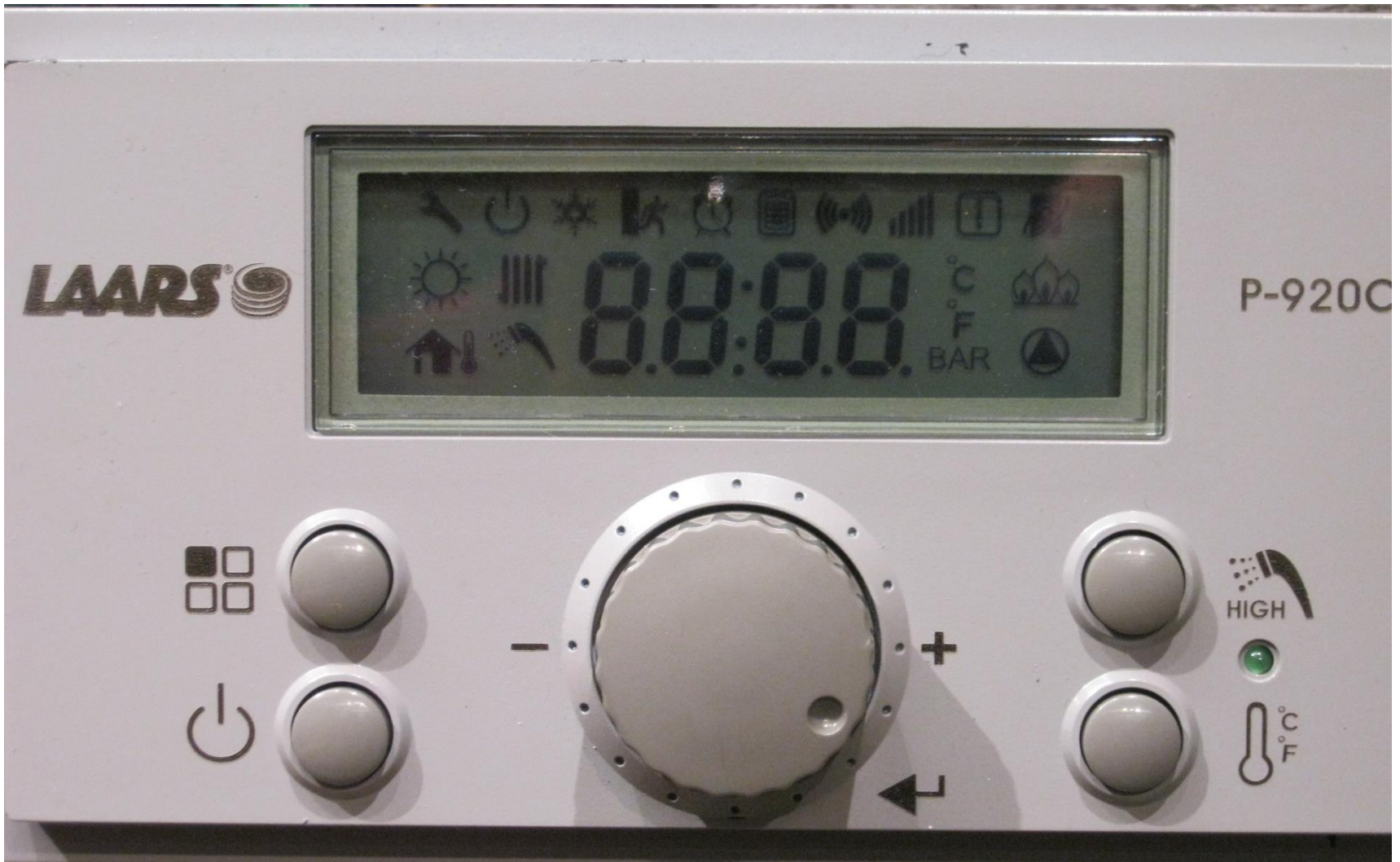


# Mascot FT Quick Start



# Start Up

- Confirm that the boiler has been installed according to Installation Operation Manual as well as all local and state codes for your area
- Make sure unit is securely fastened to the wall with the proper wall mount hardware
- Confirm proper gas line size and incoming supply pressure
- Fill system with water and purge of all air
- Insure proper line voltage and receptacle per local code
- Confirm vent size and length is correct as per the Installation Operation Manual



When the unit is powered up the display shows all Icons and runs through a series of numeric codes.

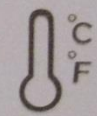
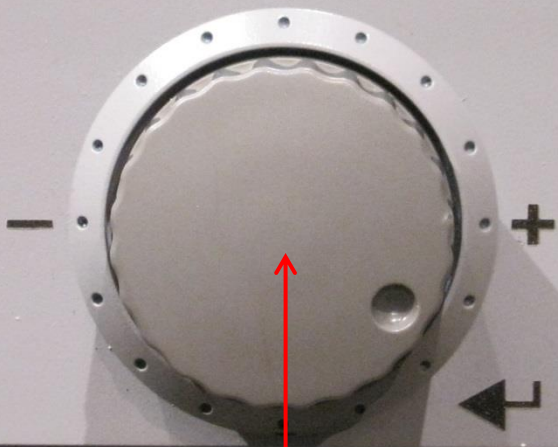
**LAARS** 

P-920C



Mode Button

DHW Button



Display Power

Scroll / Select

CH Button





Display Power Button



To set desired CH set point press the CH Button



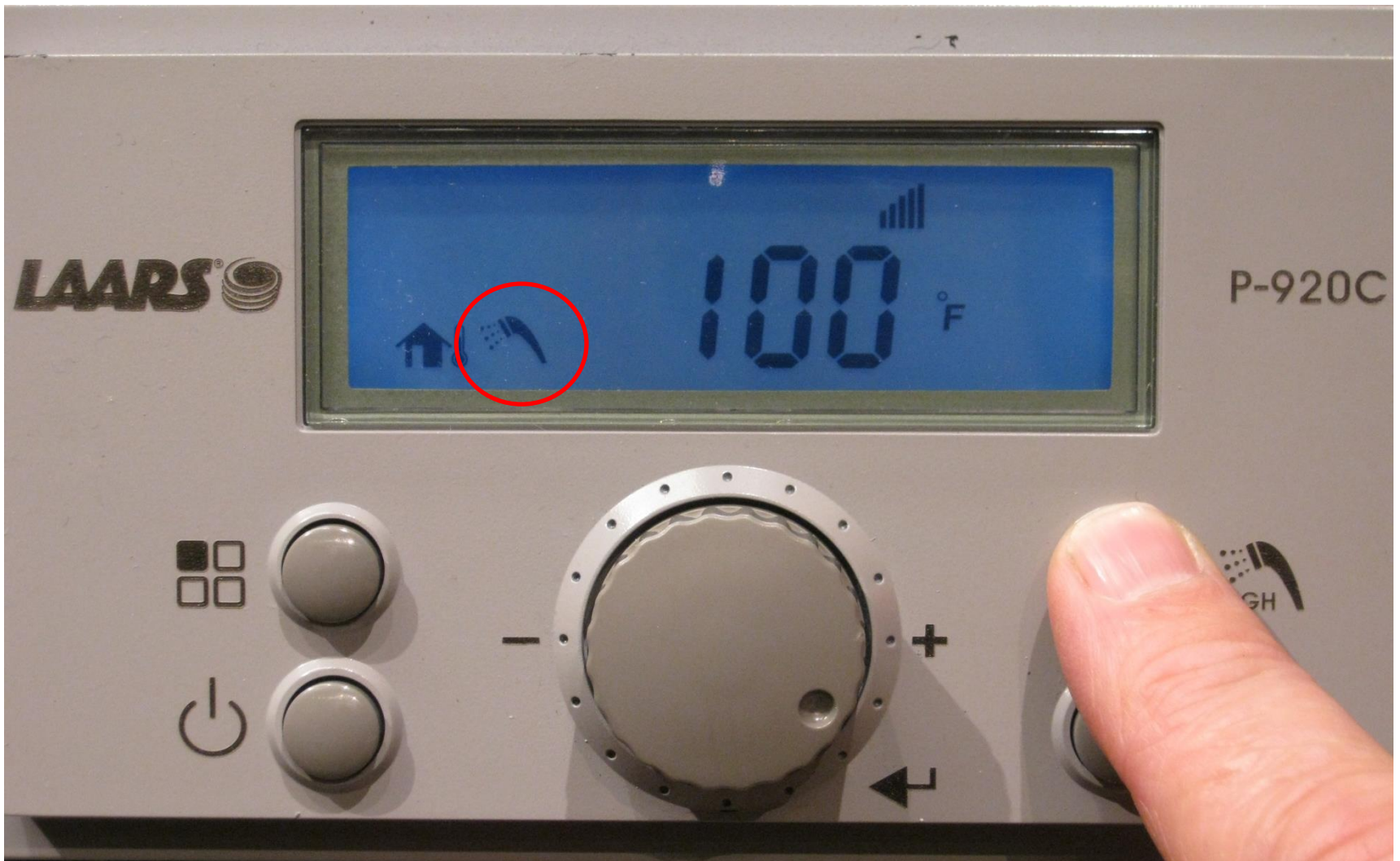


You will see the CH Icon on the screen  
Use the Scroll/Select button and adjust to desired set point



When you have the desired set point press the Scroll/Select Button to lock in your selection





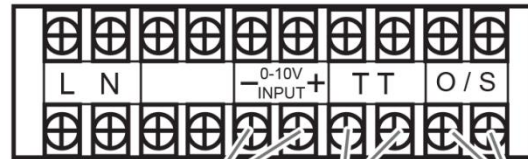
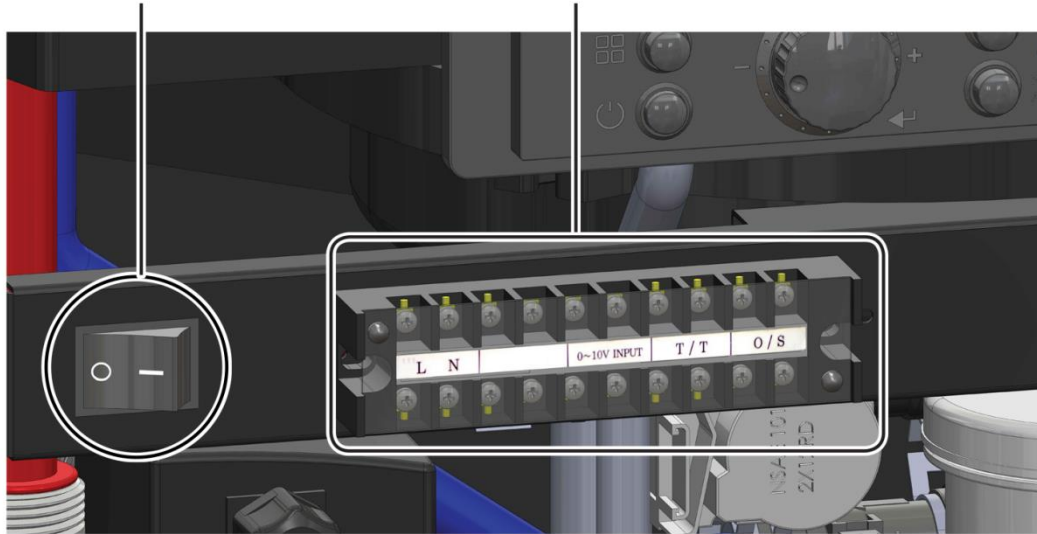
To set DHW set point Press DHW Button (combi boiler)  
You will see the DHW Icon



Use the Scroll/Select button and adjust to desired set point and press to lock in your selection

Manual Switch

Terminal Block



0 - 10V External Input      Thermostat Connection      Outdoor Sensor

To use Out Door Reset you will need to install and wire the Out Door Sensor to terminals marked O/S then you will need to go to the **Installer Parameters** to complete the set up



- **Outdoor Reset** varies the control set point based on the outdoor temperature. When the outdoor temperature reaches 6:OH “High Outdoor Temperature Set Point” the control set point is adjusted to 17:cL “Low Boiler Temperature Set Point”
- When the outdoor temperature reaches 7:OL”Low Outdoor Temperature Set Point” the control set point is adjusted to 16:cH “High Boiler Temperature”
- The Outdoor Temperature Mode Icon on the display flashes if the outdoor sensor is not connected
- To check the CH target temperature while in “Outdoor Reset” Press the CH Set point button while the boiler is in operation

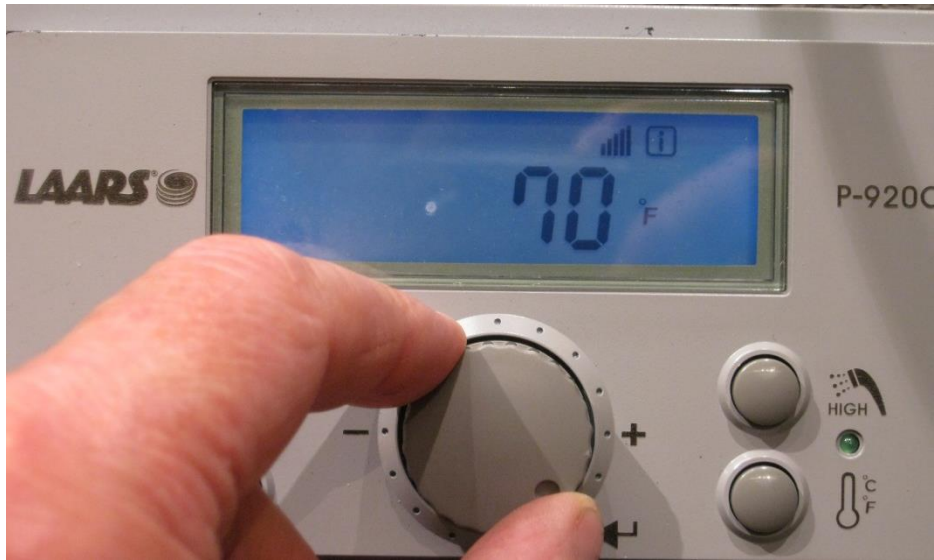


**Installer Parameters** Start by turning off the Power to the Display. Then with the Display Powered off press and HOLD the Mode button for about 5 seconds.



You will see the Out Door Icon when the sensor is connected.  
Using the Scroll/Select Button locate 6:0H This is the Maximum Out  
Door Temperature then press the select button





Now scroll to the desired High Out Door Temperature then press the Scroll/Select button to lock in the setting



Now scroll up to 7:01 to adjust the Low Out Door temperature and press the Scroll/Select button

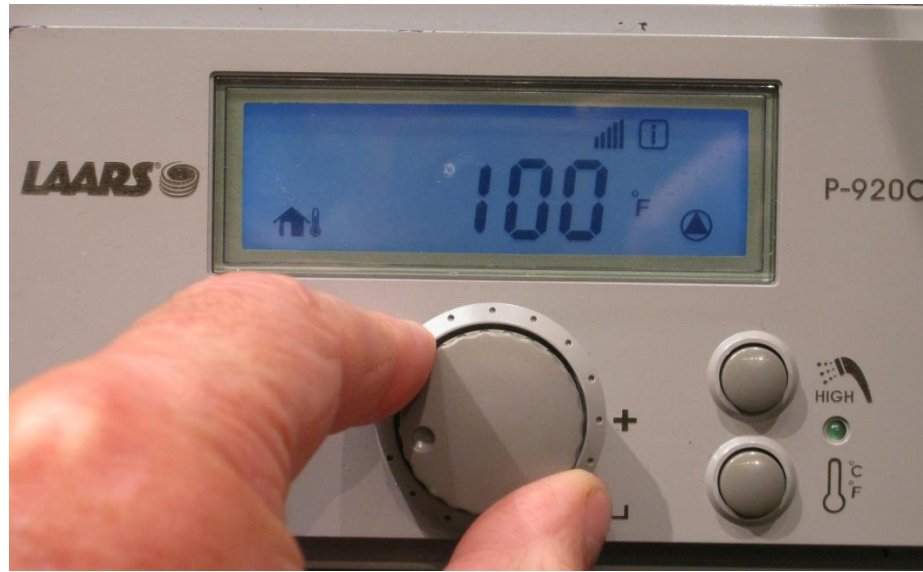


Scroll to the desired Low Out Door temperature and press the Scroll/Select button to lock in you selection





Scroll to the Warm Weather Shut Down 15:0F and press the Scroll/Select button



Scroll to set the desired Warm Weather Shut Down temperature then press the Scroll/Select button to lock in



Scroll to Setting for Heating Maximum Temperature 16:cH and press Scroll/select button





Scroll to set the desired Heating Maximum Temperature then press the Scroll/Select button to lock in



Scroll to Setting for Heating Minimum Temperature 17:cL and press Scroll/select button



Scroll to set the desired Heating Minimum Temperature then press the Scroll/Select button to lock in



# Measuring and Adjusting CO2

## **WARNING !**

*Always make sure that the Control Display is turned **OFF** before changing any DIP Switch. Then turn Control Display back **ON** to continue with CO2 measurements.*

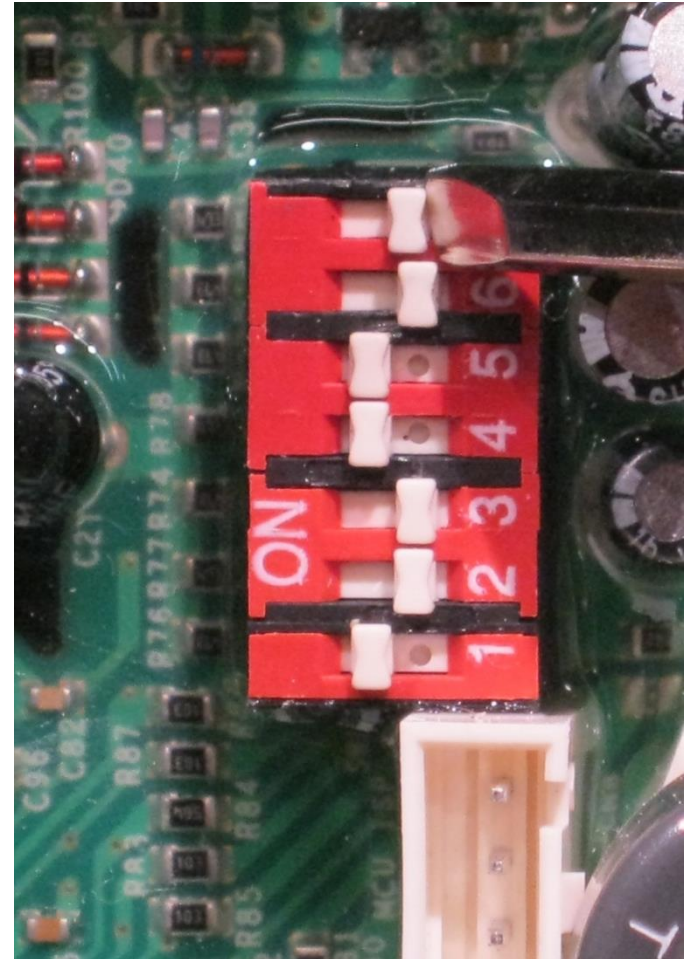
Turn on Gas and Water supply to the Mascot

Remove the plug located in the vent pipe adaptor and set up your gas analyzer





CO2 adjustment are made when the boiler is in “Min Fire” so with the Display Powered **OFF** set DIP Switch #7 to the **ON** position to run boiler in “Min Fire”



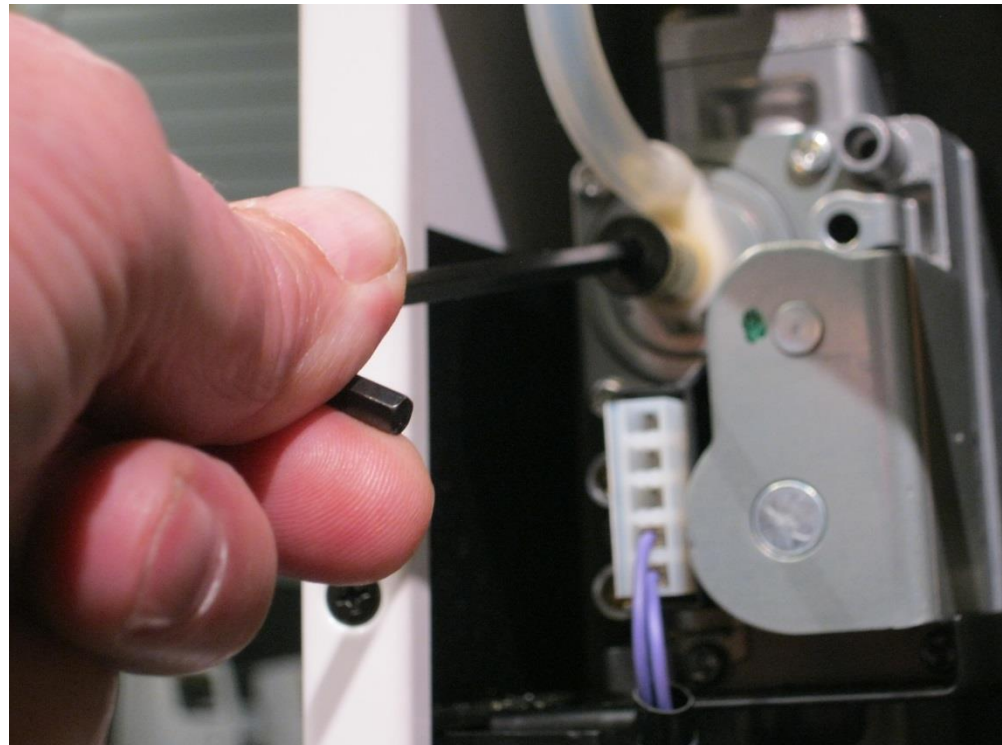
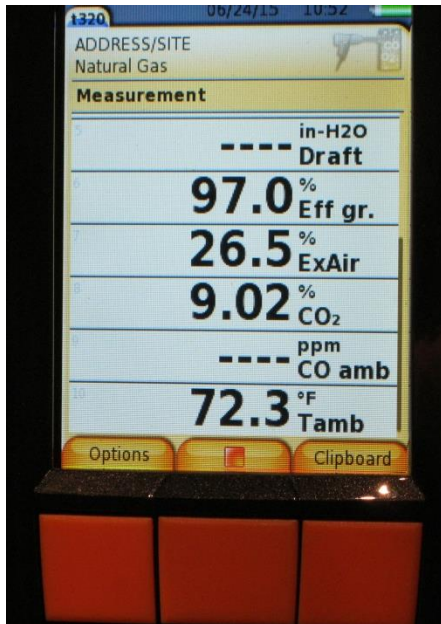
| <b>ON</b>        | <b>OFF</b>       | <b>#</b> |
|------------------|------------------|----------|
| <b>MIN</b> Fire  | Normal Operation | 7        |
| <b>MAX</b> Fire  | Normal Operation | 6        |
| NG Natural       | LP Propane       | 5        |
| 3" Vent Size     | 2" Vent Size     | 4        |
| Do Not Touch     | Normal Operation | 3        |
| Do Not Touch     | Normal Operation | 2        |
| Normal Operation | Do Not Touch     | 1        |

Turn Display Power back **ON** and give the boiler a call for heat

Adjust CO2 using 4mm allen wrench at cap screw on gas valve

Natural Gas 8% - 10% Min Fire

Propane Gas 9% - 10.5% Min Fire





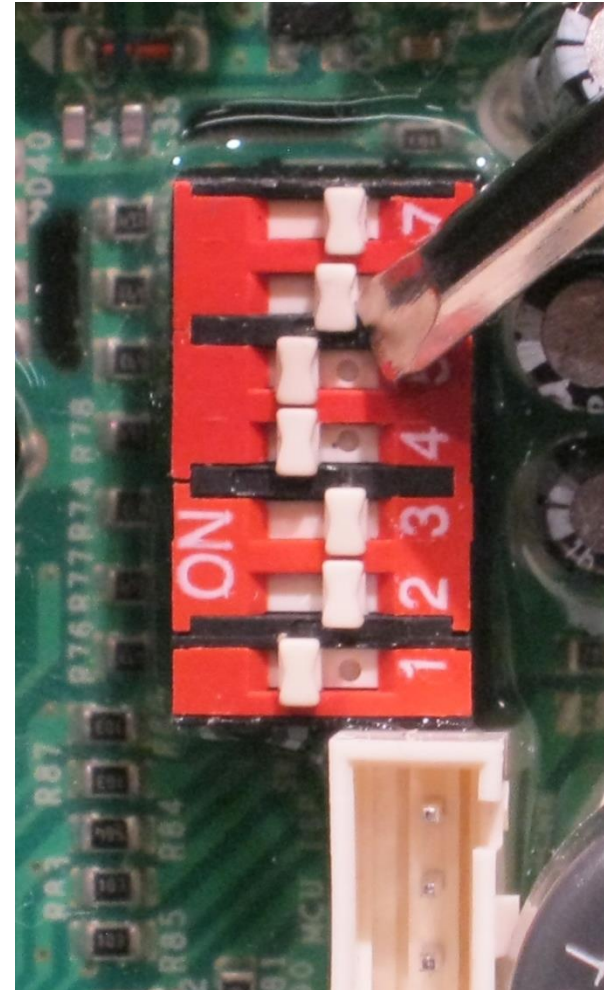
Once you have measured and adjusted CO2 in  
“Min Fire” turn off Display Power  
Set DIP Switch #7 to OFF and #6 to ON  
Power up Display and this will fire the boiler in  
“Max Fire”

## DO NOT MAKE ADJUSTMENTS IN MAX FIRE

If “Max Fire” is to low you will need to go back  
to “Min Fire” and adjust to bring CO2 up

If “Max Fire” is to high you will need to go back  
to “Min Fire” and adjust to bring CO2 down

| ON               | OFF              | # |
|------------------|------------------|---|
| MIN Fire         | Normal Operation | 7 |
| MAX Fire         | Normal Operation | 6 |
| NG Natural       | LP Propane       | 5 |
| 3" Vent Size     | 2" Vent Size     | 4 |
| Do Not Touch     | Normal Operation | 3 |
| Do Not Touch     | Normal Operation | 2 |
| Normal Operation | Do Not Touch     | 1 |



- Once the CO2 has stabilized and are with in the specification turn Display Power OFF and set all DIP Switches to the proper position according to the table
- Turn Display Power back on and the boiler is ready to operate
- Remove all test equipment and replace boiler cover

