

# COMFORTBILT UNIVERSAL 4-PIN CONTROL PANEL CP2 INSTALL INSTRUCTIONS

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## Board Installation Instructions

1. Unplug the power from the stove.
2. Apply gentle pressure to the board in an upward direction (This should allow the board to separate from the mounting bracket).
3. Unplug the connector from the back of the board.
4. Plug the connector into the new board.
5. Position the board over the mounting screws and slide the board into place.
6. Plug in the stove and follow the setup instructions.

## Board Set-up Instructions

### **Combustion Settings:**

1. From the home screen, press and hold the **ENTER** (left arrow) button until the **Set data** menu appears.
2. Scroll down to **#3 Set combustion** and press **ENTER**.
  - If prompted for a password, use the following: **UP, DOWN, UP, UP, DOWN, UP**

- The combustion levels will display at the top of the screen. H01-H05 for heating levels, and IG01-IG03 for ignition levels.
3. You can scroll up and down through these levels to get to the heating level you want to edit, and then lock in by pressing the **ENTER** key.
- Each level is edited independently of the other levels. (For example, if you wanted to adjust only the 3 bar setting, you would only need to edit the numbers within H03).
  - There are 3 metrics for every heating level:
    - i. Feed rate
    - ii. Exhaust voltage
    - iii. Blower voltage
  - Feed rate and exhaust voltages are directly related to the size and intensity of the fire (combustion), while the blower voltages are just for heat/air distribution (convection). (Voltages range from 80V on the low to 115V on the high)
  - Feed rates are displayed as an On and Off cycle, and expressed in 1/10's of seconds. (for example a feed rate of On 15, Off 45 means that the auger will feed pellets for 1.5 seconds, and then rest for 4.5 seconds for that specific level)
4. Now adjust all the levels to match the following chart. (suggested settings)
5. Now, press the **Exit button (right arrow)** to return to the set data menu, and then set the **Ash cleaning cycles**.

*For more information on programming your control board, [click here!](#)*

## Charts

Stall 1	Stall 2	Stall 3	Stall 4	Stall 5	Stall 6	Stall 7	Stall 8
OFF 4.0 ON 1.0	OFF 4.2 ON 1.8	OFF 3.5 ON 2.5	OFF 3.0 ON 3.0	OFF 2.6 ON 3.4	OFF 3.0 ON 3.0	OFF 4.0 ON 1.0	OFF 4.5 ON 1.5
Ex Volt: 100V	Ex Volt: 102V	Ex Volt: 105V	Ex Volt: 108V	Ex Volt: 110V	NA	NA	NA

<b>HP22, HP61</b>								
Combustion Level	H01	H02	H03	H04	H05	IG01	IG02	IG03
1. Feed Rate	on 10, off 40	on 20, off 40	on 25, off 35	on 30, off 30	on 34, off 26	on 30, off 30	on 10, off 40	on 15, off 45
2. Exhaust voltage	98V	102V	105V	108V	110V	115V	115V	110V
3. Blower voltage	100-115V	105-115V	110-115V	115V	115V	-	-	-
<b>HP22N</b>								
Combustion Level	H01	H02	H03	H04	H05	IG01	IG02	IG03
1. Feed Rate	on 10, off 40	on 13, off 37	on 16, off 34	on 20, off 30	on 24, off 26	on 30, off 30	on 10, off 40	on 15, off 45
2. Exhaust voltage	102V	104V	106V	109V	112V	115V	115V	110V
3. Blower voltage	100-115V	105-115V	110-115V	115V	115V	-	-	-
<b>HP21, HP22i</b>								
Combustion Level	H01	H02	H03	H04	H05	IG01	IG02	IG03
1. Feed Rate	on 10, off 40	on 18, off 42	on 23, off 37	on 27, off 33	on 30, off 30	on 30, off 30	on 10, off 40	on 15, off 45
2. Exhaust voltage	098V	100V	103V	106V	109V	115V	115V	110V
3. Blower voltage	100-115V	105-115V	110-115V	115V	115V	-	-	-
<b>HP50</b>								
Combustion Level	H01	H02	H03	H04	H05	IG01	IG02	IG03
1. Feed Rate	on 08, off 32	on 10, off 30	on 13, off 27	on 16, off 24	on 20, off 20	on 20, off 30	on 05, off 30	on 08, off 30
2. Exhaust voltage	090V	094V	97V	100V	104V	115V	115V	110V
3. Blower voltage	100-115V	105-115V	110-115V	115V	115V	-	-	-