



History of the Flame Probe

The HF-7318-1 supersedes part numbers HF-7318, HF-7100 and HF-7062.

HF-7062 burner board was used before 1991 and used a flame switch to detect flame.

HF-7100 burner board replaced the HF-7062 and was used between 1991 and 1996 and also used a flame switch to detect flame.

HF-7318 burner board replace the HF-7100 and was used between 1996 and late 2012. It utilized a flame sensor (flame rectification) which had no switching capabilities but rather induced a voltage on the flame sensor to detect current changes in the voltage that was applied.

HF-7318-1 was introduced in late 2012 and is in current production. It contains a minor update to the circuit which made it resistant to false flame detection in certain situations.

HF-7275 flame box was used as an added feature to customers using a HF-7100 or a HF-7062 board. By adding a HF-7275 to the HF-7100 or a HF-7062 burner circuit board it allowed the customer to use flame sensor instead of the flame switch which had a high failure rate when compared to the flame sensor. The HF-7100's were made obsolete and replaced by the HF-7318 flame board in which had the flame sensor capability already built in.

THH-4179 commonly called a flame sensor, flame rod or flame probe. It does not include any bracket and if adding for the first time to the HF-7318 board it is recommended to get the kit (THH-7577) that contains the bracket and hardware.

Replacing HF-7100 or HF-7062 heater board only

When using this kit to replace either a HF-7200 or HF-7062 you will need to replace the existing flame switch with a flame sensor kit part number THH-7577. Use the wiring diagram contained in this document as a reference when replacing the board and wiring in the newer style flame sensor. The HH-1088 reset switch is no longer needed and will be removed from the circuit.

Replacing HF-7200 or HF-7062 with a HF-7275 Flame Probe Module

When using this kit to replace an existing HF-7275 Flame Probe Module you will need to replace the burner circuit board which will be either a HF-7200 (1991–1996) or a HF-7062 (pre 1991) with the HF-7318-1 board. The terminals between these boards are almost identical with exception to terminals 16, 17 and 18. 16 is no longer used and 17 and 18 are used for an air switch (if applicable). So place a jumper between terminals 17 and 18 if no air switch is present.



Flame Probe Kit using HF-7318-1

Installing a new HF-7318 circuit board

The flame sensors red and green wires will connect directly to the HF-7318-1 board to terminals 3 and 4. Use the wiring diagram contained in this document for reference. The HH-1088 reset switch is no longer needed and will be removed from the circuit.

NOTE: This kit is applicable only to 120V bin heater units. Please contact the factory if your heater is not in this application. The HF-7318-1 is a flame rectification system which utilizes a flame rod.

DANGER! Disconnect power and lock out prior to performing this service!

1. Before disconnecting the wires make note of the wire locations. It is helpful to label the wires using the old board terminal numbers as a reference.
2. If replacing a burner board that is using the flame switch then replacement will be necessary with flame rod kit number THH-7577.
3. Disconnect all wires to the existing HF-7100 or HF-7062 board.
4. Remove the old burner board by spreading the snap track slightly to allow the board to become free.
5. Snap the new burner HF-7318-1 board into the track. Be sure to orient the board so that the terminal strips are positioned as indicated in the following wiring diagrams (locate terminals 11-24 toward center of box).
6. Use the 2 diagrams on the following pages as a reference to rewire the HF-7318-1 board into the circuit.

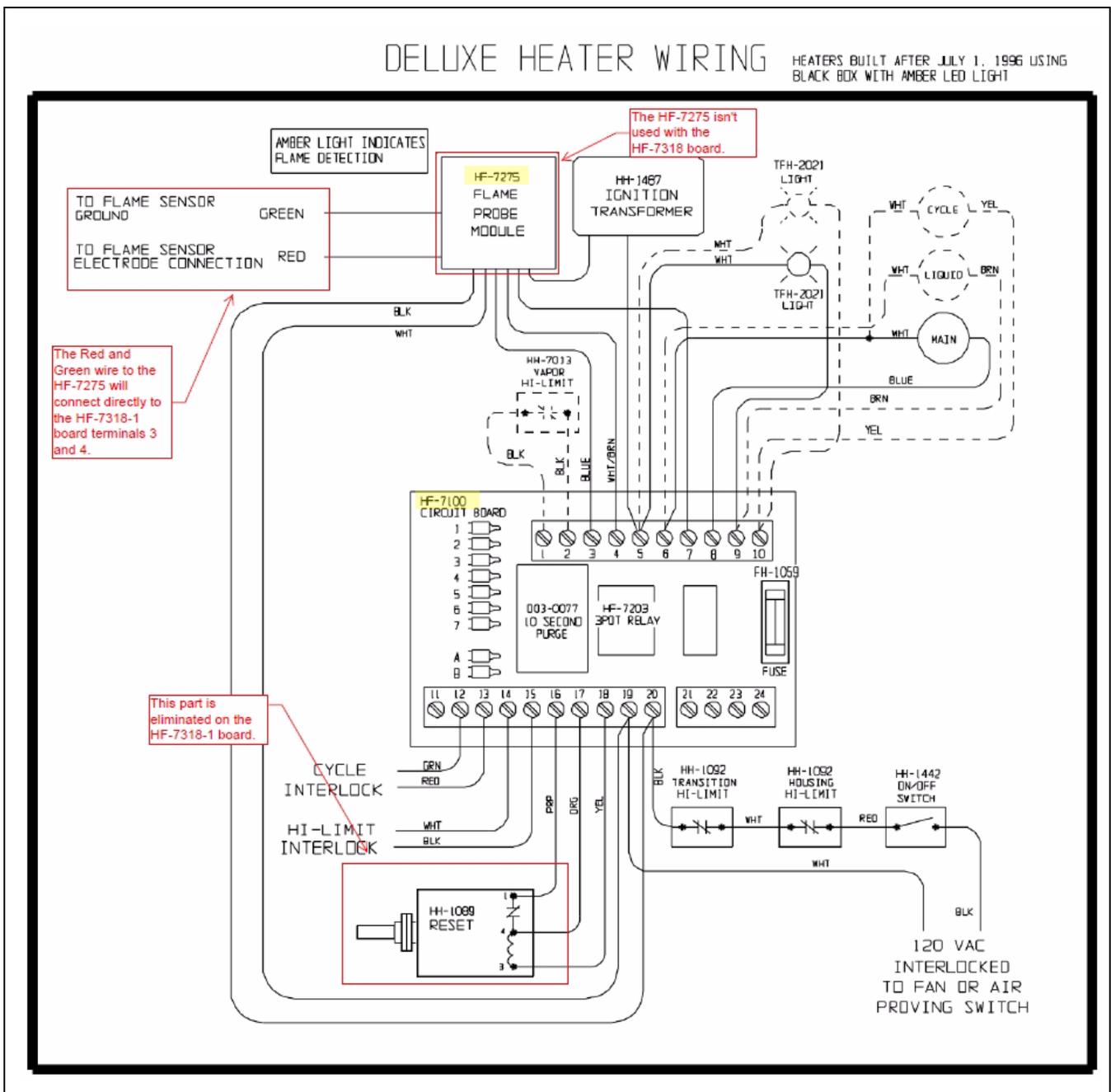


Figure 1 Deluxe Heater Wiring using Black Box with Amber LED Light (after July 1, 1996)

Flame Probe Kit using HF-7318-1

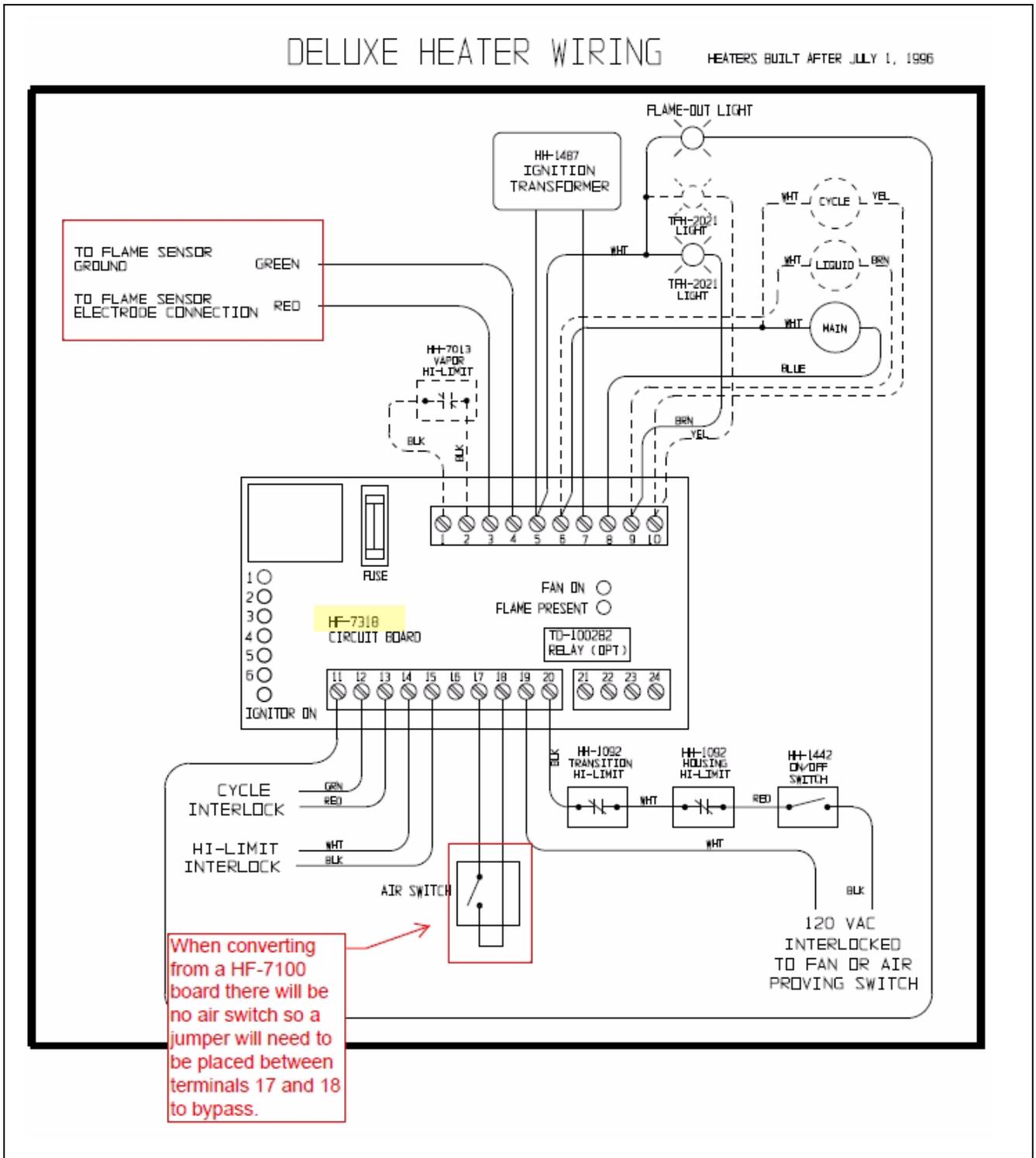


Figure 2 Deluxe Heater Wiring (after July 1, 1996)