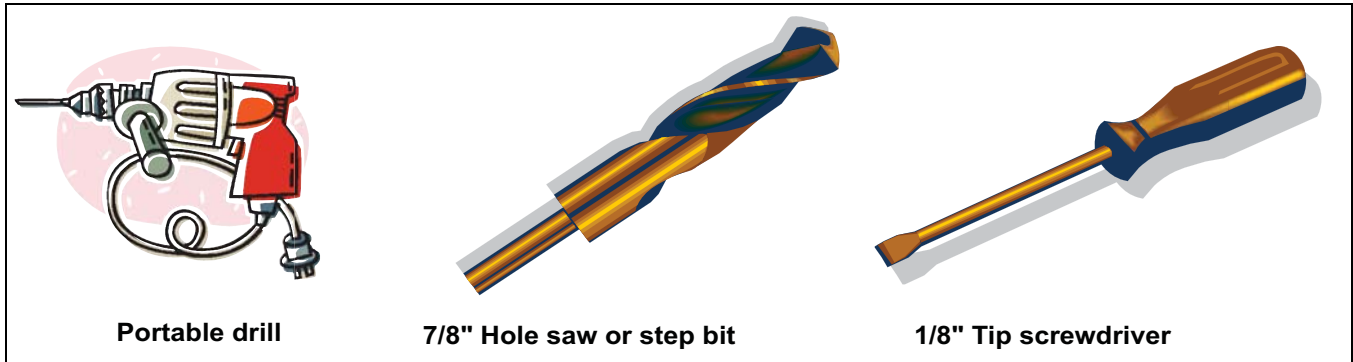




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# Instructions Installation of UV Flame Sensor Kit (D04-1259)

## Tools you will need for this installation:



## Parts included with the UVSCAN-1:

Part #	Description
PNEG-2165	Installation Instructions of UV Flame Sensor Kit (D04-1259)
D04-1259	UV BST Scanner Kit for Domestic Portable Dryers and Heaters

## Product Description

This UV flame sensor was designed to replace the flame rod or probe that is used on Vision dryer controls that utilize the HF-4624 Fenwal flame control board. (See Figure 1.) This flame controller uses a flame rectification circuit that in certain situations may not work reliably.



Figure 1 Fenwal Flame Control (HF-4624) (HF-4624 not included)

Date: 08-24-17                      V1.0

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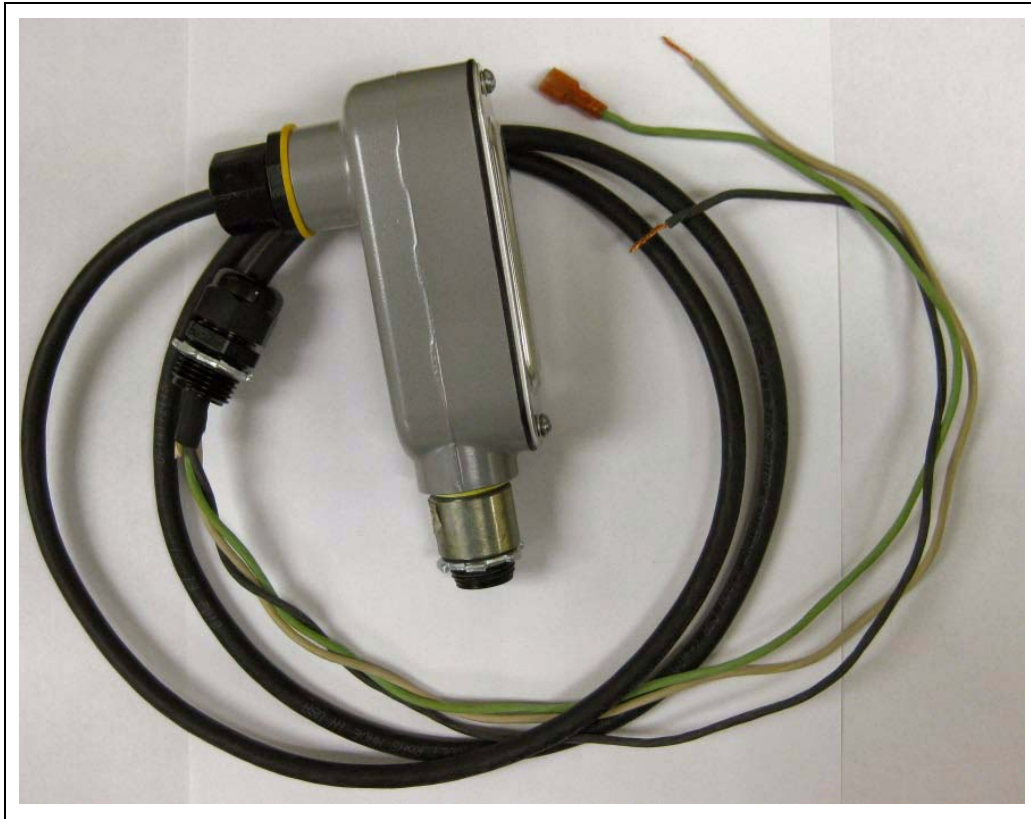


PNEG-2165  
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CN-331341

## Installation of UV Flame Sensor Kit (D04-1259)

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The GSI part # D04-XXXX UV flame sensor is more reliable since it picks up the UV light (in the 180-230 nm) that is naturally emitted in the flame when using LP, Natural Gas or Propane as its fuel. It replaces the flame rod or probe located in the burner and reproduces the expected flame signal to the fenwal board. (See [Figure 2.](#))

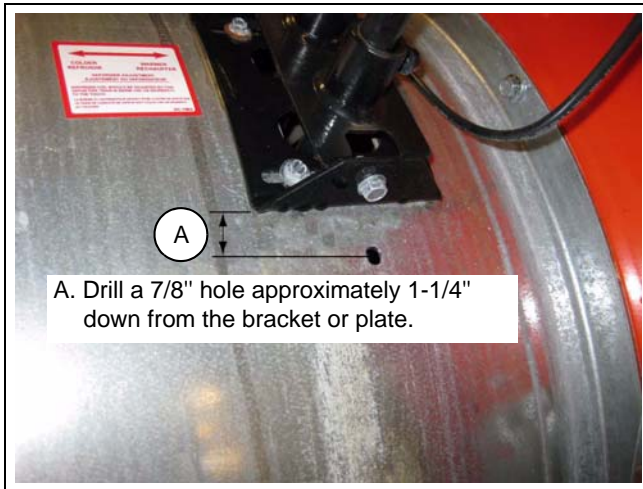


**Figure 2** *UV Flame Sensor Relay (D04-XXXX)*

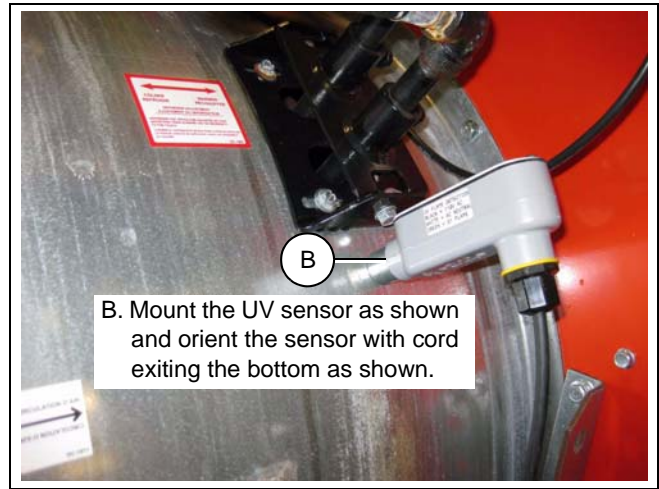
This kit will include all the parts necessary to change the flame rectification sensing on a fan/heater used on portable dryers over to UV style flame sensor.

## Sensor Mounting

The location to mount the sensor is critical in providing reliable flame sense. Typically the best location is just below the vaporizer mounting bracket or plate as shown in [Figure 3](#). Drill a 7/8" hole approximately 1-1/4" below the center of this bracket.

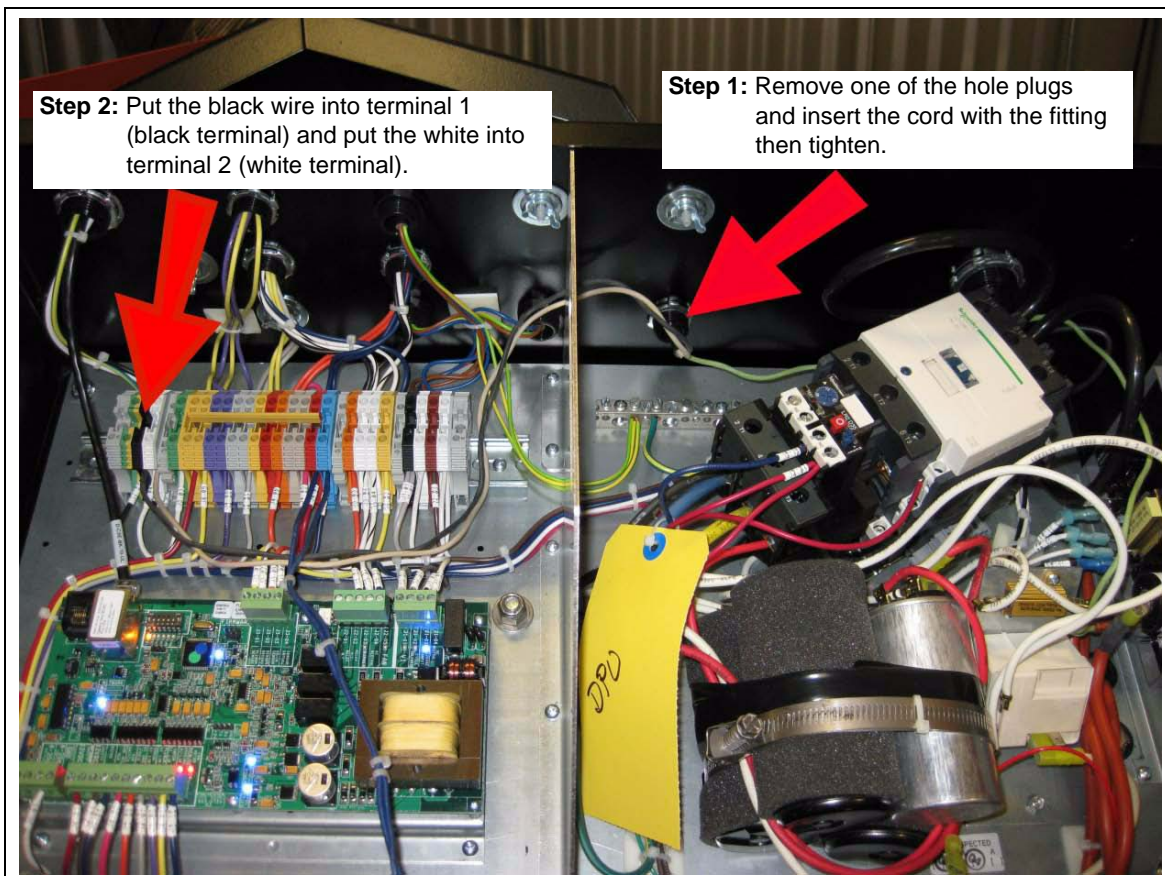


**Figure 3** Drilling Mounting Hole



**Figure 4** Sensor Location Pointing between Burner Veins

Route the cable to the back of the fan/heater enclosure using either an existing hole in the fan/heater control box or drill a new 7/8" hole. Try to keep the cable entrance location close to center of the back.



**Figure 5** Connecting 110 VAC to the Flame Sensor

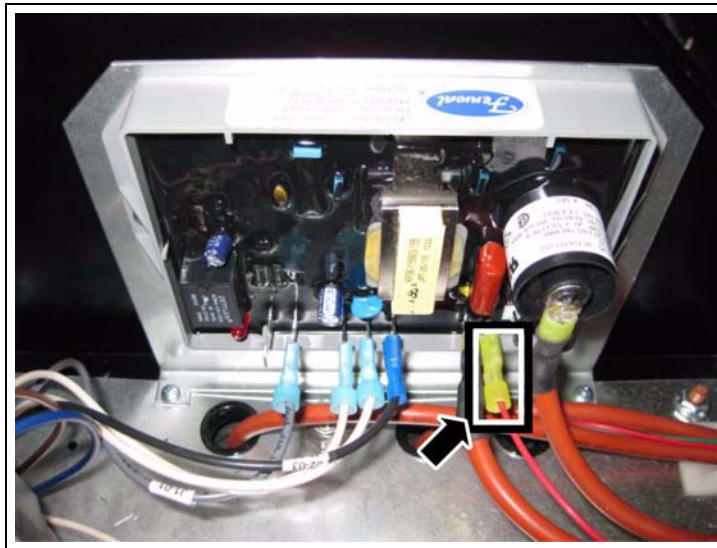
# Installation of UV Flame Sensor Kit (D04-1259)

## Wiring Instructions

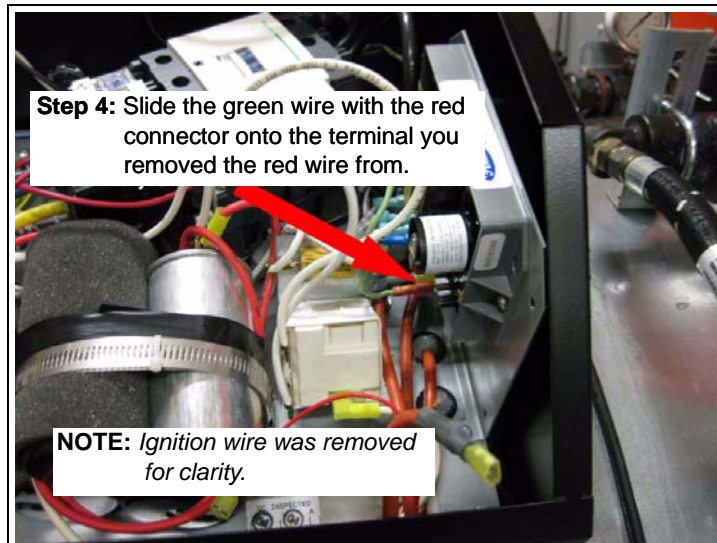


**Disconnect power and lock out prior to performing this service.**

1. With the power disconnected to dryer place the cord through an unused hole in the back of the fan/heater enclosure as shown in [Figure 6](#).
2. Attach the black wire to terminal 1 of the terminal strip and the white wire to terminal 2 of the terminal strip as shown in [Figure 6](#). This will provide the power to the UV sensor.
3. Locate the red flame sense wire “S1” on the burner control board as shown in [Figure 7](#) and remove it. Tape the connector of the wire to prevent any accidental grounding and tuck it out of the way.

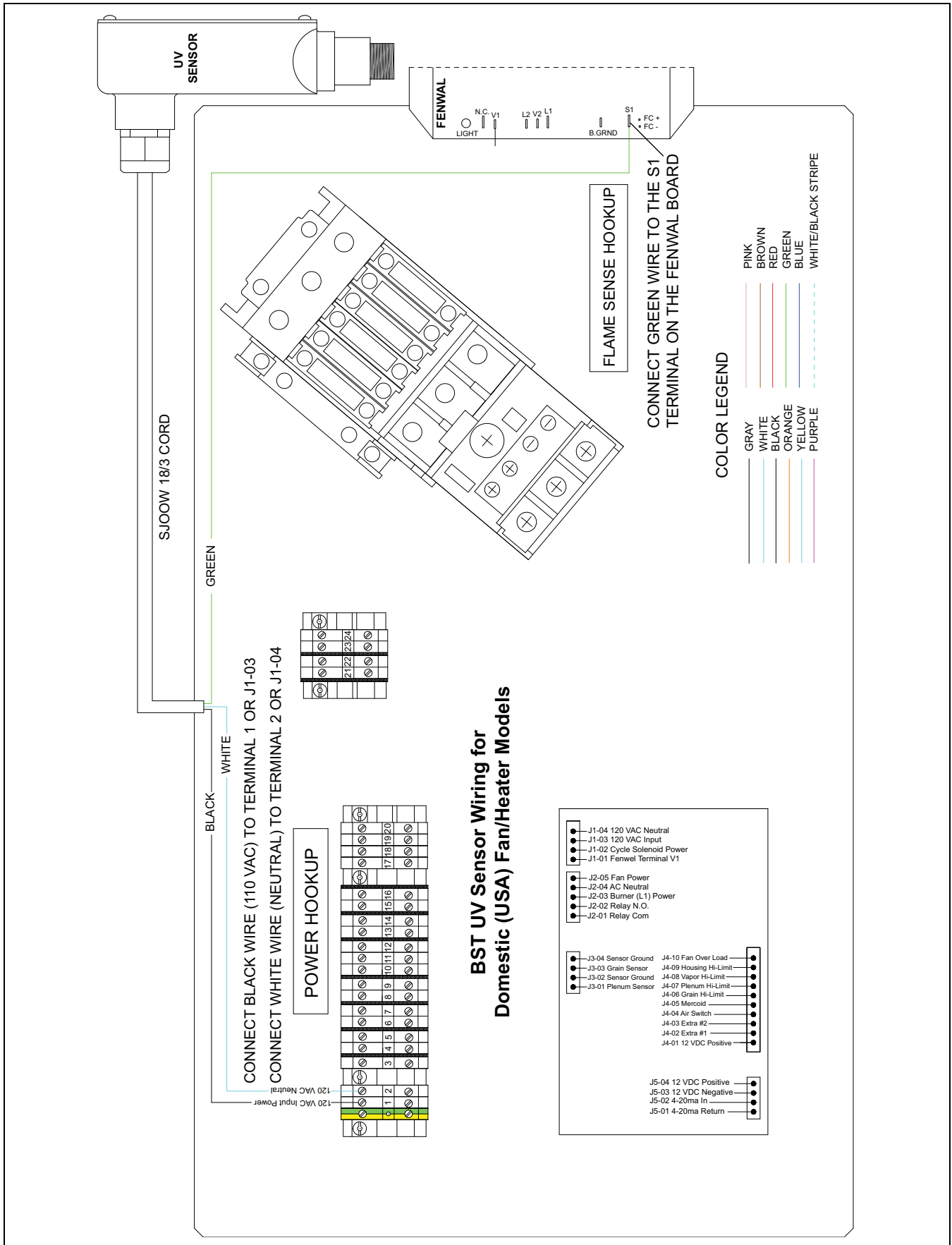


**Figure 6** Existing Flame Sensor Wire location



**Figure 7** Install Green Wire onto the S1 Terminal

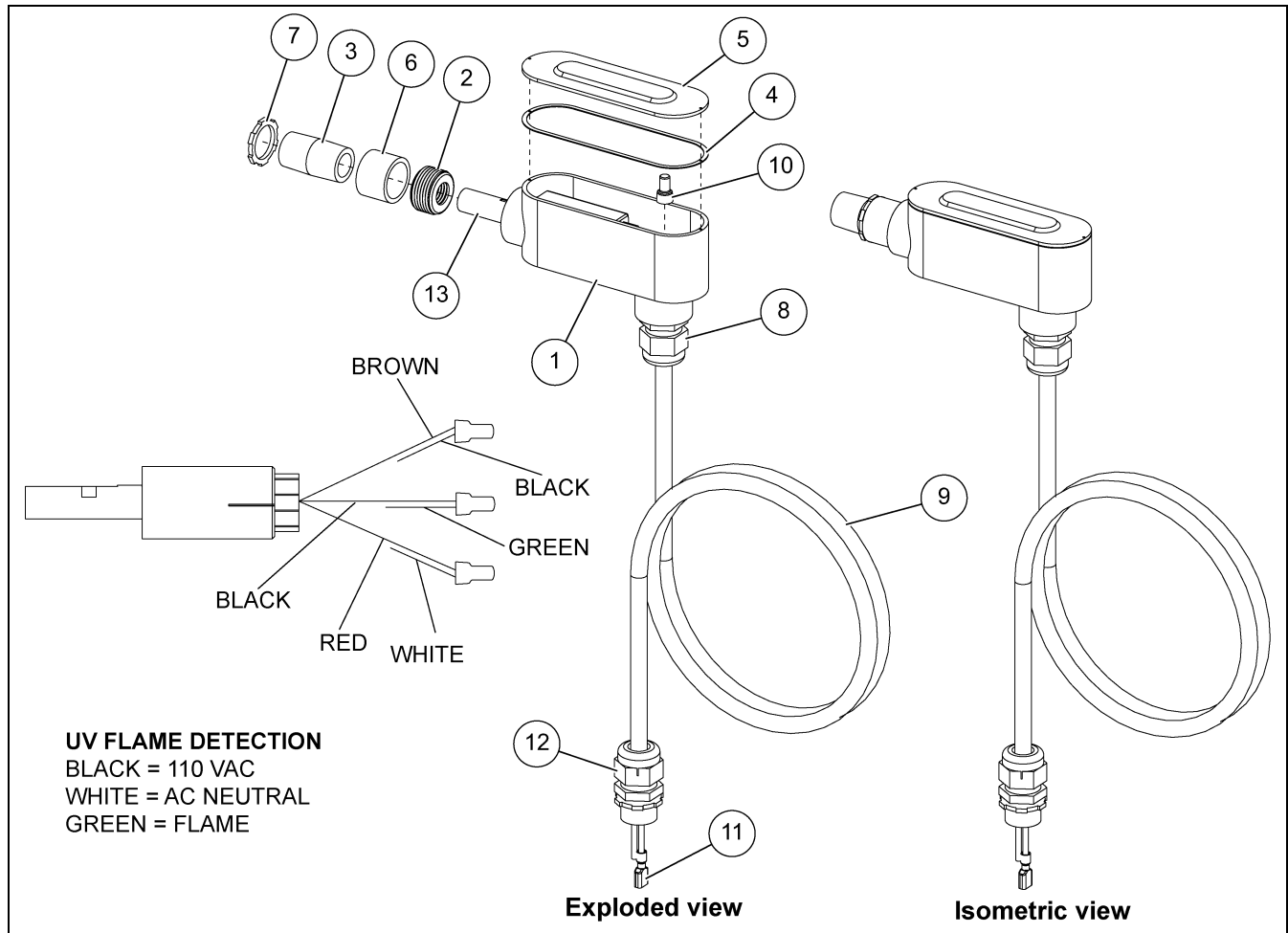
4. Place the green wire with the red connector onto the S1 terminal as shown in [Figure 7](#). Double check your wire connections and then re-apply power.



**Figure 8 Domestic Fan/Heater Wiring for UV Sensor**

# Installation of UV Flame Sensor Kit (D04-1259)

## UV BST Scanner Kit for Domestic Portable Dryers and Heaters (D04-1259) Parts



### UV BST Scanner Kit for Domestic Portable Dryers and Heaters Parts List (D04-1259)

Ref #	Part #	Description	Qty	UOM
1	006-1057-6	Unilet, 3/4" LB	1	EA
2	067-1063-6	Reducer, Elec Bush 3/4" to 1/2"	1	EA
3	D07-0019	Nipple, 1/2" x 1-1/2" SCH 80 Black	1	EA
4	006-1056-8	Seal, Unilet 3/4"	1	EA
5	GT3-0722	Cover, Conduit Body 3/4"	1	EA
6	D01-3410	Spacer, for Mounting BST UV Sensor Assembly	1	EA
7	FH-1309	Lock Nut 1/2" with Pipe Threads	2	EA
8	S-9372	Connector, 3/4" Watertight Heyco# 3460	1	EA
9	WR-183SJOWA	Cord, 14/3 SJO Black Wire	6	FT
10	FH-6998	Insulator, 18 Gauge Crimp Connection	3	EA
11	006-1145-9	Terminal, Spade 1/4" 'S8' Insulated	1	EA
12	FH-1310	Connector, Cord Heyco# 3231 Replaces: 006-1235-8	1	EA
13	D03-1355	Sensor, BST Flame UV Non-Self Checking	1	EA
N/S	PNEG-2165	Installation Instructions of UV Flame Sensor Kit (D04-1259)	1	EA