

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!



OPERATING INSTRUCTIONS AND OWNER'S MANUAL

MODEL#
HSP500ID-A

READ INSTRUCTIONS CAREFULLY: YOUR SAFETY IS IMPORTANT TO YOU AND TO OTHERS. Read and follow all instructions. Place instructions in a safe place for future reference. Do not allow anyone who has not read these instructions to assemble, light, adjust or operate the heater.

PORTABLE INDUSTRIAL OIL-FIRED INDIRECT HEATER



⚠ WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Service must be performed by a service agency.

⚠ WARNING: Improper adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual for correct installation and operational procedures. For Assistance or additional information consult a service agency.

⚠ WARNING: This is an indirect oil-fired portable heater. It uses air (oxygen) from the area in which it is used. Provisions for adequate combustion and ventilation air must be provided.

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

⚠ IMPORTANT: READ THIS OWNER’S MANUAL CAREFULLY AND COMPLETELY BEFORE TRYING TO ASSEMBLE, OPERATE, OR SERVICE THIS HEATER. IMPROPER USE OF THIS HEATER CAN CAUSE SERIOUS INJURY OR DEATH FROM BURNS, FIRE, EXPLOSION, ELECTRICAL SHOCK, AND/OR CARBON MONOXIDE POISONING.

⚠ GENERAL HAZARD WARNING:
ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER.

⚠ WARNING: FIRE, BURN, INHALATION, AND EXPLOSION HAZARD. KEEP SOLID COMBUSTIBLES, SUCH AS BUILDING MATERIALS, PAPER, OR CARDBOARD A SAFE DISTANCE AWAY FROM THE HEATER. AS RECOMMENDED BY THE INSTRUCTIONS NEVER USE THE HEATER IN SPACES WHICH DO OR MAY CONTAIN VOLATILE OR AIRBORNE COMBUSTIBLES, OR PRODUCTS SUCH AS GASOLINE, SOLVENTS, PAINT THINNER, DUST PARTICLES, OR UNKNOWN CHEMICALS.

⚠ DANGER: CARBON MONOXIDE POISONING MAY LEAD TO DEATH. USING A PORTABLE HEATER IN AN ENCLOSED AREA CAN PRODUCE DEADLY CARBON MONOXIDE.

CARBON MONOXIDE POISONING:
Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the heater may not be working properly. Get fresh air at once! Have heater serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, persons with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

⚠ WARNING: NOT FOR HOME OR RECREATIONAL VEHICLE USE

THE STATE OF CALIFORNIA REQUIRES THE FOLLOWING WARNING:

⚠ WARNING: This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information visit www.P65Warnings.ca.gov

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CONTACT INFORMATION

RETAIN THIS MANUAL FOR FUTURE REFERENCE.
FOR QUESTIONS, PROBLEMS, MISSING PARTS BEFORE RETURNING TO RETAILER PLEASE CALL WITH MODEL NUMBER AND SERIAL NUMBER OF HEATER:
866-447-2194

MONDAY-FRIDAY 8-5 EASTERN TIME
OR E-MAIL USING THE HEATSTAR WEBSITE:
WWW.HEATSTARBYENERCO.COM

In order to provide the best service possible HEATSTAR is now giving you more ways to get in touch with us. Find informational videos at:

 YouTube: youtube.com/heatstarTV

HEATSTAR’S full line of product are now at:
WWW.HEATSTARBYENERCO.COM

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

SPECIFICATIONS

Heat Input (Max) (kBTU/hr)	500 (400 - Setting From Factory)
CFM Output/Static Pressure	4,032/1.08" WC
Fuel Types	• #1 or #2 Fuel Oil • K-1 Kerosene
Fuel Consumption (Max) (gal/h)	3.6 (2.9 - Setting From Factory)
Steinen Nozzle Capacity (Max) (gal/hr)	2.75 (2.25 - Setting From Factory)
Spray Angle (deg)	60
Spray Pattern	Solid
Pump Pressure	174 psi/1200 kPa/12 bar
Power Supply	1 Phase, 120V, 60Hz, 13.4A
Dimensions (L" x W" x H")	68 x 27 x 60
Dry Weight (lb)	494

If you need assistance or heater information such as a instructions manuals, labels, etc. contact the manufacturer.

CLEARANCES TO COMBUSTIBLES

Clearances between these HEATSTAR PRO indirect heaters and adjacent combustible material (which is part of the building or its contents) shall not be less than:

Top: 5ft (1.5m)

Sides: 5ft (1.5m)

Front: 8.5ft (2.5m)

Back: 5ft (1.5m)

THEORY OF OPERATION

The burner pump aspirates the fuel from the tank and sends it to the pressurised nozzle, where it is nebulised and mixed to the comburent air in the combustion chamber. A spark triggers combustion while the exhaust fumes are expelled from the chimney. A series of sensors constantly checks the correct operation of the heater, stopping the cycle in the case of a fault. The fan, located at the rear of the heater, cools the combustion chamber and the flue gas pass, transferring heat from the latter into the environment.

PRECAUTIONS

Caution: When using Thermostat, heater can start unexpectedly. Turn heater off when unattended.

WARNING:

- DO NOT USE GASOLINE, NAPHTHA OR VOLATILE FUELS.
- STOP HEATER BEFORE ADDING FUELS.
- ALWAYS FILL OUTDOORS AWAY FROM OPEN FLAME
- DO NOT OPERATE HEATER WHERE FLAMMABLE LIQUIDS OR VAPORS MAY BE PRESENT
- DO NOT START HEATER WHEN EXCESS FUEL HAS ACCUMULATED IN THE CHAMBER
- DO NOT PLACE COOKING UTENSILS ON TOP OF THE HEATER.
- PLUG ELECTRICAL CORD INTO A PROPERLY GROUNDED THREE-PRONG RECEPTACLE.

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

Please observe the following precautions when operating your HEATSTAR product.

1. Check the heater thoroughly for damage. DO NOT operate a damaged heater.
2. Only a qualified service person should service and repair heater.
3. Before using the heater, read and understand all instructions and follow them carefully. The manufacturer is not responsible for damages to goods or persons due to improper use.
4. Operate only on a stable, level surface.
5. Not suitable for operation with external tank.
6. Check that fire-fighting equipment is available and suitable to the potential of the heater.
7. The use of the unit shall be in accordance with the regulations and legislation of authorities having jurisdiction.
8. Make sure heater is always under surveillance and keep children and animals away from it.
9. Do not operate the unit in close proximity to combustible surfaces or materials.
10. Heaters used near tarpaulins, curtains or other similar covering materials must be kept at a safe distance. It is advised to use fire-proof covering material.
11. If the heater will be installed, an exhaust gas pipe connection must be installed.

Caution: When this heater is connected to a flue pipe, the flue pipe shall terminate in a vertical section at least two feet long and sufficient draft shall be created to assure safe and proper operation of the heater.

12. Heaters must be powered only with the correct voltage and frequency values as specified on the heater's identification plate or specifications table.
13. Keep all air inlet (rear) and air outlet (front) clear, free of debris or any blockage.
14. Do not start the heater when the chamber is hot.
15. Do not attempt to use heater to cook or warm food.
16. Use original spare parts when replacing the burner, strictly complying with indications

regarding capacity, type of nozzles and pump pressure. An increase in burner power could damage the heater.

17. Turn off and unplug heater and let cool before servicing or transporting.
18. Unplug heater when not in use.

UNPACKING

WARNING: The packaging material is not a toy. Keep the plastic bag out of the reach of children; danger of suffocation!

1. Remove all protective material which may have been applied to the heater for shipment.
2. The heater is placed on a platform. Lift it delicately using hooks and chains. Use the holes on the structure to lift the heater.
3. Check the heater for possible shipping damage. If any damage is found immediately contact the manufacturer at 866-447-2194.

UNIT INSTALLATION

WARNING: Closely follow all the operations described in this paragraph. Installation must only be carried out by qualified personnel.

ELECTRICAL CONNECTION

WARNING: When you connect the power supply plug, check the light lamp with "spark icon". See Figure 1. In case the lamp stays OFF, you must remove the plug, rotate it 180 and reconnect.

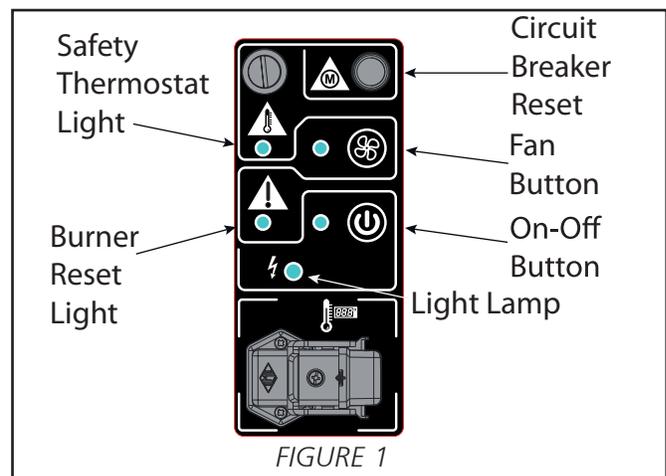


FIGURE 1

CAUTION: The electric power line of the heater must be equipped with an grounding system, residual current device, and cut-off switch.

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

The standard supply of the heater includes all the control and safety devices essential for its proper operation: electric panel, burner, manually reset safety thermostat are already connected.

During installation, prepare the power supply connection with cables having an appropriate cross-section in compliance with national standards in force and the technical data label applied to the heater.

NOTE: CHECK THE ELECTRIC CONNECTIONS BEFORE STARTING THE HEATER.

DUCT ADAPTERS

The heater comes with a dual 12" duct adapter attached. A single 16" duct adapter is available as an additional accessory as shown in Table 1 below.

ADDITIONAL ACCESSORIES

Table 1 details additional accessories approved for use with the heater. Instructions for assembly and operation of accessories are included in accessory's packaging.

Description	Part Number
Air Recycle Kit	F105128 24"x25' Duct & 24" Clamp
	F105127 Adapter Ring
Digital Thermostat	F105106
Analog Thermostat	F105108
Single Duct Adapter 16"	F105126

FLUE GAS EXHAUST CONNECTION

Thermal efficiency and correct operation of the heater are directly linked to the correct draught of the flue gas exhaust chimney. It is recommended not to make elbows, which may get clogged, or reductions in the cross-section of the flue gas exhaust chimney. If the heater is not connected to an external flue gas exhaust chimney, it must be provided with an essentially vertical steel flue gas exhaust and a draught regulator, respecting the specifications provided in this technical manual.

OPERATION

BEFORE SWITCHING HEATER ON

Before any attempt of starting the heater is made, familiarize yourself with warnings, specifications and precautions page 2 - 5.

- Check that the fuel is appropriate. Check that there is sufficient fuel in the fuel tank by reading the fuel gage. If not already closed, close the tank cap by rotating it clockwise. It is recommended to use winter diesel oil below ambient temperatures of 41 °F.
- Check that minimum safety clearances from combustibles, listed in "CLEARANCES TO COMBUSTIBLES" on page 3, is achieved in all directions.
- Make sure that flue gas is adequately ventilated from the chimney.
- Attach a duct to the outlet if directed venting of output clean hot air is desired. Ducting can be installed with the specific clamp or quick coupling. Refer to "ACCESSORY CHART" on page 18 for the correct Duct adapter.
- Check that your electrical supply and any extension cable can meet the requirements listed in the specifications table.

SWITCH-ON

1. Check the presence of fuel inside the gas tank.
2. Connect the heater to the electrical supply.
3. Adjust the air damper of the burner according to your needs. See Figure 2.

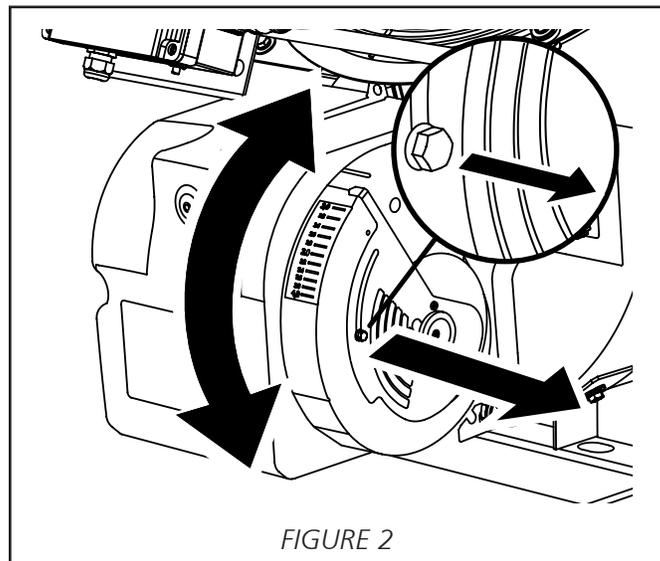


FIGURE 2

START-UP IN HEATING MODE

Press the on-off button (the burner starts first and after about one minute, ventilation starts). Refer to the Control Panel in Figure 1.

NOTE: THE HEATER HAS A SENSOR THAT CONSTANTLY MONITORS THE OUTLET AIR TEMPERATURE [FOR NORMAL OPERATION, THE OUTLET AIR TEMPERATURE MUST BE BELOW 105°C (221°F). IF THE OUTLET AIR TEMPERATURE EXCEEDS 105°C (221°F), THE HEATER TURNS OFF THE BURNER. WHEN THE TEMPERATURE RETURNS BELOW 105°C (221°F), THE BURNER AUTOMATICALLY REACTIVATES. UNDER 105°C (221°F) THE HEATER MODULATES VENTILATION TO ENSURE THE BEST OUTLET AIR TEMPERATURE, IN RELATION TO THE ENVIRONMENTAL CONDITIONS DETECTED.

START-UP IN VENTILATION MODE

Press the fan button. See Figure 1.

SWITCHING OFF THE HEATER:

IMPORTANT: Never unplug the heater to switch it off or before it is completely off.

The heater turns off by pressing the "OFF" button. The burner box will turn off, and the fan will continue running to cool off the burner box.

Do not unplug the heater until this cooling cycle has totally ended. When the outlet air temperature drops below 50°C (122°F), the fan turns off and the luminous signal of the button turns on to indicate the presence of voltage (stand-by condition).

RESETTING THE HEATER

The appliance stops when an anomaly occurs.

RESETTING THE BURNER: If the burner is blocked, the indicator light on the control panel turns on. Refer to Figure 1. Identify and remove the cause of the block. To reactivate the burner, press the reset button on it for at least 10 seconds. See Figure 3.

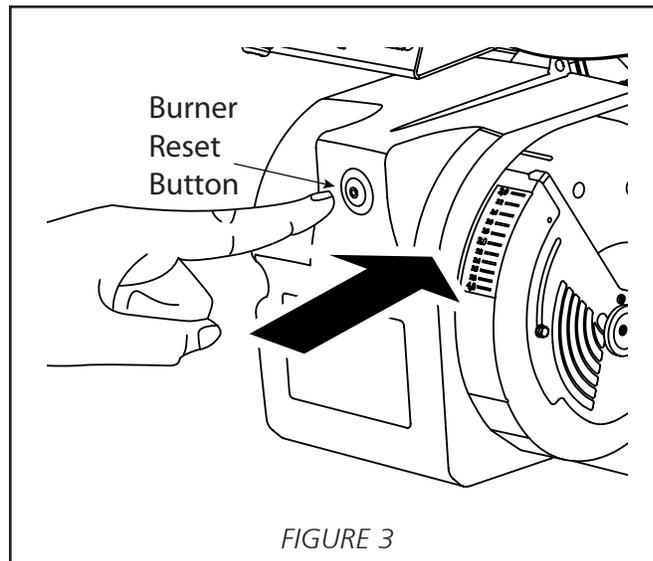


FIGURE 3

RESETTING THE SAFETY THERMOSTAT: Safety thermostat operation is identified by an indicator light. Refer to Figure 1. Identify and remove the cause that triggered the safety thermostat. Press the reset button located at the back of the heater all the way.

RESETTING THE CIRCUIT BREAKER: Identify and remove the cause of activation of the circuit breaker. Press the reset button to release it. See Figure 1.

THE EXTERNAL THERMOSTAT SOCKET

The heater can only work automatically when a control device, such as a thermostat or a timer, is connected to the heater. **F105106**, a 33ft digital Thermostat, and **F105108**, a 33ft analog thermostat are both approved for use by the manufacturer with the heater. Connection to the heater is made by removing the thermostat socket cap and connecting the room thermostat to the socket. If no room thermostat will be connected the cap must be inserted into the socket.

TRANSPORTATION

Before any handling, the heater must be switched off following the proper procedure, and disconnected from the electrical and gas supply. Wait for the heater to cool.

Before handling, make sure that the support used to move the heater is capable of bearing its weight (the weight is displayed on the technical specification of the appliance). Do not attempt to lift or move the heater without the aid of suitable equipment (this operation must be carried out with the utmost attention to avoid personal harm or damage to the heater).

STORAGE

IN ORDER TO KEEP THE HEATER IN THE BEST POSSIBLE CONDITIONS, WE RECOMMEND FOLLOWING THE PROCEDURE BELOW:

- Place the heater in a dry place away from potential external damage.

MAINTENANCE

⚠ WARNING:

Never service heater while it is plugged in, operating or hot. Severe burns or electrical shock can occur.

Periodic maintenance is recommended to keep the heater in good condition, avoiding possible failures or faults as far as possible.

CLEANING THE FAN

Use compressed air for routine cleaning of the fan, blowing the air through the rear grille.

CLEANING THE BURNER

Read and understand the specific manual to clean the burner.

CLEANING THE COMBUSTION CHAMBER

It is recommended to clean the combustion chamber and flue gas duct at least once a year or when required to avoid problems regarding chimney draught and combustion. The combustion chamber is cleaned through the five inspection openings on the front of the heater.

Closely follow this sequence to perform cleaning (keep the screws and washers with care):

1. Remove the air ducting cone by removing the screws which secure it to the heater. See Figure 4.

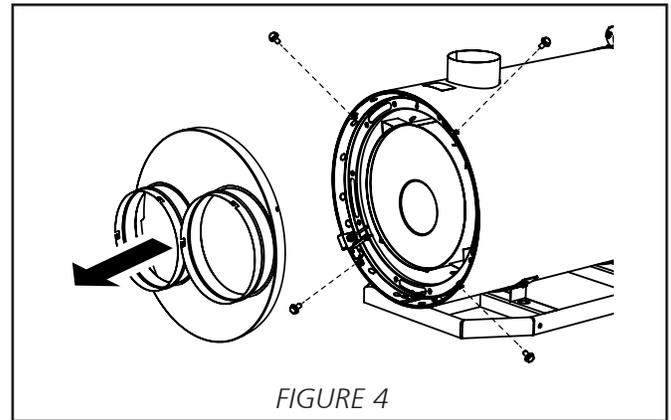


FIGURE 4

2. Remove the plates, which close the inspection openings, by removing the screws. See Figure 5.

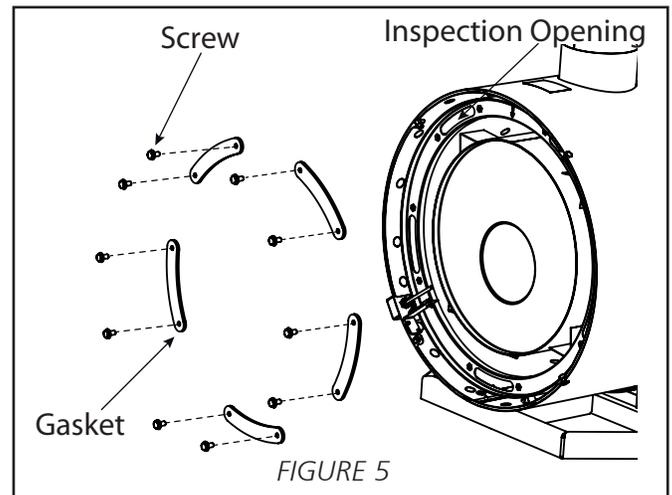


FIGURE 5

3. Remove the gaskets installed and do not reuse them. Only use new and original gaskets. See Figure 5.
4. Spray high pressure water inside the chamber through the inspection openings. Refer to Figure 5. When washing, move the nozzle in various positions so the water reaches all the slots of the combustion chamber.
5. Lift the combustion chamber from the back to empty as much water as possible from inside the chamber (this operation must be carried out with the utmost attention to avoid personal harm or damaging the heater).
6. Reassemble the heater performing the sequence of operations in the opposite order, replacing the gaskets with original spare parts.

NOTE: BEFORE SWITCHING THE HEATER BACK ON, MAKE SURE AS MUCH WATER AS POSSIBLE HAS BEEN ELIMINATED FROM INSIDE THE COMBUSTION CHAMBER TO AVOID SERIOUS DAMAGE.

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

⚠WARNING: BEFORE STARTING ANY MAINTENANCE OR REPAIRS, DISCONNECT THE POWER CABLE AND MAKE SURE THAT THE HEATER IS COLD.

TABLE 4: PREVENTATIVE MAINTENANCE SCHEDULE

COMPONENT	MAINTENANCE FREQUENCY	MAINTENANCE PROCEDURE
Safety Thermostat	Yearly check and/or when required	Contact a technical service center. Service of these components should only be performed by a qualified serviceman. Qualified service professionals may contact the manufacturer for a service manual.
Nozzle	Replace yearly and/or when required	
Electrical System	Yearly check and/or when required	
Fan	Yearly check and/or when required	
Motor	Yearly check and/or when required	
Fuel Pump	Yearly check and/or when required	
Combustion chamber	Yearly check and/or when required	

TROUBLESHOOTING

OBSERVED SYMPTOM	POSSIBLE CAUSE	REMEDY
The heater does not start or does not remain on	No power supply	<ul style="list-style-type: none"> • Check that there is electric power • Check that the heater is connected to the correct power supply • Contact an authorized technical support center or HEATSTAR customer service
	Interrupted power cable	<ul style="list-style-type: none"> • Contact an authorized technical support center or HEATSTAR customer service
	Electronics need to be reset or are faulty	<ul style="list-style-type: none"> • Reset the heater • Contact an authorized technical support center or HEATSTAR customer service
	Incorrect setting of the room thermostat (if applicable)	<ul style="list-style-type: none"> • Set the room thermostat to a temperature higher than the temperature of the working environment
	No gas supply	<ul style="list-style-type: none"> • Refuel and, if necessary, reset the heater
	Foreign substances in the fuel system	<ul style="list-style-type: none"> • Contact an authorized technical support center or HEATSTAR customer service
The heater generates smoke during operation	Foreign substances in the fuel system	<ul style="list-style-type: none"> • Contact an authorized technical support center or HEATSTAR customer service
	Obstructed inlet air vent	<ul style="list-style-type: none"> • Remove all possible obstructions from the rear grille
The heater does not turn off	Faulty electronic system	<ul style="list-style-type: none"> • Contact an authorized technical support center or HEATSTAR customer service

PARTS ORDERING INFORMATION:

PURCHASING: Accessories may be purchased at any HEAT STAR local dealer or direct from the factory

FOR INFORMATION REGARDING SERVICE

Please call Toll-Free 866-447-2194 • www.heatstarbyenerco.com

Our office hours are 8:00 AM – 5:00 PM, EST, Monday

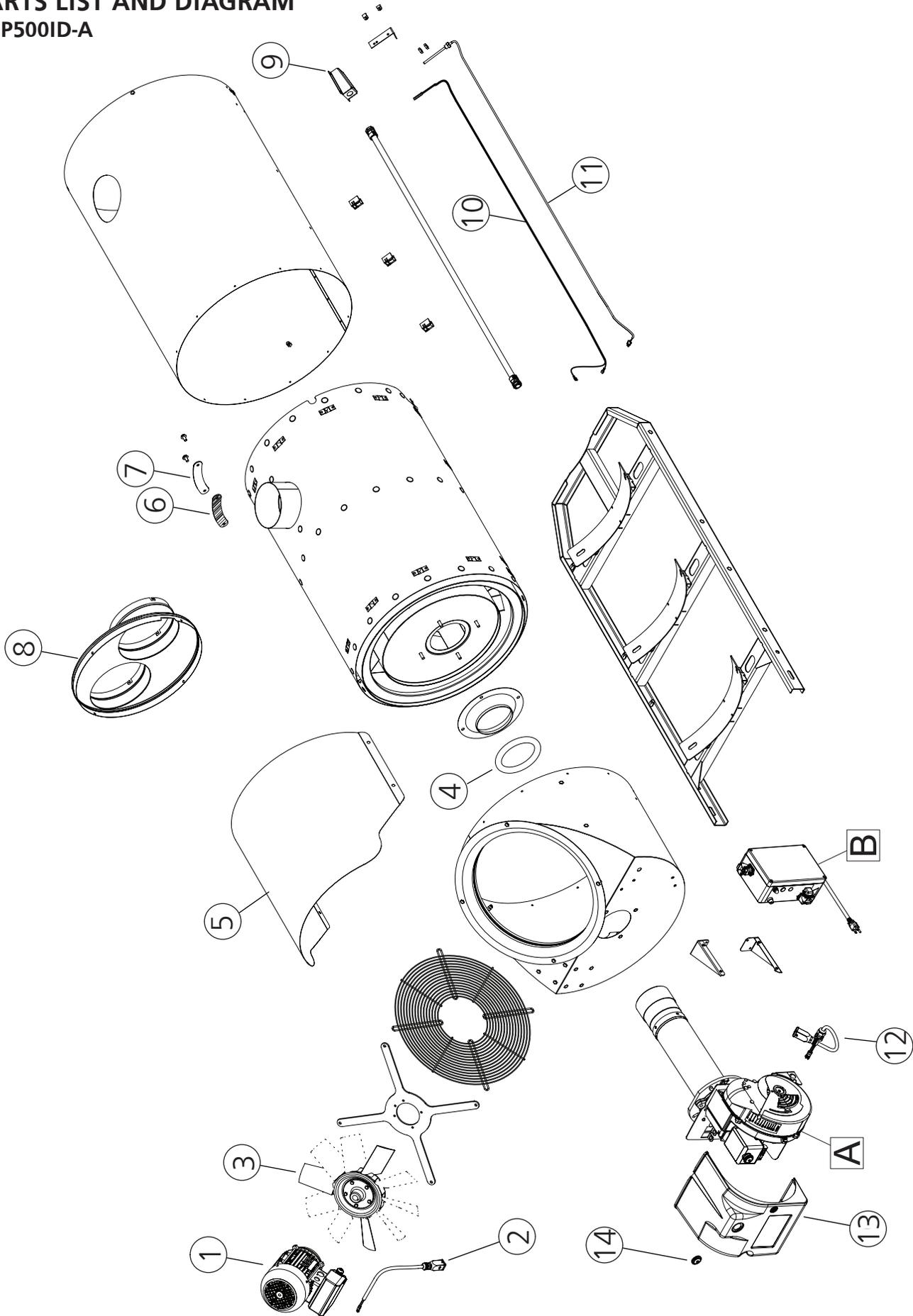
through Friday. Please include the model number, date of purchase, and description of problem in all communication.

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

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PARTS LIST AND DIAGRAM
HSP500ID-A



PARTS LIST AND DIAGRAM
HSP500ID-A

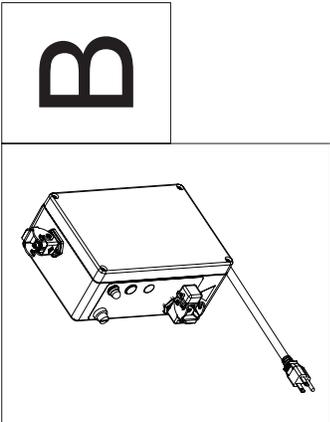
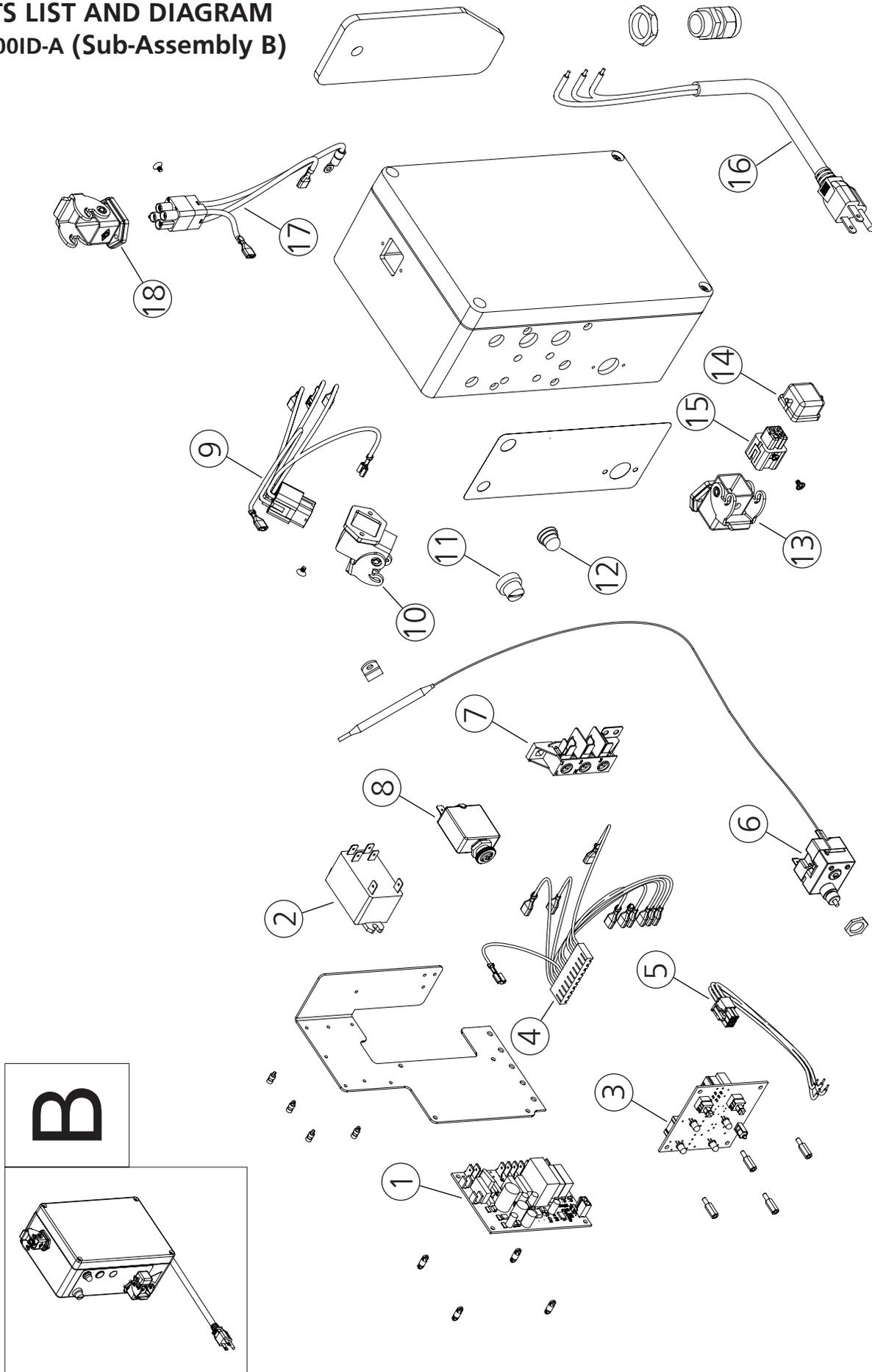
#	P/N	PART DESCRIPTION
1	51328	MOTOR
2	51329	MOTOR POWER CORD
3	51278	FAN
4	51108	FIBER ROPE GASKET
5	51336	COVER
6	51337	INSPECTION FIBER GASKET
7	51338	INSPECTION FLANGE
8	51340	DUCT ADAPTER
9	51343	THERMOSTAT BRACKET
10	51096	THERMOSTAT
11	51350	NTC SENSOR WIRE
12	51459	BURNER POWER CORD
13	51115	BURNER COVER
14	51117	BURNER RESET CAP

NOTE: Not all parts available. For questions contact manufacturer.

⚠WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

NEVER LEAVE THE HEATER UNATTENDED WHILE BURNING!

**PARTS LIST AND DIAGRAM
HSP500ID-A (Sub-Assembly B)**



**PARTS LIST AND DIAGRAM
HSP500ID-A (Sub-Assembly B)**

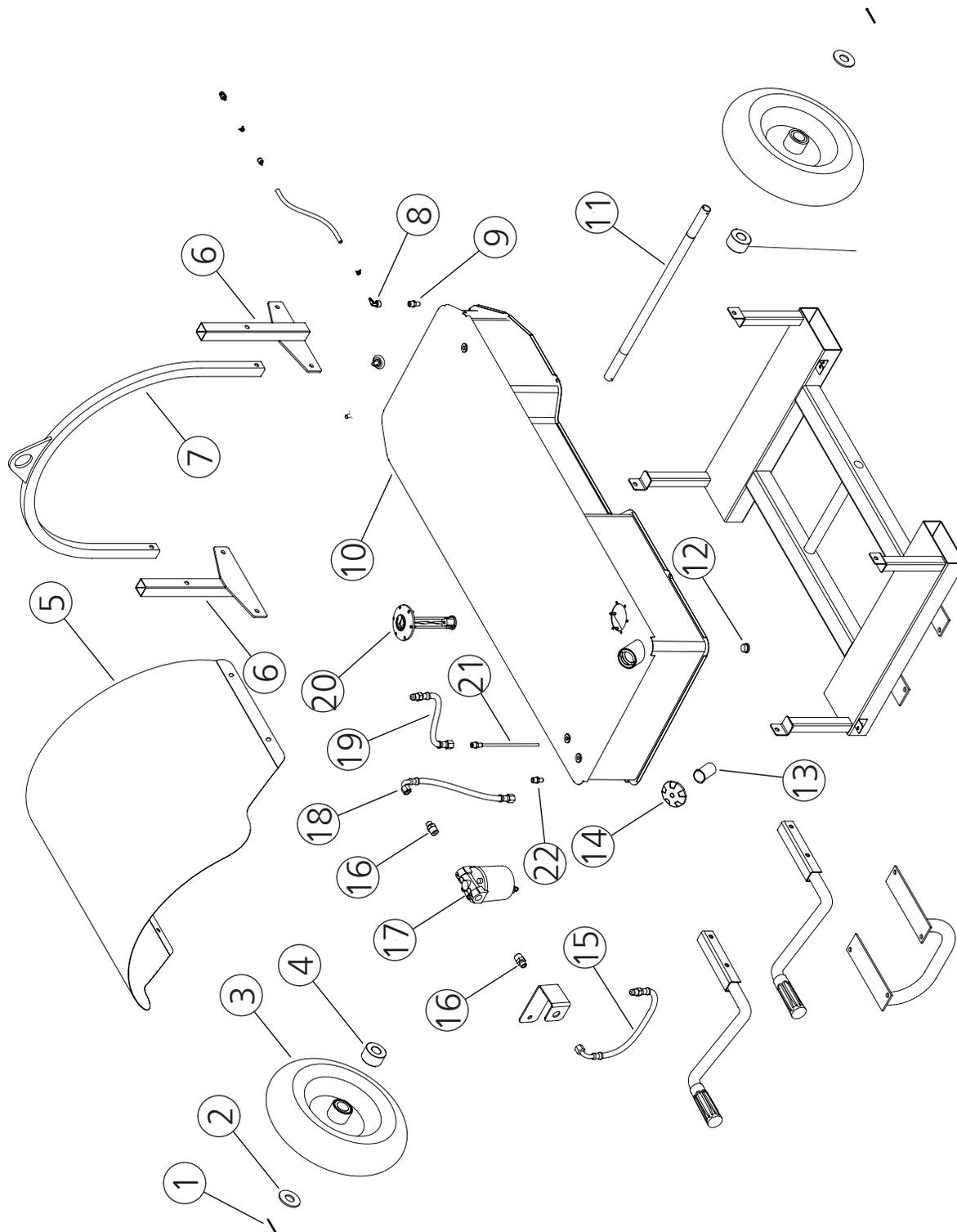
#	P/N	PART DESCRIPTION
1	51425	PC-BOARD,HSP500ID-A
2	51083	RELAY
3	51368	LED PC-BOARD
4	51369	LED PC-BOARD WIRES
5	51370	THERMOSTAT WIRES
6	51114	SAFETY THERMOSTAT
7	51138	TERMINAL BLOCK
8	51374	AUTOMATIC SWITCH
9	51376	BURNER WIRES
10	51377	90° SOCKET
11	51119	THERMOSTAT RESET CAP
12	51379	LIGHT CAP
13	51190	THERMOSTAT SOCKET
14	51193	THERMOSTAT CAP
15	51191	PLUG,ROOM,TSTAT
16	51385	POWER CORD
17	51389	WIRES FOR MOTOR
18	51390	SOCKET

NOTE: Not all parts available. For questions contact manufacturer.

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PARTS LIST AND DIAGRAM
HSP500ID-A



NOTE: Not all parts available. For questions contact manufacturer.

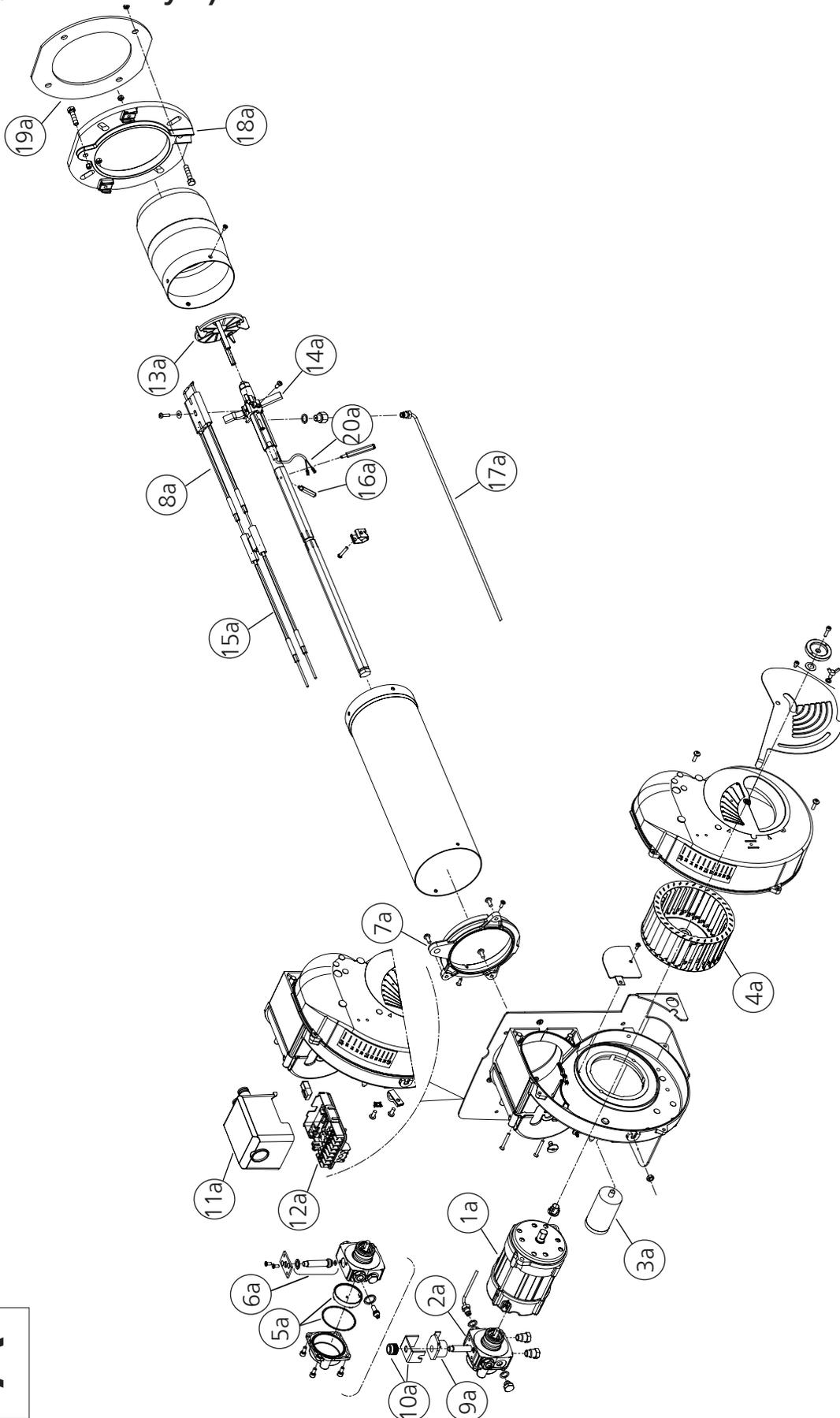
⚠WARNING: Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this heater may result in property damage or personal injury.

PARTS LIST AND DIAGRAM
HSP500ID-A

#	P/N	PART DESCRIPTION
1	51391	COTTER PIN
2	51392	WHEEL WASHER
3	51128	PNEUMATIC WHEEL
4	51091	WHEEL BUSHING
5	51336	COVER
6	51088	LIFTING ARC FOOT
7	51089	LIFTING ARC
8	51135	ADAPTER BREATHE VALVE
9	51009	STRAIGHT CONNECTION
10	51276	TANK
11	51090	WHEEL AXEL
12	51045	DRAIN PLUG
13	51124	TANK FILTER
14	51123	FUEL CAP
15	51005	FUEL LINE - PUMP-FILTER
16	51137	NIPPLE,CONNECTOR
17	51136	FUEL FILTER
18	51258	RETURN FUEL LINE
19	51417	INTAKE FUEL LINE
20	51131	FUEL GAUGE
21	51130	COPPER INTAKE TUBE
22	51009	STRAIGHT CONNECTION

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**PARTS LIST AND DIAGRAM
HSP500ID-A (Sub-Assembly A)**



A

**PARTS LIST AND DIAGRAM
HSP500ID-A (Sub-Assembly A)**

#	P/N	PART DESCRIPTION
1a	51251	MOTOR
2a	51252	PUMP
3a	51255	CAPACITOR
4a	51247	FAN
5a	51248	FILTER O-RING
6a	51249	NEEDLE VALVE
7a	51435	COLLAR
8a	51125	ELECTRODE ASSEMBLY
9a	51246	COIL
10a	51439	BRACKET WITH KNOB
11a	51253	CONTROL BOX
12a	51441	TERMINAL BOARD
13a	51126	END RING AND DIFFUSER DISC
14a	51127	CROSS
15a	51448	INSULATOR
16a	51452	SPACER
17a	51453	TUBE
18a	51456	FLANGE
19a	51250	GASKET
20a	51256	NOZZLE HOLDER

NOTE: Not all parts available. For questions contact manufacturer.

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PARTS LIST: ACCESSORY CHART

PART #	DESCRIPTION
F105126	16" Single Duct adapter
F150040	Flex Heat Duct 12" x 25'
F150050	Flex Heat Duct 16" x 25'
F105127	Adapter Ring for Air Recycling System
F105128	24" x 25' Duct & 24" Clamp for Air Recycling System
F105106	Digital Thermostat 33 ft
F105108	Remote Analog Thermostat 33 ft

PARTS ORDERING INFORMATION:

PURCHASING: Accessories may be purchased at any HEAT STAR local dealer or direct from the factory
FOR INFORMATION REGARDING SERVICE

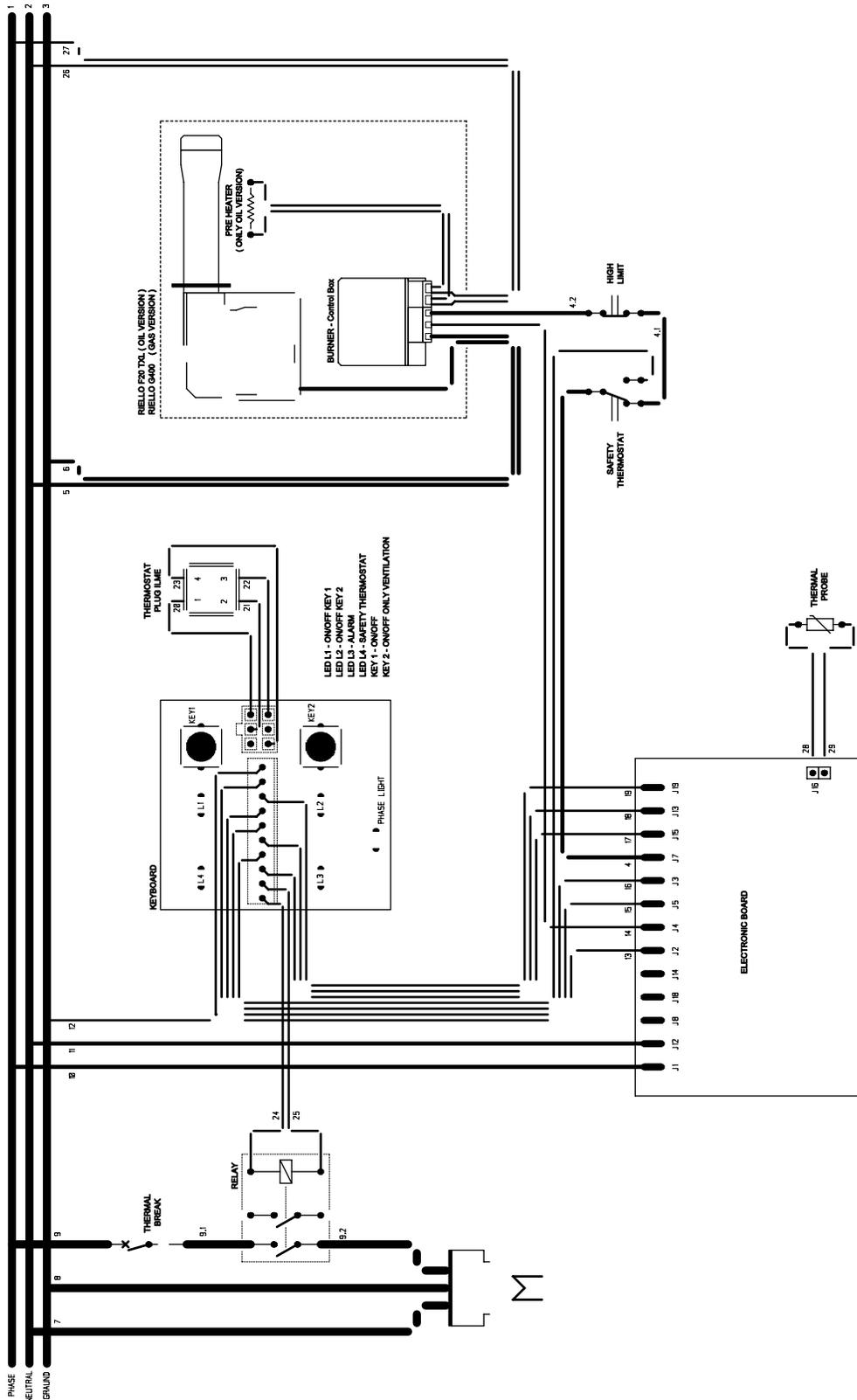
Please call Toll-Free 866-447-2194 • www.heatstarbyenerco.com

Our office hours are 8:00 AM – 5:00 PM, EST, Monday

through Friday. Please include the model number, date of purchase, and description of problem in all communication.

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WIRING DIAGRAM



CABLE #	TYPE CABLE
1	PHASE
2	NEUTRAL
3	GROUND
4	BURNER PHASE
5	BURNER NEUTRAL
6	BURNER GROUND
7	FAN NEUTRAL
8	FAN GROUND
9	FAN PHASE
10	ELECTRONIC BOARD PHASE
11	ELECTRONIC BOARD NEUTRAL
12	KEYBOARD GROUND
13	KEYBOARD NEUTRAL
14	BURNER SIGNAL LOCK
15	COMMAND ON/OFF
16	KEYBOARD PHASE
17	ALARM LIGHT
18	COMMAND RELAY FAN
19	24VDC
20	THERMOSTAT NEUTRAL
21	THERMOSTAT PHASE
22	THERMOSTAT CONTACT
23	THERMOSTAT GROUND
24	RELAY FAN
25	RELAY FAN
26	PRE HEATER NEUTRAL
27	PRE HEATER PHASE
28	NTC SENSOR
29	NTC SENSOR

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READ INSTRUCTIONS CAREFULLY: YOUR SAFETY IS IMPORTANT TO YOU AND TO OTHERS. Read and follow all instructions. Place instructions in a safe place for future reference. Do not allow anyone who has not read these instructions to assemble, light, adjust or operate the heater.



WARNING:

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH. REPLACEMENT PARTS ARE ONLY AVAILABLE DIRECT FROM THE FACTORY AND MUST BE INSTALLED BY A QUALIFIED SERVICE AGENCY.

REPLACEMENT PARTS ORDERING INFORMATION:

PURCHASING: Accessories may be purchased at any HEATSTAR by Enerco local dealer or direct from the factory

FOR INFORMATION REGARDING SERVICE

Please call Toll-Free 866-447-2194

WWW.HEATSTARBYENERCO.COM

Our office hours are 8:00 AM – 5:00 PM, EST, Monday through Friday.

Please include the model number, date of purchase, and description of problem in all communication.

LIMITED WARRANTY

The company warrants this product to be free from imperfections in material or workmanship, under normal and proper use in accordance with instructions of The Company, for a period of one year from the date of delivery to the buyer. The Company, at its option, will repair or replace products returned by the buyer to the factory, transportation prepaid within said one year period and found by the Company to have imperfections in material or workmanship.

If a part is damaged or missing, call our Technical Support Department at 866-447-2194. Address any Warranty Claims to the Service Department, Enerco Group, Inc., 4560 W. 160TH ST., Cleveland, Ohio 44135. Include your name, address, telephone number, serial number off heater and include details concerning the claim. Also, supply us with the purchase date and the name and address of the dealer from whom you purchased our product.

The foregoing is the full extent of the responsibility of the Company. There are no other warranties, express or implied. Specifically there is no warranty of fitness for a particular purpose and there is no warranty of merchantability. In no event shall the Company be liable for delay caused by imperfections, for consequential damages, or for any charges of the expense of any nature incurred without its written consent. The cost of repair or replacement shall be the exclusive remedy for any breach of warranty. There is no warranty against infringement of the like and no implied warranty arising from course of dealing or usage of trade. This warranty will not apply to any product which has been repaired or altered outside of the factory in any respect which in our judgment affects its condition or operation.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Enerco Group, Inc. reserves the right to make changes at any time, without notice or obligation, in colors, specifications, accessories, materials and models.

