



# Instinct Solo/Combi

## Natural Gas (NG) to Propane Gas (LP) Conversion Instructions

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These instructions shall be kept with the appliance literature for future reference.

### **WARNING**

**Do not use the appliance with Propane Gas (LP) unless these Conversion Instructions have been fully implemented.**

**This conversion kit shall be installed by a qualified installer, service agency, or the gas supplier in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction.**

**If the information in these instructions is not followed exactly, a fire, an explosion, or production of carbon monoxide can result causing property damage, personal injury, or loss of life.**

**The qualified installer, service agency, or the gas supplier is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in this manufacturer's instructions supplied with the kit.**

### **NOTICE**

*Whenever possible, conversion should be carried out before installing and connecting the boiler.*

*When you convert the appliance from Natural Gas (NG) to Propane Gas (LP), always make sure that all conversion work is complete before fully installing the air inlet piping.*

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### DEFINITIONS

The following terms are used throughout this manual to bring attention to the presence of potential hazards or to important information concerning the product.

### **WARNING**

**Indicates a potentially hazardous situation which, if ignored, can result in substantial property damage, serious injury, or death.**

### **DANGER**

**Indicates the presence of a hazardous situation which, if ignored, will result in substantial property damage, serious injury, or death.**

### **NOTICE**

*Indicates special instructions on installation, operation or maintenance, which are important to the equipment but not related to personal injury hazards.*

ATTENTION

PROPANE GAS
GAZ PROPANE

This appliance was converted on \_\_\_\_\_ (day/month/year) / Cet appareil a été converti le \_\_\_\_\_ (année/mois/jour)

to \_\_\_\_\_ gas (gas type) / pour fonctionner au gaz \_\_\_\_\_ (type de gaz)

with Kit No. \_\_\_\_\_ (reference number) / à l'aide de la trousse n° \_\_\_\_\_ (numéro de référence)

Combustion readings / Valeurs de combustion: \_\_\_\_\_% CO<sub>2</sub>    \_\_\_\_\_% O<sub>2</sub>    \_\_\_\_\_ppm CO

by \_\_\_\_\_ / par \_\_\_\_\_

Name and address of organization making this conversion - nom et adresse de l'organisme qui a effectué la conversion

**that accepts the responsibility for the correctness of this conversion**  
**qui accepte l'entière responsabilité de la qualité de la conversion**

⚠ WARNING

THIS APPLIANCE WAS CONVERTED FROM NATURAL GAS TO PROPANE GAS

- Make sure the propane gas venturi and labels have been installed.
- Verify combustion readings are within the desired range specified in the installation Manual.

⚠ AVERTISSEMENT

CET APPAREIL A ÉTÉ CONVERTI DU GAZ NATUREL AU GAZ PROPANE

- Assurez-vous que le venturi et les autocollants pour le fonctionnement au gaz propane ont été installés.
- Vérifiez que les valeurs de combustion se situent dans la plage souhaitée spécifiée dans les instructions de conversion ou le manuel d'installation des appareils.

INSTINCT	110	155	199
Conversion kit / Trousse de conversion	INSRKIT08	INSRKIT10	INSRKIT12
Max/min inlet gas pressure / Pression maxi/mini d'alim. gaz	13"WC MAX. / 8"WC MIN.		
Manifold pressure / Pression collecteur	0.05"WC		
input rating / Puissance	See existing rating plate / Consulter la plaque signalétique existante		

240168 A01 Made in UK

Affix this conversion plate as close as possible to the existing rating plate.  
 Collez cette plaque de conversion aussi près que possible de la plaque signalétique existante.

PROPANE GAS

ATTENTION

THIS GAS CONTROL VALVE HAS BEEN CONVERTED FOR USE WITH PROPANE GAS

GAZ PROPANE

ATTENTION

CETTE COMMANDE/VANNE GAZ A ÉTÉ CONVERTIE POUR FONCTIONNER AU GAZ PROPANE

**Installer Conversion Label (A)**

To be filled in by the installer with relevant information and affixed close to the rating plate.

**Gas Valve Conversion Label (B)**

To be affixed on top of the gas control valve to indicate that conversion has been performed.

**Controls Box Conversion Label (C)**

To be affixed on top of the Controls Box to indicate that conversion has been performed.

**Location of labels after conversion**

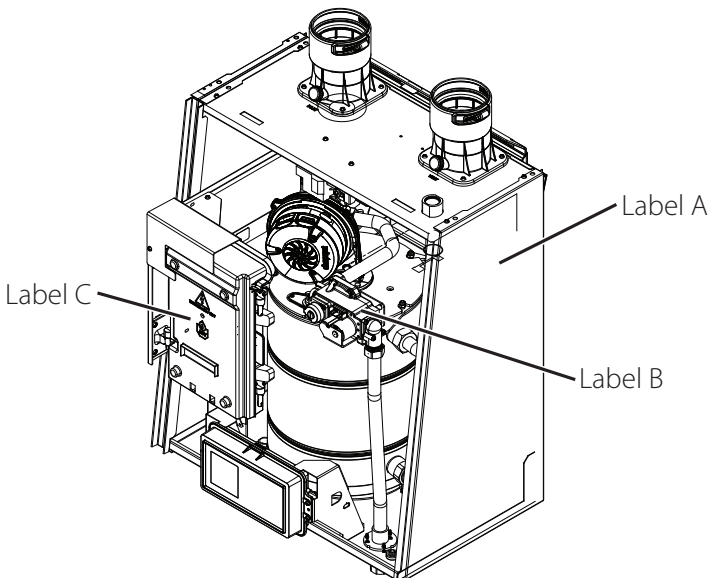


Figure 1 Instinct Wall Hung

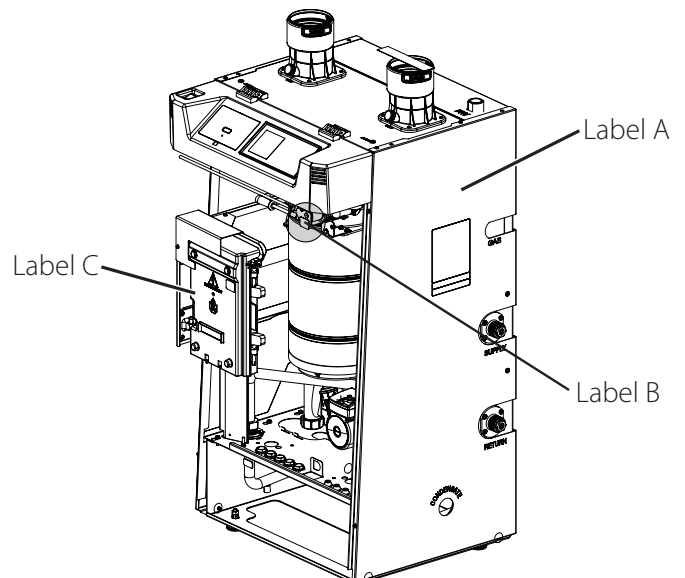



Figure 2 Instinct Floor Standing

The Propane Rating Label (D) must be placed on top of the original rating label on the boiler case.


SERIAL No:  
IN155SAB000321



**FOR YOUR SAFETY**

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

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**INSTINCT SOLO 155**

CATEGORY IV  
FOR EITHER DIRECT VENT INSTALLATION OR FOR INSTALLATION USING INDOOR COMBUSTION AIR  
FOR INSTALLATION ON WALL MOUNTING BRACKET FOR ALCOVE OR CLOSET INSTALLATION


<b>FUEL:</b>	NATURAL GAS
<b>MAXIMUM GAS INLET PRESSURE:</b>	13 In.WC [3.25kPa]
<b>MINIMUM GAS INLET PRESSURE:</b>	5 In.WC [1.25kPa]
<b>MANIFOLD PRESSURE:</b>	-0.04In.WC [-0.010kPa]
<b>MAXIMUM OUTPUT:</b>	140,000 Btu/h [41.0kW]
<b>MAXIMUM INPUT:</b>	155,000 Btu/h [45.4kW]
<b>MINIMUM INPUT:</b>	19,375 Btu/h [5.7kW]
<b>ELEVATION (CANADA CSA 2.17):</b>	0-4,500FT [0-1,370m]
<b>MINIMUM RELIEF VALVE CAPACITY</b>	140LBS PER HOUR
<b>WORKING GAUGE PRESSURE HEATING</b>	50 PSI [3.5 bar]

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ELECTRICAL RATING 120V, 60Hz LESS THAN 12 AMPERES

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TRIANGLE TUBE – MADE IN UK




1240 FOREST PARKWAY,  
SUITE 100, WEST  
DEPTFORD, NEW JERSEY  
08066

APPLIANCE CODES  
NG: X431

04/03/2024 15:40:01




Intertek  
5015379



COMPLIES WITH:  
ANSI Z21.13-2022  
CSA 4.9-2022  
ANSI Z21.10.3-2019  
CSA 4.3-2019


SERIAL No:  
IN155SAB000001



**FOR YOUR SAFETY**

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

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**INSTINCT SOLO 155**

CATEGORY IV  
FOR EITHER DIRECT VENT INSTALLATION OR FOR INSTALLATION USING INDOOR COMBUSTION AIR  
FOR INSTALLATION ON WALL MOUNTING BRACKET FOR ALCOVE OR CLOSET INSTALLATION


<b>FUEL:</b>	PROPANE
<b>MAXIMUM GAS INLET PRESSURE:</b>	13 In.WC [3.24kPa]
<b>MINIMUM GAS INLET PRESSURE:</b>	8In.WC [1.99kPa]
<b>MANIFOLD PRESSURE:</b>	-0.05In.WC [-0.013kPa]
<b>MAXIMUM OUTPUT:</b>	180,000 Btu/h [52.7kW]
<b>MAXIMUM INPUT:</b>	199,000 Btu/h [58.3kW]
<b>MINIMUM INPUT:</b>	24,875 Btu/h [7.3kW]
<b>ELEVATION (CANADA CSA 2.17):</b>	0-4,500FT [0-1,370m]
<b>MINIMUM RELIEF VALVE CAPACITY</b>	140LBS PER HOUR
<b>WORKING GAUGE PRESSURE HEATING</b>	50 PSI [3.5 bar]

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ELECTRICAL RATING 120V, 60Hz LESS THAN 12 AMPERES

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TRIANGLE TUBE – MADE IN UK




1240 FOREST PARKWAY,  
SUITE 100, WEST  
DEPTFORD, NEW JERSEY  
08066

APPLIANCE CODES  
LP: X432

04/17/2024 11:37:27



Intertek  
5015379



COMPLIES WITH:  
ANSI Z21.13-2022  
CSA 4.9-2022  
ANSI Z21.10.3-2019  
CSA 4.3-2019

**Propane Rating Label (D)**

To be overlaid on top of the existing rating label.

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## GENERAL

### Scope:

These instructions cover Natural Gas (NG) to Propane Gas (LP) conversion for Instinct Solo/Combi Wall Hung and Floor Standing boiler models. Each kit is supplied with one venturi suitable for use with that particular boiler model.

### Kit Part Number:

INSRKIT08 (Instinct Solo 110)

INSRKIT10 (Instinct Solo/Combi 155)

INSRKIT12 (Instinct Solo/Combi 199)

### Kit Contents:

- Installer Conversion Label **(A)**
- Gas Valve Conversion Label **(B)**
- Controls Box Conversion Label **(C)**
- Propane Rating Label **(D)**
- Acoustic Foam (required for Solo 110 and Solo/Combi 155 models ONLY)
- Fibre Washers (2 off)
- Propane Venturi (refer to Table 1 for venturi and injector diameters)

Table 1 - Propane Conversion Venturis

Model	Venturi Diameter	Bottom Injector	Top Injector	Label Colour	Part No.
110 Solo	22mm	LP Ø2.80 mm	LP Ø2.90 mm	Black	INSRKIT08
155 Solo	24mm	LP Ø3.00 mm	LP Ø3.30 mm	Black	INSRKIT10
199 Solo	26mm	LP Ø3.30 mm	LP Ø3.45 mm	Black	INSRKIT12
155 Combi	24mm	LP Ø3.00 mm	LP Ø3.30 mm	Black	INSRKIT10
199 Combi	26mm	LP Ø3.30 mm	LP Ø3.45 mm	Black	INSRKIT12

### 1.1 Applicability

Instinct Solo/Combi Wall Hung and Floor Standing Boiler models.

### 1.2 Safety Requirements



**Failure to follow instructions provided in this document can result in substantial property damage, serious injury, or death.**

- Instructions are for a qualified installer or service technician.
- Read all instructions before proceeding.

- Follow instructions in proper order.
- Make sure that the correct gas type is used.
- Contact the local Propane Gas (LP) supplier for recommended sizing of piping, tanks and 100% lockup gas regulator.

### 1.3 Kit Installation

#### NOTICE

*Upon completion of the conversion from Natural Gas (NG) to Propane Gas (LP):*

- Affix the new Propane Rating Label **(D)** on top of the existing rating label.
- Affix the Gas Valve Conversion Label **(B)** onto the gas valve and the Controls Box Conversion Label **(C)** onto the controls box.
- Fill in and affix the Installer Conversion Label **(A)**.
- Refer to Figures 1 & 2 on page 2 for correct locations.

#### 1.3.1 Required Tools and Material

- Adjustable Wrench / 10 mm Socket & Ratchet
- POZI Head Screwdriver
- Flat Head Screwdriver
- Calibrated Combustion Analyzer

#### 1.3.2 Preliminary Instructions

1. Make sure that the venturi replacement kit is correct for the model and type of boiler. Refer to Kit Part Numbers.



#### FOR YOUR SAFETY:

- The gas supply shall be shut off prior to disconnecting the electrical power, before proceeding with the conversion,
  - The electrical power supply shall be turned off at external electric box prior to performing any operation on the internal parts of the boiler.
  - Failure to do so can result in substantial property damage, serious injury, or death.
2. Shut off the gas supply to the boiler at the main manual shut off valve.
  3. Disconnect electrical power at the external electric box.
  4. Remove the front panel of the boiler.

#### For the Floor Standing Boiler Model (FSB):

Remove the two securing screws on top of the control pod. Rotate the pod upwards. Lift the front panel to disengage the keyhole slots and remove the panel.

To Install the front panel - lower the front panel to engage the keyhole slots and re-fit the panel. Rotate the pod downwards and secure using the two screws.

**For the Wall Hung Boiler Model:**

Remove the securing screws holding the bottom of the front panel to the chassis. Pull the bottom of the front panel out and lift to disengage from the top mounting points.

To install the front panel - push the bottom of the front panel in to engage the top mounting points. Secure the bottom of the front panel to the chassis using the screw.

5. Use a voltmeter to make sure that there is no electrical power to the boiler. To do this apply the test equipment across the boiler's Live and Neutral voltage terminals, L and N.



**WARNING**  
**ELECTRICAL SHOCK HAZARD**  
 Always disconnect the electrical power before servicing the unit.

**1.4 Install the Acoustic Foam**

**NOTICE**

*The acoustic foam is only applicable to the Instinct Solo 110 and Instinct Solo/Combi 155 models.*

*The acoustic foam is not applicable to the Instinct Solo/Combi 199 models.*

1. Select the new 3-inch Ø air inlet piping.  
 Note: If the venting is to be piped with 2-inch Ø, a (minimum) 7-inch length in 3-inch Ø piping must be used before reducing to 2-inch Ø.
2. Cut a (minimum) 7-inch section of air inlet piping.
3. Refer to Figure 3. Insert the 7-inch section of air inlet piping into the air inlet adaptor.

*When it is correctly installed, the acoustic foam should be flush to the inside of the air inlet adaptor.*

**NOTICE**

*The INSTINCT boiler has a length of acoustic foam already installed in the air inlet adaptor. DO NOT remove this. The new acoustic foam is to be added to this.*

4. Insert the new section of acoustic foam into the 7-inch long section of pipe. Use a straight coupling or an elbow coupling to connect to the air inlet installation. Refer to the Vent Supplement for full details of the installation of air and vent pipes.

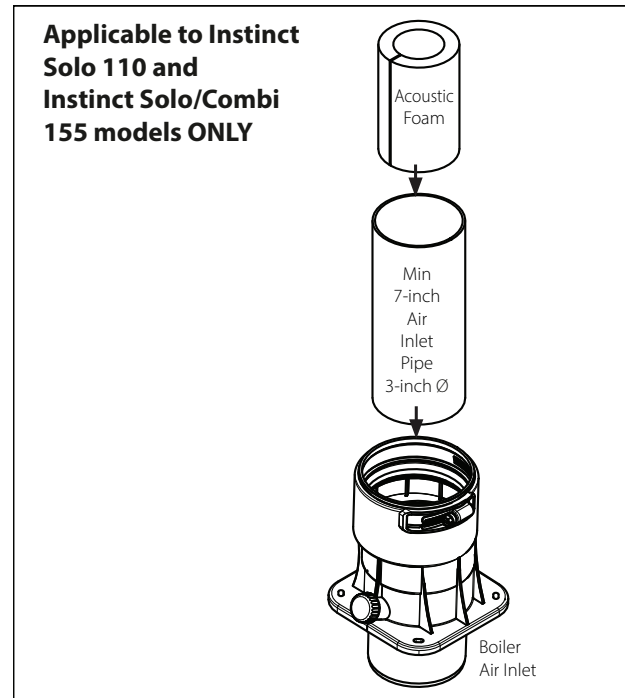


Figure 3 Install the Acoustic Foam

**1.5 Removal of Natural Gas (NG) Venturi**

1. Remove the air reference hose from the air inlet elbow. Then remove the air inlet elbow.
2. Rotate the venturi interface in a clockwise direction for approximately 60 degrees, to release the clamp mechanism. Then remove the venturi interface.
3. Loosen the nuts at each end of the gas valve to venturi pipe. Remove the gas valve to venturi pipe.



**There are gaskets at both ends of the gas valve to venturi pipe. These gaskets must be reinstalled with the pipe. Refer to Figures 4, 5 & 6 for relevant boiler models. Do not cause damage to the gaskets.**

4. Use a 10 mm socket and ratchet to remove the three (3) bolts that attach the venturi to the fan assembly. Remove the venturi from the fan assembly. When you remove the venturi from the fan assembly make sure that you do not cause damage to the O-ring gasket on the blower.

## 1.6 Install the Propane Gas (LP) Venturi



Always make sure that the O-ring gasket is correctly installed between the venturi and the blower. Failure to install the O-ring will cause a gas leak. Gas leaks can cause substantial property damage, serious injury, or death.

Always make sure that the two fibre washers are correctly installed between the gas valve, gas pipe and venturi. Failure to install the fibre washers will cause a gas leak. Gas leaks can cause substantial property damage, serious injury or death.

1. When you align the Propane venturi, make sure that: The UP arrow on the plastic housing points upward. Before the gas pipe is installed, make sure that the threaded connection for the gas pipework is in the correct orientation.

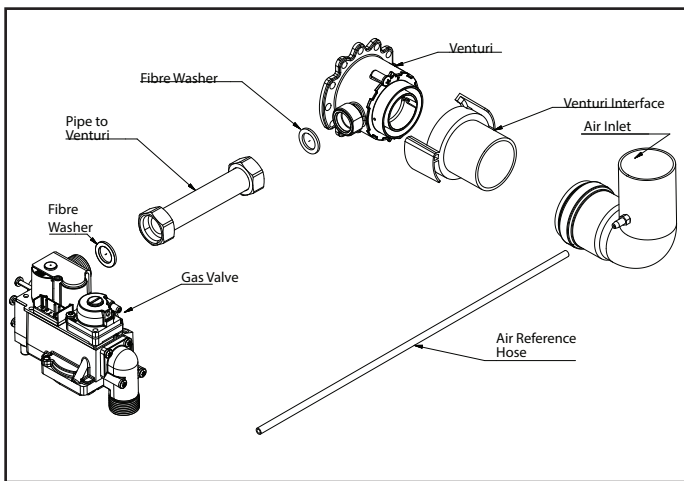


Figure 4 Instinct Solo 110 Gas Train

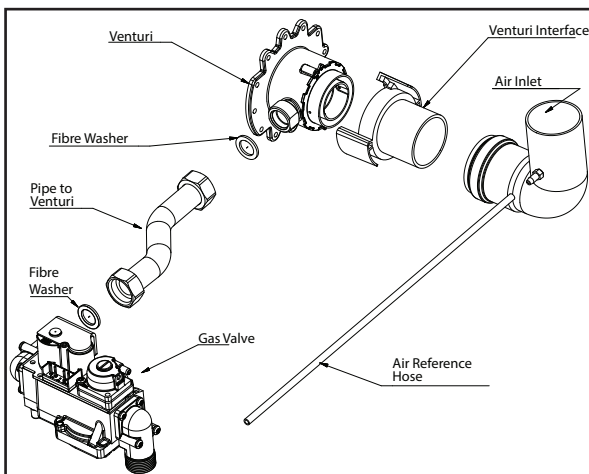


Figure 5 Instinct Solo/Combi 199 Gas Train

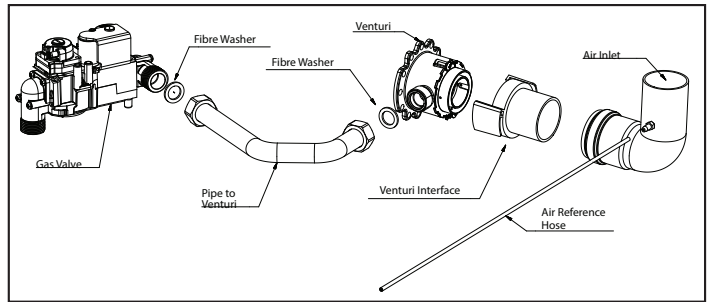


Figure 6 Instinct Solo/Combi 155 Gas Train



Always make sure that the correct venturi for the model and variant is installed. Refer to Table 1 for the correct venturi and injector sizes.

- Natural Gas (NG) venturi have a white manufacturer's label and an additional yellow Natural Gas identification label.

- Propane (LP) venturi have a black manufacturer's label and an additional green Propane identification label (see below). The venturi used for this conversion must have these labels attached.



Failure to comply with this warning will affect the input rate and combustion of the boiler. This failure may cause substantial property damage, serious injury, or death.

### NOTICE

Do not use adhesive on gaskets or O-rings during the assembly process.

2. Attach the venturi to the fan assembly with the three (3) bolts. Use a 10 mm socket and ratchet to tighten the bolts.
3. Assemble the venturi pipe to the gas valve and venturi. Always make sure that the gaskets are seated correctly before you tighten the nut.
4. Put the venturi interface on to the venturi. Rotate the venturi interface counterclockwise until it is in the locked position.
5. Install the air inlet elbow coupling. Then attach the air reference hose.
6. Place the Gas Conversion Label (B) on the gas valve and the Controls Box Conversion Label (C) onto the controls box (refer to Figures 1 & 2 on page 2 for the correct location).

**WARNING**

**Failure to correctly install the air inlet elbow coupling and attach the air reference hose can affect combustion of the boiler. This type of failure may cause substantial property damage, serious injury, or death.**

- Open the manual gas shut off valve to the unit. Before the boiler is put into operation, each gas connection must be tested for leaks. Repair all leaks before the boiler is put into operation.

**DANGER**

- **Prior to start-up and during initial operation, check for a gas leak using a combustible gas detector.**
  - **Do not check for gas leaks with an open flame. Use a bubble test.**
  - **Any leaks found shall be repaired immediately.**
  - **Do not proceed with the start-up if there is any indication of a gas leak.**
  - **Propane installations only - The propane supplier mixes an odorant with the propane to make its presence detectable. In some cases the odorant can fade and the gas may no longer have an odor. Prior to start-up of the unit and periodically after start-up have the propane supplier check and verify the odorant level.**
  - **Failure to comply with these instructions will result in substantial property damage, serious injury, or death.**
- Make sure the correct gas type is supplied to the boiler.
  - Visually check the overall installation, checking around the unit for gas odour.

**DANGER**

**If any gas leaks are found or suspected:**

- **Shut the unit down immediately.**
- **Use a gas detector or bubble test to locate the source of the gas leak and repair at once.**
  - **Do not check gas leaks with an open flame.**
  - **Do not operate the unit until the leak is corrected.**
- **Failure to comply with this procedure will result in substantial property damage, serious injury, or death.**

## 1.7 Changing the Appliance Code

- Refer to Figure 7. Press, and hold, the UP and DOWN buttons together.

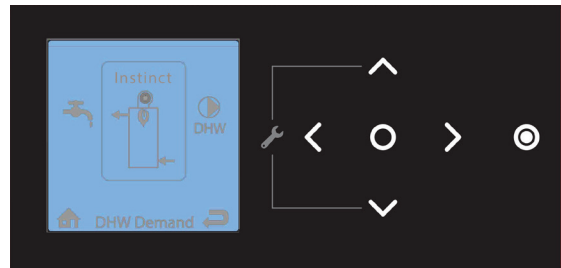


Figure 7 CTRLMax Navigation Control

- Enter the access code 054:
  - Use the LEFT and RIGHT buttons to select a digit.
  - Use the UP and DOWN buttons to change the digit.
  - Press the center button to enter the access code.
- With the CH/DHW SETTINGS icon highlighted, press the center button.
- Press the down button to highlight the BOILER SETTINGS icon. Then press the center button.
- Scroll down to highlight APPLIANCE SETTING. Then press the center button.
- Enter the Propane appliance code from the Propane Rating Label (D).
  - Use the LEFT and RIGHT buttons to select a character.
  - Use the UP and DOWN buttons to change the character.
  - Press the center button to enter the appliance code.

## 1.8 Combustion Test and Adjustments

**WARNING**

**The installer MUST do a complete combustion check to make sure that the appliance meets the requirements of Table 2. These tests will make sure that combustion levels are correct at high and low input firing rates and that the burner will continue to operate efficiently.**

**WARNING**

Failure to comply with the requirements of this warning may cause injuries to personnel and substantial property damage.

- All combustion testing and adjustments must be done by a qualified installer, service agency or gas supplier.
- All combustion equipment measurements must be done with calibrated equipment.
- Always refer to Table 2 to check that the combustion measurements are within the acceptable range.

**WARNING**

Failure to do a complete combustion test at both high and low input rates may result in incomplete combustion and the production of carbon monoxide. This can cause severe personal injury, death or substantial property damage.

1. Press the UP and DOWN buttons at the same time, for three seconds to get access to the installer functions menu. Refer to Figure 7.
2. Enter the access code 054:
  - Use the LEFT and RIGHT buttons to select a digit.
  - Use the UP and DOWN buttons to change the digit.
  - Press the center button to enter the access code.
3. Press the right-hand button to highlight the MANUAL OPERATION screen. Then press the center button.

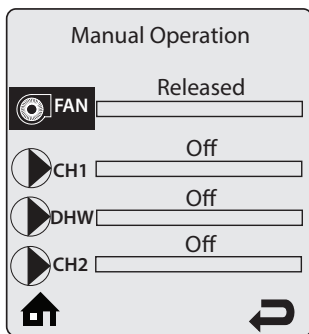


Figure 8 CTRLMax Manual Operation

4. Make sure that the FAN icon is highlighted. Press the center button to manually fire the burner and apply power to the CH circulator. Refer to Figure 8.
5. Adjust the propane supply regulator provided by the gas supplier for 13-inch W.C. maximum pressure at flow or no flow conditions to the burner. There must be a minimum 8-inch W.C. during flow conditions to the burner.

**WARNING**

Do not adjust or attempt to measure gas valve outlet pressure. The gas valve is factory-set for the correct outlet pressure. This setting is suitable for Natural Gas (NG) and Propane Gas (LP) and requires no field adjustment. Attempts by the installer to adjust or measure the gas valve outlet pressure can result in damage to the valve, causing substantial property damage, serious injury, or death.

**WARNING**

The Propane Gas (LP) venturi assembly must never be modified or replaced with a different assembly. Refer to Table 1 for the full specification. Failure to use the required Propane Gas (LP) venturi assembly can result in substantial property damage, serious injury or death.

**NOTICE**

*There must be a sufficient CH load to dissipate heat generated during the combustion test. If a sufficient CH load is not available, an indirect water heater can be used to dissipate the heat. This will create a DHW demand which will start the DHW circulator.*

6. Operating sequence:
 

Perform the following ignition operating sequence check prior to firing the boiler with a gas supply :

  - a. Shut off the gas supply to the boiler.
  - b. Adjust the thermostat demand to the highest setting
  - c. Make sure the fan operates a prepurge function prior to activating the igniter.
  - d. Once the igniter has deactivated, make sure the fan operates a postpurge function prior to reactivating the igniter.
  - e. Adjust the thermostat to its lowest setting and proceed with the high fire check.

**WARNING**

**Checking and adjusting high fire must be done before setting low fire. Failure to set high fire first may cause toxic gas combustion and can result in substantial damage, serious injury or death.**

7. Press the right-hand button to adjust the firing rate to 100 % (high fire). Hold down the right-hand button to increase the firing rate.



- If the combustion levels during high fire are outside the recommended combustion settings (refer to Table 2), use a flat-blade screwdriver to adjust the throttle screw (refer to Figure 9). Use the adjustments shown below to increase or decrease oxygen (O<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>) levels within the unit.

Counter-clockwise adjustment of the throttle screw at High Fire (100% firing rate) will decrease O<sub>2</sub> levels and increase CO<sub>2</sub> levels.

Clockwise adjustment of the throttle screw at High Fire (100% firing rate) will increase O<sub>2</sub> levels and decrease CO<sub>2</sub> levels.

- Check the flame pattern through the observation port of the heat exchanger. The flame should be blue and stable. The flame should be over the length of the burner head.
- After the combustion level is set at high fire, manually put the boiler into LOW FIRE mode. To do this, press the left-hand button to adjust firing rate down to 1 % (low fire).

If the combustion levels (O<sub>2</sub> or CO<sub>2</sub>) during low fire are outside the recommended combustion settings in Table 2, contact Triangle Tube Technical Support.

- Press the center button while the FAN icon is highlighted to shut down the burner.
- Press the LEFT or RIGHT buttons to highlight the HOME SCREEN icon to exit the service mode.
- Replace the front panel and put the boiler back into operation.

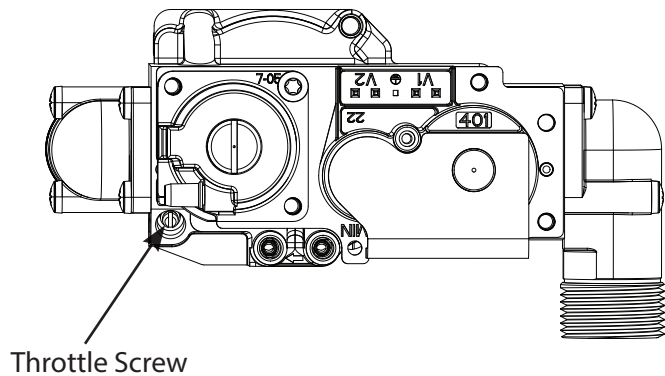


Figure 9 Throttle Screw Location

Table 2 - Combustion Settings

		Propane 110, 155	Propane 199
High Fire	CO <sub>2</sub> Range	10.0 % to 11.0 %	
	CO <sub>2</sub> Target	10.8 %	
	O <sub>2</sub> Range	5.7 % to 4.2 %	
	O <sub>2</sub> Target	4.5 %	
	CO Max	< 200 ppm @ 10.8 % CO <sub>2</sub>	
Low Fire	CO <sub>2</sub> Range	10.0 % to 11.0 %	
	CO <sub>2</sub> Target	10.8 %	10.4 %
		Target values are equivalent to High Fire values. Make sure that all measured CO <sub>2</sub> values are less than or equal to High Fire CO <sub>2</sub> measurements.	
	O <sub>2</sub> Range	5.7 % to 4.2 %	
	O <sub>2</sub> Target	4.5 %	5.1 %
		Target values are equivalent to High Fire values. Make sure that all measured O <sub>2</sub> values are higher than or equal to High Fire O <sub>2</sub> measurements.	
	CO Max	10 ppm	



**If combustion levels at high (100%) or low (1%) fire are not within the range of Table 2, shut the boiler down and contact Triangle Tube Technical Support. Failure to comply with this requirement can result in substantial damage, serious injury or death.**


### 1.9 Measure Input Rate - Propane Gas (LP)

#### NOTICE

*This section can only be performed when a gas meter is present.*

- Press the **OK** button while the **FAN** icon is highlighted and Press the **RIGHT** button to adjust the firing rate to **100 %** (high fire).
- Operate the unit for approximately 10 minutes.
- Turn off all gas appliances within the building, except the INSTINCT appliance.
- At the gas meter, record the time required to use one cubic foot of gas.

5. Calculate Propane Gas (LP) input using the following equation:  

$$3600 \times 2500 / \text{number of seconds recorded for one cubic foot of gas} = \text{BTU/H.}$$
6. The BTU/H calculated should approximate the input rating listed on the unit rating label and in the table below.
7. Press the **OK** button while the fan icon is highlighted to shutdown the burner.
8. Press the **LEFT** or **RIGHT** button to highlight the home screen icon  and exit the service mode.

Boiler Model	Fuel	Input (Btu/h)
<i>Instinct 110 Solo</i>	<i>Natural / Propane</i>	<i>13,750 - 110,000</i>
<i>Instinct 155 Solo</i>	<i>Natural / Propane</i>	<i>19,375 - 155,000</i>
<i>Instinct 199 Solo</i>	<i>Natural / Propane</i>	<i>24,875 - 199,000</i>
<i>Instinct 155 Combi</i>	<i>Natural / Propane</i>	<i>19,375 - 155,000</i>
<i>Instinct 199 Combi</i>	<i>Natural / Propane</i>	<i>24,875 - 199,000</i>

### **NOTICE**

*Input and output ratings are shown for sea level applications. The INSTINCT features altitude compensation, altitude of the boiler must be inputted via the INSTINCT menu. Failure in selecting the correct altitude may compromise boiler ignition performance and will derate the boiler by 1.7 % per 1000 ft above sea level.*

#### **1.10 Follow-on Tasks**

- Fill in the Installers conversion data label **(A)** with the required conversion information and with combustion values.
- Affix the completed Installers Conversion Label **(A)** and Propane Rating Label **(D)** (refer to Figures 1 & 2 on page 2 for the correct location).