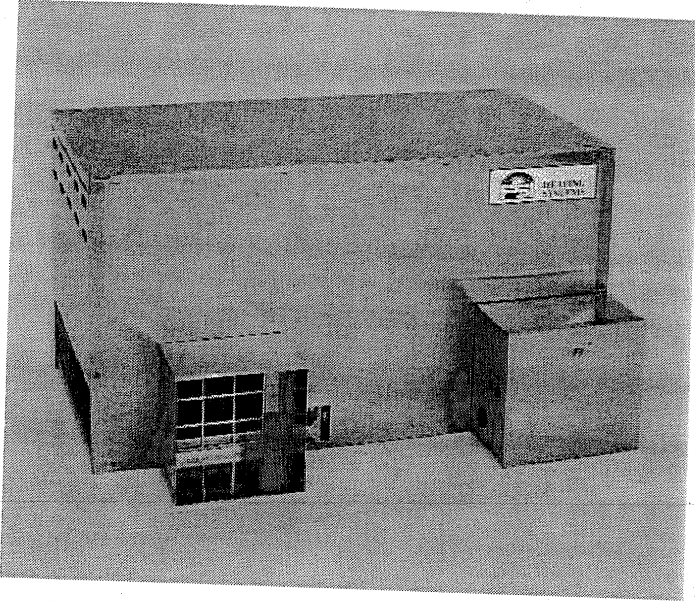




Owner's Manual and Instructions

Agricultural Animal Confinement Building Heaters



SERIES	IGNITION TYPE	OUTPUT (BTUH)
1450	Hot	40,000
	Surface	60,000
	Ignition	150,000
		225,000

Available in either L.P. Vapor Withdrawal or Natural Gas Configurations.



Warnock Hersey



Congratulations!

You have purchased the finest agricultural building heater available.

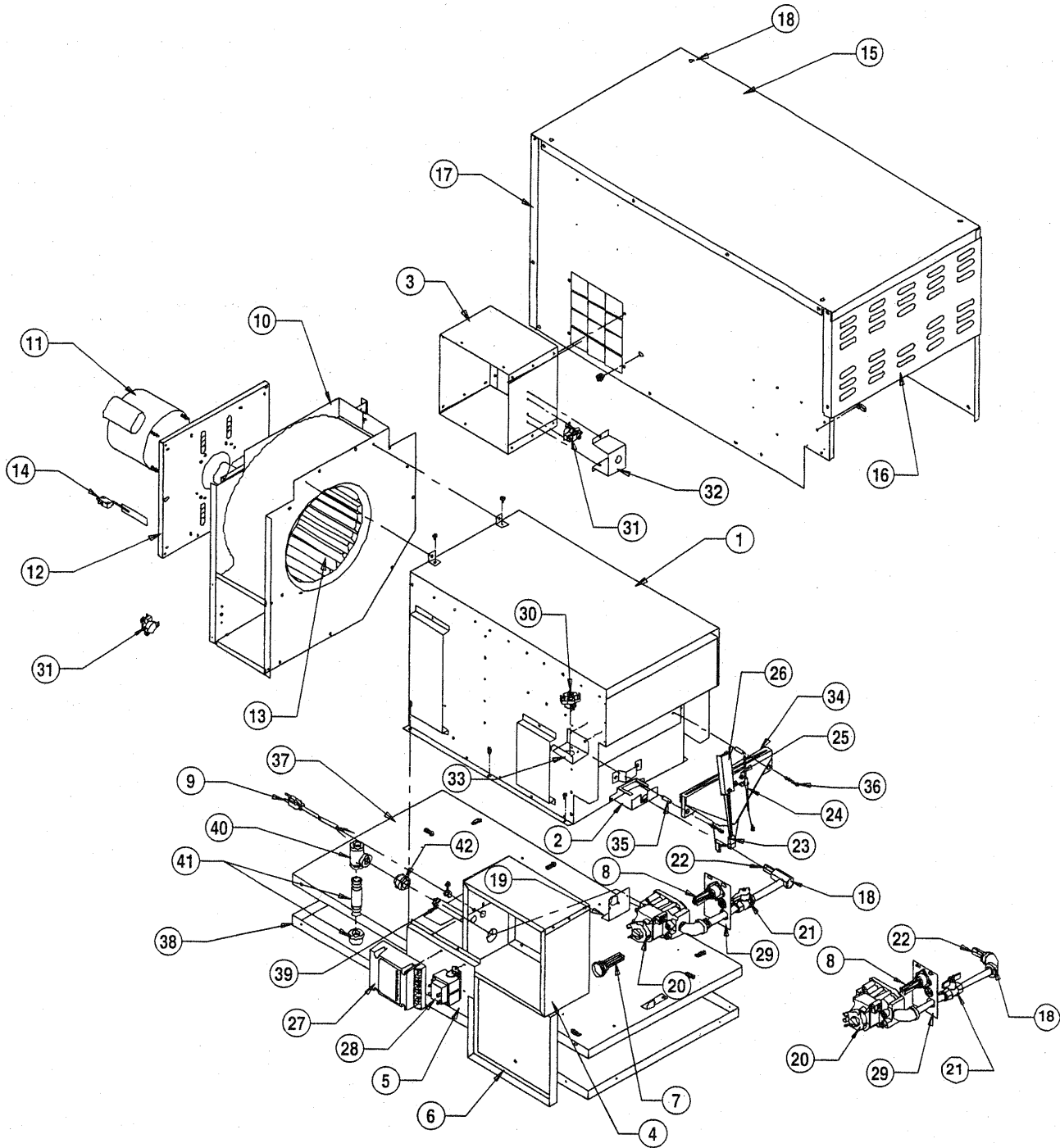
Your new PSI heater incorporates the benefits from the most experienced manufacturer of heating products using state-of-the-art technology.

We, at PSI, **thank you** for your confidence in our products and welcome any suggestions or comments you may have.....call us, at 800-562-2966.



Parts Identification

PARTS SCHEMATIC



DO NOT HAVE A NUMBER IN THE SYSTEM

		40,000	60,000	150,000	225,000
1 HEAT CHAMBER ASSEMBLY					
	STAINLESS	472-F400-80267	472-F400-80267		472-F400-81043
	GALVANIZED	472-F400-80268	472-F400-80268		472-F400-81042
2 BRACKET BURNER MOUNT		472-F220-80251	472-F220-80251	472-F220-80404	472-F220-80404
3 DUCT ASSEMBLY					
	STAINLESS	472-F400-80285	472-F400-80285	NONE	472-F400-80322
	GALVANIZED			NONE	472-F400-80323
4 CONTROL BOX ASSEMBLY					
	STAINLESS	472-F400-81364	472-F400-81364	472-F400-81364	472-F400-81364
	GALVANIZED	472-F400-81365	472-F400-81365	472-F400-81365	472-F400-81365
5 BRACKET CONTROL MOUNTING		472-F240-80444	472-F240-80444	472-F240-80444	472-F240-80444
6 GASKET		472-F130-80456	472-F130-80456	472-F130-80456	472-F130-80456
7 HARNESS WIRING, FEMALE		472-F120-80680	472-F120-80680	472-F120-80680	472-F120-80680
8 HARNESS WIRING, MALE		472-F120-80681	472-F120-80681	472-F120-80681	472-F120-80681
9 CORD, POWER		472-F120-80679	472-F120-80679	472-F120-80679	472-F120-80679
10 HOUSING, FAN ASSEMBLY					
	STAINLESS		472-F400-80666		472-F400-80531
	GALVANIZED		472-F400-80719		472-F400-80530
11 MOTOR		472-120-20290	472-120-20290		472-120-20169
12 BRACKET, MOTOR MOUNT		472-80298	472-80298	472-80294	472-80294
13 BLOWER WHEEL		472-130-02808	472-130-02808		472-130-02684
14 AIR PROVING SWITCH		472-F400-80324	472-F400-80324	472-F400-80324	472-F400-80324
15 CASE ASSEMBLY					
	STAINLESS	472-F400-81330	472-F400-81330		472-F400-81318
	GALVANIZED	472-F400-81331	472-F400-81331		472-F400-81317
16 PANEL BURNER END CASE					
17 PANEL MOTOR END CASE					
19 BRACKET GAS VALVE INLET				472-F240-80443	
20 VALVE, GAS CONTROL		NONE	NONE		NONE
	PROPANE	472-F550-81243	472-F550-81243	472-F550-81243	472-F550-81243
	NATURAL GAS	472-550-81244	472-550-81244	472-550-81244	472-550-81244
21 VALVE, THROTTLE					
	PROPANE				
	NATURAL GAS				
22 ORIFICE, BURNER					
	PROPANE				472-F310-81062
	NATURAL GAS				472-F310-81149
23 IGNITER		472-550-09201	472-550-09201	472-550-09201	472-550-09201
24 SENSOR, FLAME		472-120-09626	472-120-09626	472-120-09626	472-120-09626
25 BRACKET, IGNITER		472-F260-80363	472-F260-80363	472-F260-80553	472-F260-80553
26 SHIELD, IGNATER		472-240-09167	472-240-09167	472-240-09167	472-240-09167
27 CONTROL, IGNITION		472-120-09298	472-120-09298	472-120-09298	472-120-09298
28 TRANSFORMER		472-81218	472-81218	472-81218	472-81218
29 PLATE					472-81155
SWITCH, HIGH LIMIT					
30 (LOCATED ON HEAT CHAMBER)		472-84144	472-84144	472-F120-84144	472-F120-84144
SWITCH, HIGH LIMIT					
31 (LOCATED NEAR BLOWER)		472-F120-84144	472-F120-84144	472-F120-84144	472-F120-84144
32 COVER, HIGH LIMIT SWITCH		NONE	NONE	NONE	472-F240-85957
33 BRACKET, HIGH LIMIT SWITCH		472-F240-86327	472-F240-86327	472-F240-86327	472-F240-86327
34 BURNER CASTING		472-F320-80015	472-F320-80015	472-F320-80038	472-F320-80038
35 SPACER		472-130-02687	472-130-02687	472-130-02687	472-130-02687
36 BURNER MOUNT SCREW		472-130-02688	472-130-02688	472-130-02688	472-130-02688
37 BASE TOP		472-F240-80662	472-F240-80662		472-F240-80445
38 BASE BOTTOM		472-F240-84677	472-F240-84677		472-F240-80446
39 NIPPLE, GAS VALVE INLET		472-130-05357	472-130-05357	472-130-05357	472-130-05357
40 TEE		472-130-02971	472-130-02971	472-130-02971	472-130-02971
41 SEDIMENT TRAP KIT		472-F400-80299	472-F400-80299	472-F400-80299	472-F400-80299
42 GROMMET		472-F130-85875	472-F130-85875	472-F130-85875	472-F130-85875
LATCH KIT, CONTROL BOX					
43 (NOT ILLUSTRATED)		472-F500-80762	472-F500-80762	472-F500-80762	472-F500-80762

Heater Component Function

Air Proving Switch

Safety device used to insure that the proper air flow is being achieved before the gas valve is opened.

Burner

Cast iron component used to channel gas and provide an area at which the fuel may ignite.

Burner Orifice

Brass metering device used to feed gas to burner at a specific rate.

Fan Housing

Chamber used for compressing air for efficient air movement.

Fan Wheel

Component used in conjunction with the motor and fan housing to pull the hot air from heater and blow it into room for heating (also known as a "squirrel cage").

Gas Control Valve

Houses electrical solenoids which are energized by voltage and therefore open allowing gas to pass through to burner for ignition. The gas control valve will close, shutting off the flow of fuel gas in the event burner flame goes out.

Gas Hose

Flexible connector used to convey gas from supply line in building to heater.

Heat Chamber

Metal "fire box" within the appliance that provides an area where burner flame mixes with combustion air thereby providing heat.

High Limit Switch

Safety device wired into the control system which is used to break an electrical circuit to the gas control valve in event of overheat situation.

Hot Surface Ignition Control Board

Electronic printed circuit board which sends and receives voltages to various controls in an automatic hot surface ignition system. An important safety feature of the control board is that it will shut down the entire heater, thereby stopping the flow of fuel gas if burner flame goes out.

Igniter

Ignition device used on automatic ignition control systems. Ignites gas by surface temperature rather than by spark or flame.

Motor

Electric device used to force preheated air through the heater and to circulate heat within a certain area. Converts electrical energy into mechanical energy.

Regulator

The heart of any gas supply installation. Used to deliver a working pressure to the appliance under varying conditions in tank pressure.

Sensor

Device used in conjunction with the ignition control board to insure that the burner flame exists during a call for heat.

Thermostat

Electrical device used as an automatic "on/off" switch which will respond to changes in temperature in a certain area. Can be wired so contacts in the thermostat open or close on temperature increase or decrease.

Transformer

Electrical control used to take higher incoming voltage and reduce it to lower outgoing voltage to operate certain control systems.