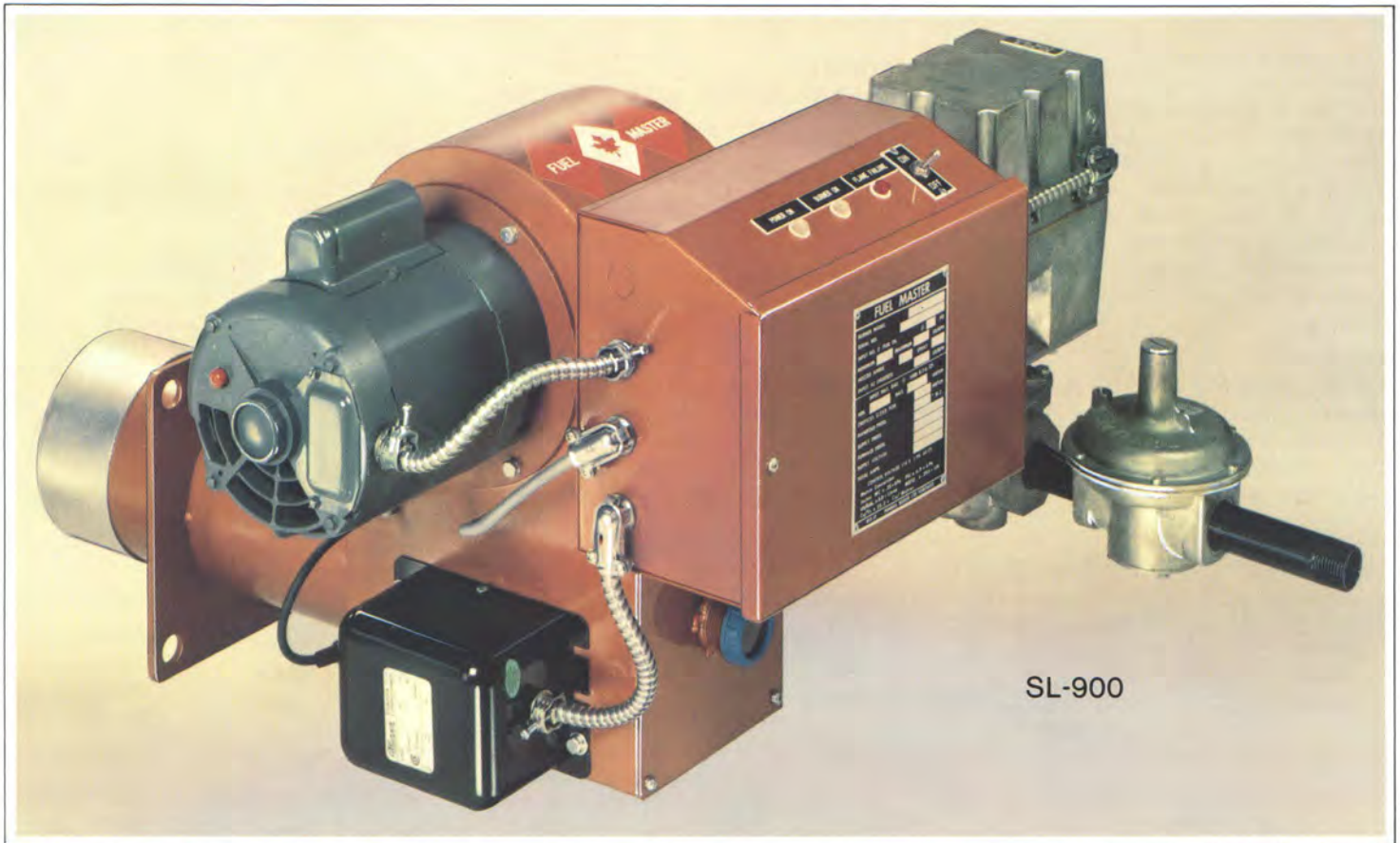


# Fuel Master **SPARK-LIGHT** burner



SL-900

Pendell has adapted new technology to produce an extraordinary, versatile and economical burner that's a breakthrough in its class and it doesn't compromise quality in order to beat rising costs.

#### The savings start here

This new Fuel Master is the SPARK-LIGHT, a direct spark burner. It eliminates the pilot with all its complicated encumbrances and vulnerability to outage. No servicing or replacement of pilot valves, regulators and parts. An immediate saving. A unique design turbulizer and air stabilizer combine to produce an optimum air/gas mixture with three significant advantages: 1) instant combustion from spark ignitor, 2) instant, recirculating high temperature flame combustion for improved heating of primary surfaces, 3) short flame — there is no inefficient, lazy flame travelling a long distance before completing combustion.

Solid state technology provides circuitry that critically monitors the start up and operation of the burner for maximum service life. The ultra

violet flame detector located in the air stream saves you money — it won't burn out like a flame rod.

#### New life for old boilers

The Fuel Master SPARK-LIGHT burner is especially useful to revitalize old firebox type boilers. Properly converted, these types of boilers can now perform better than ever. No need for a whole new heating system. The short flame incandescent heat is three times more efficient for heating primary surfaces. Its capacity for full heat transfer through radiation is more effective for all kinds of heat transfer apparatus.

#### Maximizing short flame combustion

For boilers and furnaces (500,000 BTU - 1.6 million BTU) the Fuel Master SPARK-LIGHT provides maximum heat transfer and combustion efficiency which, for quality and price at this size, is unmatched anywhere.

#### No pilot — Improved installation

There's nothing to manually ignite or adjust or check, and there's no pilot components to service. Installation

procedure is now much simpler. No flame rods to clutter; gas piping is much simpler.

An adjustable heavy gauge, robust flange is ready to accommodate different boiler wall thicknesses and simplify burner entrance installation.

#### Safety

A 'proof of closure' switch provides absolute safety — no spark, no start.

#### Quality guaranteed

Our burners are of heavy gauge cut steel, each fully welded precisely, (much better than 'hold-together' light gauge spot welding), to produce the various units that fit together with custom made excellence.

Our electric circuitry is never a mixed up nest of tangled mystery, it's diagrammatically assembled, colour coded; it's a picture of wiring precision. That's part of our pride — to know that any future circuit tracing or maintenance will be visually clear and time saving.

Each burner comes with a panel box enclosure with a terminal strip for field wiring connections. Terminal lights indicate burner functions.

An on/off selector switch makes servicing easier.

Every step of the way, in assembly, our high standards of quality control mean testing and approval before the next step is assumed. At the final stage all burners are tested for firing reliability.

**Ecologically Proven**

Generally no change in combustion chamber is required with a Fuel Master SPARK-LIGHT. Our unique direct spark firing heads are exclusive to us. They're precision made and designed to produce clean stable combustion and to meet the various pollution control standards required across North America.

**Versatile**

Fuel Master SPARK-LIGHT is versatile, easily adapted to all types of fire box and cast iron boilers, direct and indirect fired air heaters and similar applications.

**Efficient**

With the proper air/gas mixture the placement of the burner head to shape the flame for optimum recirculating combustion is a convenient, easy and precise adjustment with our exclusive design drawer assembly.

**Capacity**

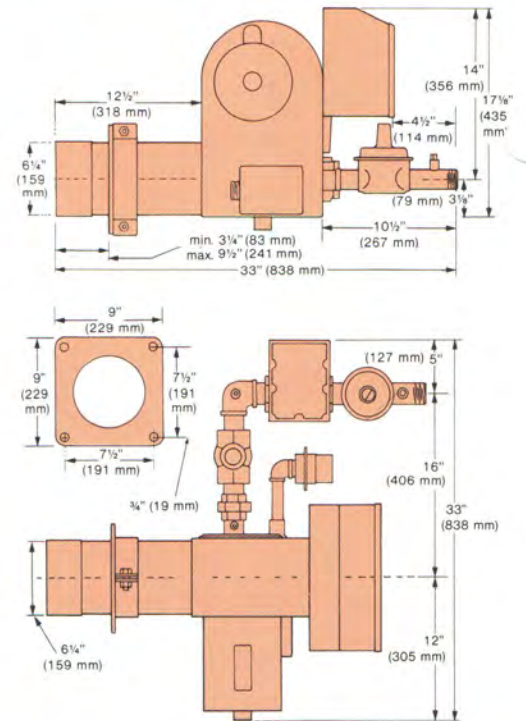
Input from 500,000 to 1.6 million BTU

**Approved**

Fuel Master SPARK-LIGHT burners are approved by C.S.A. testing laboratories.

**Tested and proven**

Pendell quality and craftsmanship ensures easy installation and maintenance. The design and application of standard parts and precise assembly have set the Fuel Master apart, providing years of dependability even through long demanding Canadian winters.



**Specifications and Capacities**

Burner Model Number	*Ratings at 0.02 W.C. Furnace Pressure			Gas Train Size at Press. Listed Inches (mm)	Listed Gas Press. at Regul. Inches (kPa) (1.74)	Listed Gas Press. Propane Inches (kPa) (2.74)	Blower Motor H.P.	Approx. Crated Weight Lbs. (kg)
	M.B.H. Gas Input		Max. Boiler Output H.P. (kW)					
	Min.	Max.						
SL-900	500 (146.4)	900 (263.6)	21.5 (210)	1" (25.4)	7"(W.C.)	11" (W.C.)	1/3	160 (72.5)
SL-1350	700 (263.6)	1350 (395.4)	32.3 (316)	1 1/4" (31.8)	7"(W.C.)	11" (W.C.)	1/3	165 (74.8)
SL-1600	1200 (395.4)	1600 (468.6)	38.4 (375)	1 1/2" (38.1)	7"(W.C.)	11" (W.C.)	1/3	170 (77.1)

**When Ordering Specify**

- Intended fuel input
- Gas type and pressure available
- Flange setting
- Electrical supply
- Description of equipment to be fired
- Firing sequence
- Special details

**Standard Equipment 115 Volt 1 phase 60 cycle.**

3450 rpm motor, squirrel cage blower, air switch, interrupted spark ignited system, lubricated firing cock, main gas control valve, main gas pressure regulator.

Available in - On/Off, Hi-Lo, and Modulating Firing Sequences

Control System — pre-purge only — UVM-2 or TERVCON 5602, ultra-violet scanner, Power On, Burner On & Flame Failure lites, On/Off switch, panel box, terminal strip.

Ratings based on 2000 ft. (609.6 m) above sea level.

De-rate burner 4% for each additional 1000 ft. (304.8 m) altitude.

H.P. Ratings based on 80% combustion efficiency and Maximum burner capacity. Ratings based on Natural Gas @ 1000 BTU (.293 kWh).

Ratings based on Propane Gas @ 2500 BTU (.732 kWh).

Orifices will be drilled to minimum input when required input is not specified.



**Fuel Master Burners**

DESIGNED AND BUILT BY

**Pendell Boiler Limited**



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