

Replacement PC Board for C-07720 Draft Control System

All replacement pc boards for the **C-07720 Draft Control System** are pre-configured at the factory for a **C-07720-B04 positive application, with flue gas temperature monitoring enabled**.

Some units will require reconfiguration in the field depending on the model being replaced, and site-specific application.

Before removing the old pc board from the burner panel, please mark the position of existing jumpers and parameters on **Chart 1**.

After the new board has been installed, but before the air-switch (if any) has been mounted, verify that the configuration jumpers are correctly positioned.

Removal of the old PC Board

1. If the old unit will still power up, apply power and **scroll through the display** by pressing the "Enter" key. Note the Model number, software version and all parameters on Chart 1, Section 3.
2. Disconnect the **main power input** to the draft controller.
3. Detach the **display cable** from the board. Note the proper orientation of the cable. Remove and tag all field wiring.
4. If the unit is **surface- or panel-mounted**, remove the entire enclosure from the wall or panel.
5. Remove the **six (6) mounting screws** (that hold the PC board in place) located on the back of the housing. (See Figure 1 for mounting screw locations.) Save the mounting screws.
6. If unit is **open-mounted** and installed inside a burner cabinet, remove the **six (6) mounting screws** securing the PC board to the burner cabinet. (See Figure 1 for mounting screw locations.) Save the mounting screws.
7. Remove the **low draft switch**. On Chart 1, Section 2, record the white, red, & blue wire terminal connections.
8. On Chart 1, Section 2, record the position of each jumper. (See Figure 2 for jumper locations).

Installation of New Board

1. Using the settings you recorded on Chart 1, **configure** the new pc board.
2. **Mount the air switch** on the new pc board, and reconnect the wires to terminals 9, 10, & 11 following your notes on Chart 1, Section 2.
3. If the unit is not equipped with the Low-draft/High-pressure Cutoff switch option, connect a short **jumper wire between terminals 9 & 10**.

4. Connect the **orange sample tubing to port P2** of the transducer mounted on the main PC board.
5. Place the board in the burner cabinet/housing, in the same orientation as the old board, and secure with the six screws saved during removal.
6. **Plug display cable** on main board in proper orientation.
7. **Reconnect all field wiring**. Note: if old software version was 1.41 or older, you will need to add 2 additional wires between the flame safeguard and the draft control. See "Additional Burner Wiring" section below.
8. Re-apply power and commission with parameters noted in step 1 of the removal process. If you were unable to record the old parameters, the default settings should allow the unit to start-up and run, but final tuning should be performed. See instruction manual or commissioning guide for further assistance.

Additional Burner Wiring

1. Starting with Software version 1.42 and later, additional "Flame-Fail" logic has been added to the programming. This upgrade requires two additional wires to be added to the draft control. The additional wires connect terminal "**M**" of the draft control to **neutral**, and terminal "**L**" of the draft control to the **burner motor** terminal of the flame safeguard (terminal "5" for Honeywell, terminal "M" for Fireye).
2. If these two wires are not connected to the draft control, on a call for heat the unit will drive open for purge, but after purge it will drive closed, not allowing the boiler to start. If this happens, add the wires as indicated above.
3. Product support for the **C-07720** Draft Control is available from the Hays Cleveland Technical Service Dept. Monday thru Friday, 8:00 A.M. to 5:00 P.M. (except major holidays).
4. For assistance, please call (216)-398-4414 ext 257.

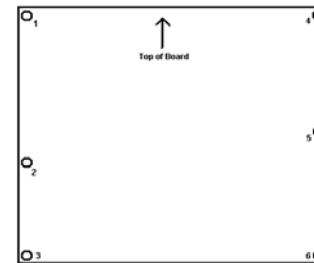


Figure 1. Mounting Screw Location

SECTION 1	Model Identification	Jumper	Setting (On/Off)
		S1-1	
		S1-2	
	Application (Set Point Polarity)	Jumper	Setting (neg/pos)
		S3	
	Flue Gas Monitoring	Jumper	Setting (Enable/Disable)
S2			
SECTION 2	Air-Switch Wiring	Terminal	Wire color
		9	
		10	
		11	
SECTION 3	Model Parameters	Parameter	Setting
		Model	
		Version	
		Setpoint	
		Deadband	
		Propband	
		Damping	
		Prepurge TMR (If Avail.)	
		Postpurge TMR (If Avail.)	
		FG units (If Avail.)	
		FG ALM1 (If Avail.)	
		FG ALM2 (If Avail.)	
		Modbus ADDR	
		Baud Rate	

Chart 1. Jumper Settings and Parameters

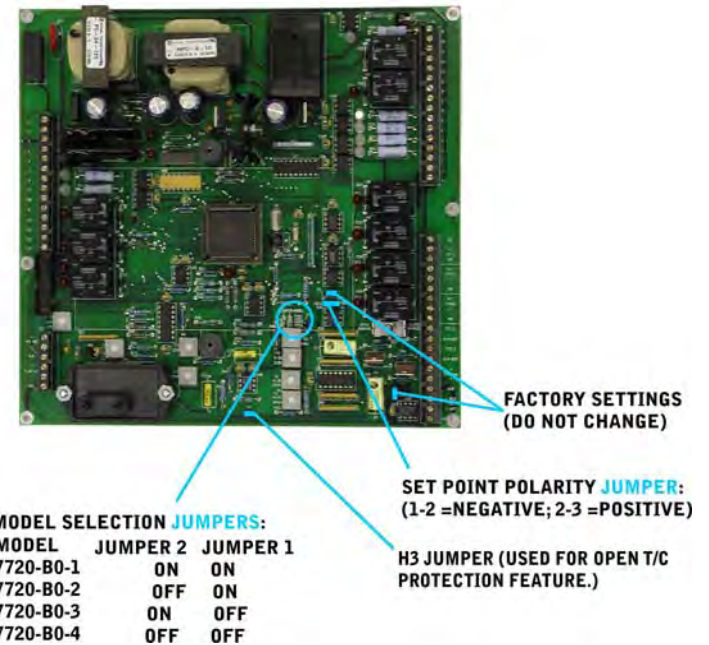


Figure 2. Configuration Jumper Locations



1111 Brookpark Road
 Cleveland OH 44109
Sales Office Telephone: 561.734.9400
 Sales Office Fax: 561.734.8060
 Email: Salescombustion@hayscleveland.com
Customer Service Telephone: 216.398.4414
 Customer Service Fax: 216.398.8558
 Email: Customerservice@hayscleveland.com
Website: <http://www.hayscleveland.com>