

Subject: Thermopile Pilot Monitoring Systems (for EG-75, EGH-85 & 95, PFG-6 & 7)

Prior to March 2001, all Weil-McLain models EG-75, EGH-85, EGH-95, PFG-6, and PFG-7 standing pilot boilers were manufactured using a thermocouple pilot monitoring system. This consisted of a thermocouple, thermocouple terminal block, and 24-volt gas valve designed for use with a thermocouple.

Since March 2001, these specific boiler models/sizes have been manufactured using a "thermopile" pilot monitoring system. This thermopile type of system improves reliability for sensing the presence of the pilot flame. Although a 24-volt gas valve is still utilized, this thermopile pilot monitoring system uses different components and is not interchangeable with the components of the thermocouple system.

The thermopile pilot monitoring system consists of a thermopile (in place of the thermocouple), a lead-wire assembly (in place of the thermocouple terminal block), and a 24-volt gas valve specifically designed to be used with a thermopile (gas valve screw fittings are different sizes for each system). The pilot assembly remains the same for either the thermopile or the thermocouple system.

Weil-McLain models EG-75, EGH-85, EGH-95, PFG-6, and PFG-7 boilers will operate with either the thermocouple or the thermopile system. Conversion from the thermocouple system to the thermopile system is not required, but it is an option if sensing the pilot flame becomes an issue. Be sure to only use matching gas control components whenever converting to LP or Natural gas or when utilizing a conversion kit. Below is a chart showing both the thermocouple and the thermopile components:

Thermocouple Components (standard pre 03/01)			Thermopile Components (standard as of 03/01)		
Description	W-M Part No.	Vendor Part No.	Description	W-M Part No.	Vendor Part No.
Natural Gas Valve	511-044-219	Robertshaw: 7000ERHC-S7C Grayson: 5A7-501-723	Natural Gas Valve includes 3/4" x 1" reducing bushing for EG-75 only	510-811-641	Robertshaw: 7000ERHC-S7C Grayson: 5D7-501-723
LP Gas Valve	511-044-277	Robertshaw: 7000ERHC-S7C Grayson: 5A7-502-789	LP Gas Valve includes 3/4" x 1" reducing bushing for EG-75 only	510-811-643	Robertshaw: 7000ERHC-S7C Grayson: 5D7-502-789
Thermocouple with spade terminal block, 36"	511-724-255	Honeywell: Q309B1177	Thermopile, 36"	511-724-259	Robertshaw: RSCP-2
			Lead-wire assembly	590-850-561	----

The following conversion kits include the necessary thermopile components to convert gas types:

Boiler Model	Gas Conversion	W-M Part No.
EG-75, EGH-85, EGH-95	From Natural Gas to LP Gas	510-811-397
PFG-6, PFG-7	From Natural Gas to LP Gas	510-811-405
EG-75, EGH-85, EGH-95	From LP Gas to Natural Gas	510-811-402

To convert from the thermocouple system to the thermopile system, use the appropriate conversion kit shown below. NOTE: These kits do NOT convert from one gas to another.

Boiler Model	Conversion Kit	W-M Part No.
EG-75, EGH-85, EGH-95 PFG-6, PFG-7	Nat. Gas Thermocouple to Thermopile	510-811-461
	LP Gas Thermocouple to Thermopile	510-811-462

NOTE: This thermopile pilot monitoring system is NOT a typical millivolt system. The gas valve requires 24-volts.