

### Glass Panel:

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

Do not strike or otherwise impact the glass in anyway that may cause it to break. If the glass becomes cracked or broken it must be replaced before using the fireplace. Replacement glass can be obtained from your nearest Town & Country Fireplaces dealer. Use ceramic glass only. Do not substitute with any other type.

To remove broken glass, remove door frame as noted in "Door Frame Removal" section.

Unclip the Glass Retainer Clips located at the top and sides of the Door Frame. Pull the top edge of the glass out of the frame first, then lift it up and out of the bottom edge.

Install the new piece of glass with the gasket into the frame so that the thicker bead of gasket faces the fireplace.

Re-install glass retaining clips.

### **Annual Inspection:**

- a) Remove glass panel and inspect the decorative burner media (such as logs, pebbles, glass etc) for soot build up. If excessive build up of soot is present, have a qualified service person inspect and adjust the unit for proper combustion. Clean the decorative media and use a brush or vacuum cleaner to clean the burner, paying close attention to the burner ports.
- b) Check the pilot system for proper flame size and operation. Clean pilot free of soot, dust or any other deposits (Figure 62).
- c) 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 assembled and re-sealed. Refer to VENTING section for proper procedure.
- d) Check glass panel gasket, replace if necessary. It is important that the glass seal be maintained in good condition.
- e) Check and replace batteries as needed.

**Note:** The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapours 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 fireplace.

Do not clean glass when hot.

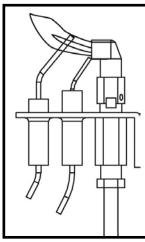
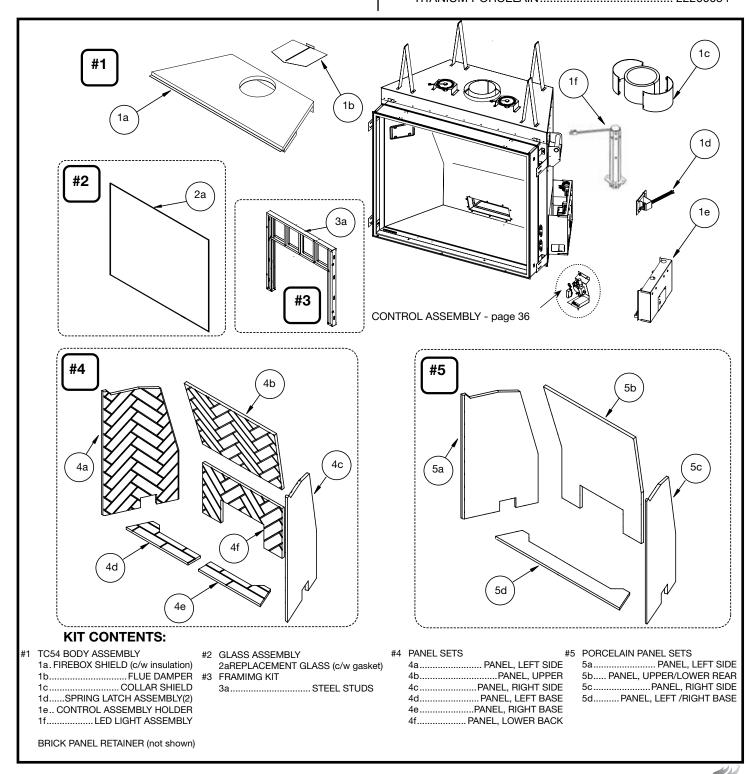


Figure 62: Pilot assembly.

### Replacement Parts

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

ITEM DESCRIPTION PART NO.	ITEM DESCRIPTION PART NO.
#1 TC54 BODY ASSY22030019	PARK AVE. BEIGE HERRING BONE 2 22200059 MOUNT VERNON RED BRICK2 22200058
#2 GLASS ASSY 80002264	MANHATTAN STACKED BRICK2 22200056 MADISON 22200055
#3 FRAMING KIT 80001901	BLACK PORCELAIN
	COPPER PORCELAIN

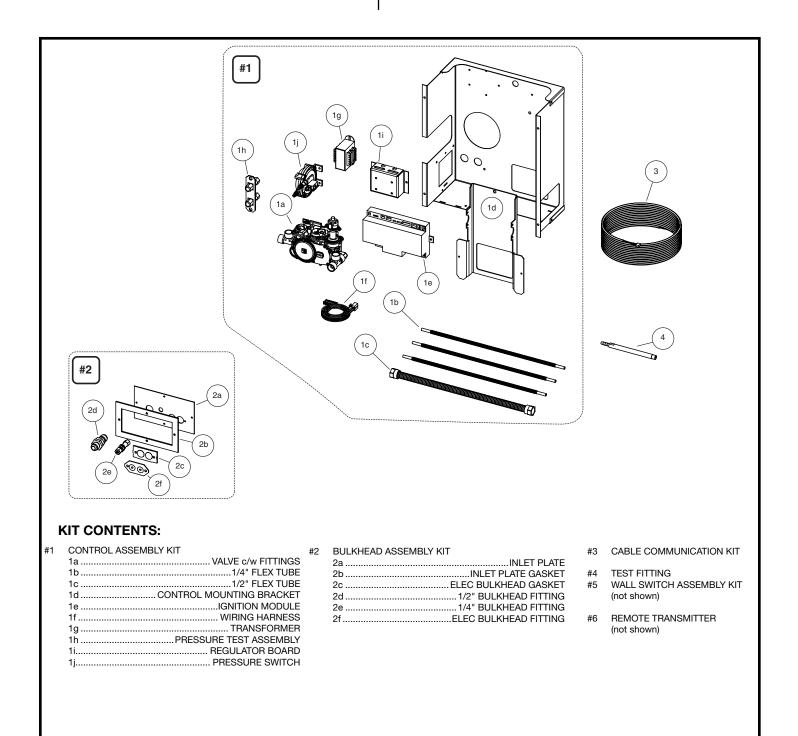


35 -

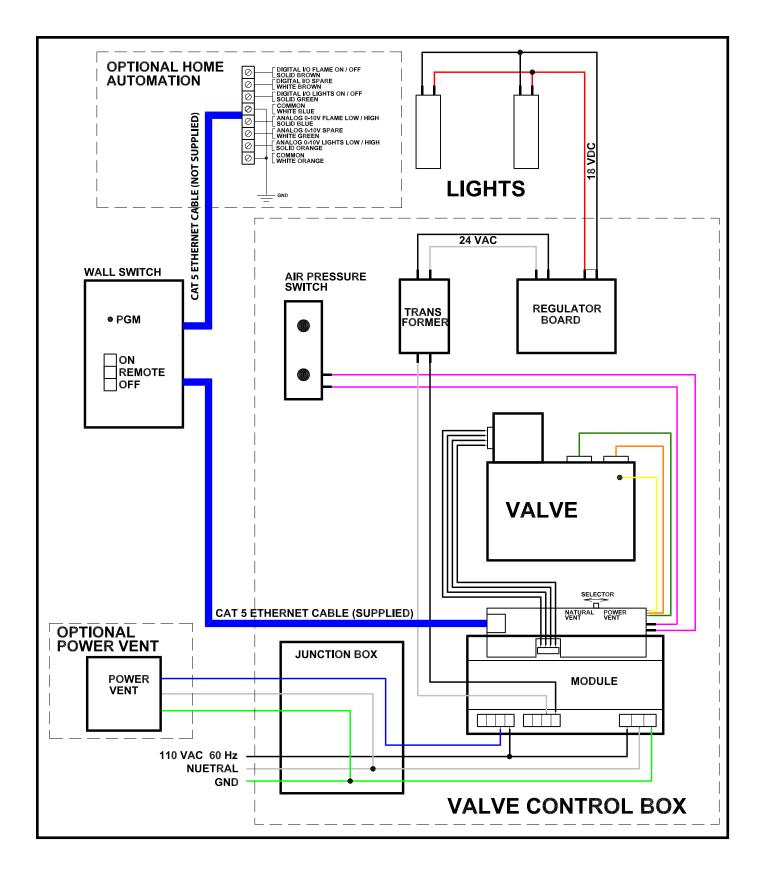
## Replacement Parts – Control System

(WHEN ORDERING, INCLUDE PART NUMBER WITH DESCRIPTION)

M DESCRIPTION PART NO.
TEST FITTING
WALL SWITCH ASSEMBLY KIT 80000498
REMOTE TRANSMITTER 80000519



## Wiring Diagram



NOTE: The Rating Label is located on a plate found in a slot between the left hand side lintel and the left hand side door frame. This plate is attached to the lintel with a cable.

SERG1.	VENTED GAS FIREPLACE - NOT FOR USE WITH SO FOYER AU GAZ À ÉVACUATION - NE PAS UTILISER COMBUSTIBLE SOLIDE This is a decorative product and is not intended	_	
TOWN & COUNTRY	to be used as a heating appliance. ANSI Z21.50-2016 / CSA 2.22-2016 Vented Gas Fireplaces CAN/CGA 2.17-M91 Gas-Fired Appliance For Use At High Altitudes.	This Appliance is Equipped For Use With / Cet Appareil est Équipé Pour Utilise Avec :	
FIREPLACES <sup>™</sup>	Certified for / Certifié pour Canada and U.S.A.	NATURAL GAS GAZ NATUREL	LP-GAS LP GAZ
MODEL/ MODELE: TC54	FOR USE WITH/ EN CASE D'EMPLOI AVEC:	NATURAL GAS/ DU GAZ NATUREL	LP GAS/ DU GAZ LP
SERIES/	Minimum supply pressure / Pression minimum d'alimentation: (For the purpose of input adjustment / dans le but de régler l'alimenation) Maximum supply pressure / Pression maximum d'alimentation:	5.0 in/wc / 5.0 po/c.e. (1.25 kPa) 13.9 in/wc / 13.9 po/c.e. (3.45 kPa)	12.5 in/wc / 12.5 po/c.e. (3.11 kPa) 13.9 in/wc / 13.9 po/c.e. (3.45 kPa)
SERIE: D	Manifold pressure / Pression de la tuyauterie: Maximum	3.5 in/wc / 3.5 po/c.e. (0.87 kPa)	10.0 in/wc / 10.0 po/c.e. (2.49 kPa)
MADE IN CANADA	Orifice Size / Diametre de l'injectuer:	ND x2	LD x2
FABRIQUE AU CANADA	Input BTU/hr (kW) / Entree BTU/h (kW):	Max.: 84,000 (24.6) Min.: 59,000 (17.2)	Max.: 84,000 (24.6) Min.: 66,000 (19.3)

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. FABRQUEZ (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 2240 MH (in CANADA), and the Manufacturer's Home Construction and Safety Standard, Title 24 CER, peut 2290, or the oursent Standard Mobile Homes, for Manufacture de Installetiones. Sites and Computing ADE/MERE 5010 AU

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 CERTIFIÉES AVEC L'APPAREIL

MINIMUM CLEARANCES TO COMBUSTIBLES / CLAIRANCES MINIM Left and Right side are determined when facing the front of the appl en se mettant devant l'appareil et en lui faisant face.	Pacific Energy Fireplace Products Ltd. Duncan, British Columbia,		
Top, Back and Side Standoffs / Sommet, Arrière et Côté Butée Sidewall to Appliance / Du mur latéral a l'appareil Ceiling to Appliance / Plafond a l'appareil Mantel to Appliance / Du manteau al'appareil	0 in./ 0 po. 4 in./ 4 po. 24 in./ 24 po. *9 in./ 9 po.	(0 mm) (102 mm) (610 mm) (229 mm)	Canada
Maximum Mantel Extension / Allongement maximum du manteau *See Installation Manual for more detail / Voyez des Directive de l'Installation pour plus détaux. Mantel Supports / Supports du manteau	*12 in./ 12 po.	(305 mm) (102 mm)	P.4.1-15 Efficiency: 38.5%
Vent Pipe / Déchargez le Tuyau	1.75 in./ 1.75 po.	(45 mm)	DATE OF MANUFACTURE
WARNING: Improper installation, adjustment, alteration, service or mai to the owner's information manual provided with this appliance. For as installer, service agency or the gas supplier. AVERTISSEMENT: Une installation, un réglage, une modification, une r des dommages matériels ou des blessures. Voir la notice de l'utilisateu renseignements supplémentaires, consultez un installateur, un technic			
60119 100001670-50			1-TC54-D2

© 2023 Copyright Pacific Energy Fireplace Products LTD

Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.



### For technical support, please contact your retailer

Web site: www.townandcountryfireplaces.com 2975 Allenby Rd., Duncan, BC V9L 6V8