



OWNER'S MANUAL

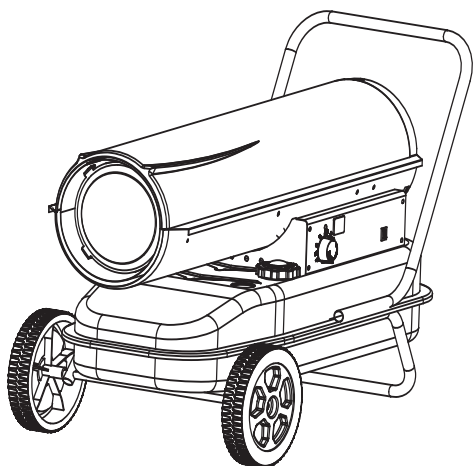
DIESEL SHOP HEATER MODEL # HIL-SHOP D125

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 qualified service agency.



UL 733
CAN/CSA B140.0
CSA Standard B140.8-1967

ANS Z83.26-2014 • CSA 2.37-2014 Gas-Fired Outdoor Infrared Patio Heaters

ATTACH YOUR RECEIPT HERE

Serial Number _____ Purchase Date _____



Questions, problems, missing parts? Before returning to your retailer, call our customer service department at **1-888-775-1330**, 7 a.m. - 4 p.m., PST, Monday - Friday. Or Email our warranty department at warranty@azpatioheaters.com.

⚠ WARNING: YOUR SAFETY IS IMPORTANT TO YOU AND TO OTHERS, SO PLEASE READ THESE INSTRUCTIONS BEFORE YOU OPERATE THIS HEATER.

GENERAL HAZARD WARNING:

- ⚠** FAILURE TO COMPLY WITH THE PRECAUTIONS AND INSTRUCTIONS PROVIDED WITH THIS HEATER, CAN RESULT IN DEATH, SERIOUS BODILY INJURY AND PROPERTY LOSS OR DAMAGE FROM HAZARDS OF FIRE, EXPLOSION, BURN, ASPHYXIATION, CARBON MONOXIDE POISONING, AND/OR ELECTRICAL SHOCK.
- ⚠** ONLY PERSONS WHO CAN UNDERSTAND AND FOLLOW THE INSTRUCTIONS SHOULD USE OR SERVICE THIS HEATER.
- ⚠** IF YOU NEED ASSISTANCE OR HEATER INFORMATION SUCH AS AN INSTRUCTIONS MANUAL, LABELS, ETC. CONTACT THE MANUFACTURER.

⚠ WARNING:
NOT FOR HOME OR RECREATIONAL VEHICLE USE.

⚠ 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.

- ⚠ WARNING:**
- DO NOT USE PETROL, NAPHTHA OR VOLATILE FUELS.
 - STOP HEATER BEFORE ADDING FUELS.
 - ALWAYS FILL OUTDOORS AWAY FROM OPEN FLAME
 - DO NOT USE EXTERNAL FUEL SOURCE.
 - DO NOT OPERATE HEATER WHERE FLAMMABLE LIQUIDS OR VAPORS MAY BE PRESENT.
 - DO NOT START HEATER WHEN CHAMBER IS HOT
 - 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.

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SPECIFICATIONS

Model	HIL-SHOP-D125
Burn Rate:	125, 000u/hr (36.6 kW)
Fuel Rate:	3.6 L/hr
Electrical Input:	120V ~ 60Hz, 3.5a
Min. Operating Voltage:	110V
Pressure Setting:	6.8psig (0.0469Mpa)
Max. Outlet Temp.:	1300°F (704°C)
Fuel Tank Capacity:	10 gallons (38L)
Spark Generator:	Igniter 15 kV
Primary Safety Control:	Solid State Control
Certification	

OPERATING PRECAUTIONS

This is a multi-fuel, direct-fired, forced air heater. It's intended use is primarily temporary heating of buildings under construction, warehouses & garages.

1-K kerosene is the recommended fuel due to the refinement to eliminate contaminants. Other fuels such as #1 or #2 fuel oil, JP8, and #1 and #2 diesel oil can be used but, do not burn as clean as 1-K kerosene. Additional ventilation should be considered when using fuels other than 1-K kerosene.

Direct-Fired means that all of the combustion products enter the heated space. Even though this heater operates very close to 100 percent combustion efficiency, it still produces small amounts of carbon monoxide. Carbon monoxide (called CO) is toxic. CO can build up in a heated space and failure to provide adequate ventilation could result in death. The symptoms of inadequate ventilation are:

- headache
- dizziness
- burning eyes and nose
- nausea
- dry mouth or sore throat

Be sure to follow advice about ventilation in the Safety Precautions section.

Forced Air means that a blower or fan pushes the air through the heater. Proper combustion depends upon this air flow; therefore, the heater must not be revised, modified or operated with parts removed or missing. Likewise, safety systems must not be circumvented or modified in order to operate the heater.

SAFETY PRECAUTIONS

1. Check the heater thoroughly for damage. DO NOT operate a damaged heater.
2. DO NOT modify the heater or operate a heater which has been modified from its original condition.
3. Use Kerosene, JP8 Jet Fuel, #1/#2 Diesel, or #1/#2 Fuel oil. **Never use petrol, naphtha, paint thinner, alcohol or any other non-approved fuels.**
4. For indoor use only. Not for use where exposed to weather.

5. Always keep combustibles, like paper and wood at least 8 ft. (2.4 m) from the heater outlet and 3 ft. (1.0 m) from the top, sides and inlet. Locate 10 ft. (3.0 m) from canvas or plastic coverings and secure them to prevent flapping movement.
6. Caution: Due to the high surface and exhaust temperatures, adults and children must observe clearances to avoid burns or clothing ignition. Do Not Touch. Keep children, clothing, and combustibles away.
7. Install the heater such that it is not directly exposed to water spray, rain and / or water.
8. Never use in areas normally for habitation and/or where children may be present.
9. Operate only on a stable, level surface. (HIL-SHOP-D35/50 & HIL-SHOP-D75) – See wood floor warning).
10. Do not use with duct work. Do not restrict inlet or exit.
11. Use only with electrical power specified. The electrical connection and grounding must comply with relative standards in Europe and all local ordinances and codes.
12. Use only a properly grounded 3-prong receptacle or extension cord.
13. Do not move, handle, or service while hot or in operation.
14. Use only in accordance with local, state (provincial) or national requirements, ordinances and codes.

ASSEMBLY INSTRUCTIONS

UNPACKING

1. Remove heater from carton.
2. Remove all protective material which may have been applied to the heater for shipment.
3. Check the heater for possible shipping damage.

ASSEMBLY (For 125,000, 175,000 and 210,000 BTU/hr models only)

Wheels and handles are found in the shipping carton along with mounting hardware. The wheels, axle and mounting hardware are in a package with standard pliers.

1. Assemble the wheels onto the wheel support frame as follows:
 - a. Install one of the cotter pins into the hole on one end of axle.
 - b. Slide the large washer, then wheel onto the axle next to the cotter pin.

- c. Slide a small washer, spacer, small washer onto the axle next to the wheel.
 - d. Slide the partially assembled axle through the wheel support frame.
 - e. Slide the small washer, spacer, and small washer onto the axle next to the wheel support.
 - f. Slide the wheel then large washer onto the axle .
2. Position the heater on the wheel support frame assembly with the exit opposite the wheels.
 3. Use eight screws and nuts to attach the handles to the top of the tank flange. The screws will go through the handles, tank flange and wheel support frame. Install the nuts ; finger tighten only until all nuts are installed.
 4. Tighten all the nuts.
 5. Attach cord wraps to handles using No. (4) & No. (5) screws and nuts.

PREPARING FOR OPERATION

1. Check the heater for possible shipping damage.
2. Follow all of the "Precautions".
3. Fill the fuel tank with clean kerosene, JP8 Jet Fuel, #1/#2 Diesel or #1/#2 Fuel Oil. In extremely cold weather, When filling the heater, use at least . 2 gallons (8 liters) of fuel. Be sure heater is level and do not overfill. Use a funnel or can with a long fill spout.

IMPORTANT: Before filling fuel tank the first time or after extended storage periods, drain the fuel tank of any moisture or condensation.

4. Locate heater at a safe distance from combustible materials. When used, the heater should rest on suitable insulating material at least 1

HEATER START UP

HIL-SHOP-D125 Turn thermostat to lowest setting, make sure "On/Off" switch is "Off".

Plug the heater into a grounded 120V, 50 Hz outlet.

Turn thermostat to highest setting. Start heater by pushing toggle switch to "On" position (light signifies switch is in "ON" position). Adjust thermostat to desired setting. Heater will cycle on/off as heat is required.

For all models:

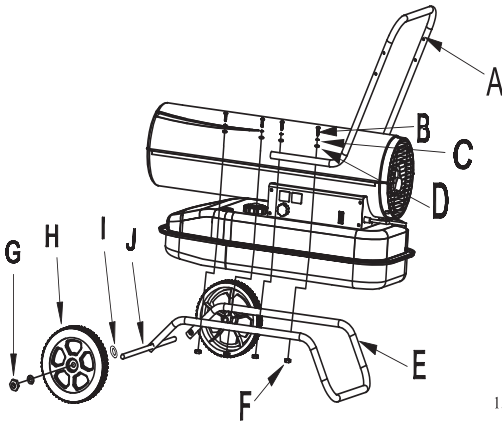
- In cold weather (below 10° F), starting may be improved by holding a finger over the vent hole of the pump adjustment screw cap until the heater starts.

HEATER SHUT DOWN

1. HIL-SHOP-D125: Push "On/Off" switch to "Off" position. For extended shutdown, unplug heater from power source.

RESTART AFTER DIAGNOSTIC SAFETY SHUTDOWN

HIL-SHOP-D125 See page 6



A Handle	1PC	E Feet pipe	1PC	I Flat gasket	ø12 2PCS
B Screw	8PCS	F Nut M5	8PCS	J Wheel axis	1PC
C Spring washer	8PCS	G Nut M12	8PCS		
D Flat gasket	ø5 8PCS	H Wheel	2PCS		

DIAGNOSTIC SAFETY SHUTDOWN AND TROUBLE SHOOTING

Model:HIL-SHOP-D125

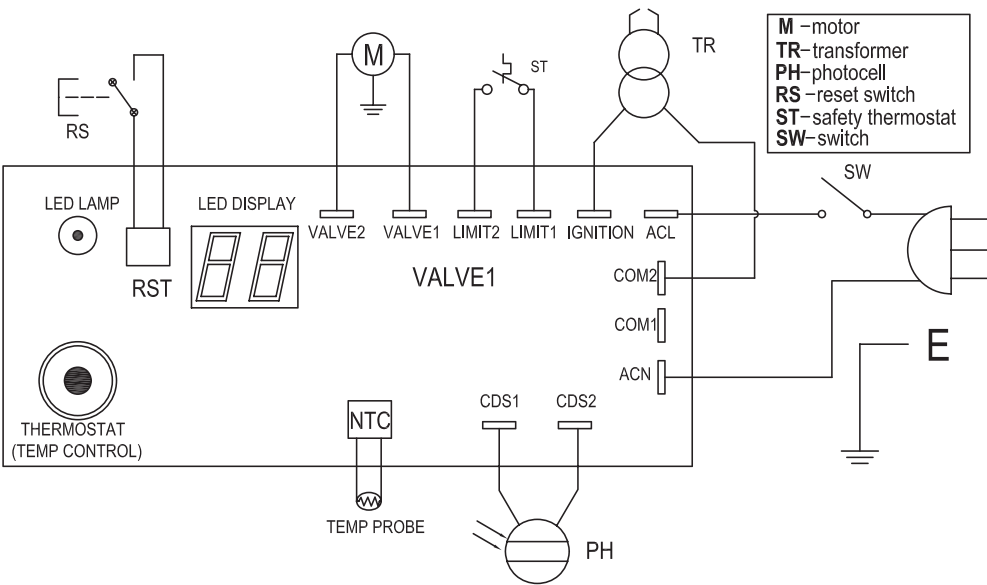
heaters are equipped with a diagnostic control board and flashing LED error indicator. This flashing LED signals indicate unit operation status. See the following diagnostic guide for unit status and corrective action if necessary.

125K LED		Possible reason	Solution
1Flashes	E1	1. Pressure not correct 2. Inlet, outlet or the cotton of the air filter is dirty 3. Diesel filter is dirty 4. Fuel oil nozzle is dirty 5. Photocell lens is dirty 6. Incorrect installation of the photocell 7. Damage of the photocell The abnormal connection between main PCB and the photocell .	1. Adjust the pump pressure 2. Clean or exchange a new air filter 3. Clean or exchange a new fuel filter 4. Clean or exchange a nozzle 5. Clean or exchange a new photocell 6. Adjust the position of the photocell 7. Exchange the photocell Check the all electrical connection
	E2	Damage or failure of the temperature probe	Exchange the temperature probe
3Flashes	E3	1. Fuel exhausted 2. Pressure not correct 3. Spark plug or the air lock is corroded 4. Fuel filter is dirty 5. Fuel nozzle is dirty 6. Fuel and fuel tank is wet 7. The connection between PCB circuit and transformer is abnormal 8. The ignition pin and ignition transformer is not connected 9. Defective igniter	1. Fill the fuel tank 2. Adjust the pump pressure 3. Clean or exchange the sparkplug 4. Clean and exchange fuel filter 5. Clean or exchange the nozzle 6. Rinse the fuel tank with fresh kerosene 7. Inspect all the electrical connection 8. Connect the ignition pin and the spark plug 9. Exchange the igniter
4Flashes	E4	Software internal fault	1. Check wiring in heater . 2. Replace oil flame control assembly.
5Flashes	E5	Motor fault	1.Motor card does not turn. 2.The motor coil burned out.
6Flashes	E6	Photosensitive resistance damage	1.Clean Cad Cell photo cell 2.If the heater still does not operate, replace Cad Cell.

WIRING DIAGRM

The parts lists and wiring diagram show the heater as it was constructed. Do not use a heater which is different from that shown. Heater performance is effected by air pressure setting. If there is any uncertainty about the air pressure setting, have it checked. A heater which is not working right must be repaired, but only by a trained, experienced service person.

HIL-SHOP-D125



ONE-YEAR LIMITED WARRANTY

CUSTOMERS IN USA

Do not return this product to the store where you purchased it. Please call **1-888-775-1330** for assistance.

CUSTOMERS IN CANADA

Only return this product to the store if it was purchased within 90 days. If you have problems after 90 days of purchase, please CALL **1-888-775-1330**. Or EMAIL our warranty department at warranty@azpatioheaters.com DATED PROOF OF PURCHASE REQUIRED FOR WARRANTY SERVICE.

This product is inspected, tested and carefully packaged to minimize the chance of damage during shipment. If a part (excluding light bulbs and fuses*) within one year from the date of purchase proves to be defective in material or fabrication under normal use, the part will be repaired or replaced. The Company's obligation under the warranty is to replace or repair defective parts at our discretion. Any expenses or damage resulting from the installation, removal or transportation of the product will be the responsibility of the owner and are not covered by this warranty. The owner assumes all other risks arising out from the use or misuse of the product. The warranty will be void if the product damage or failure is deemed by the Company to be caused by accident, alteration, misuse, abuse, incorrect installation or removal, or connection to an incorrect power source by the owner. The Company neither assumes, nor authorizes any person or entity to assume for it any obligation or liability associated with its products.

* Light bulbs and fuses are not covered under this warranty.

If you have any questions regarding the warranty or service, please call our toll free number: **1-888-775-1330**.

Distributed by:

AZ Patio Heaters, LLC

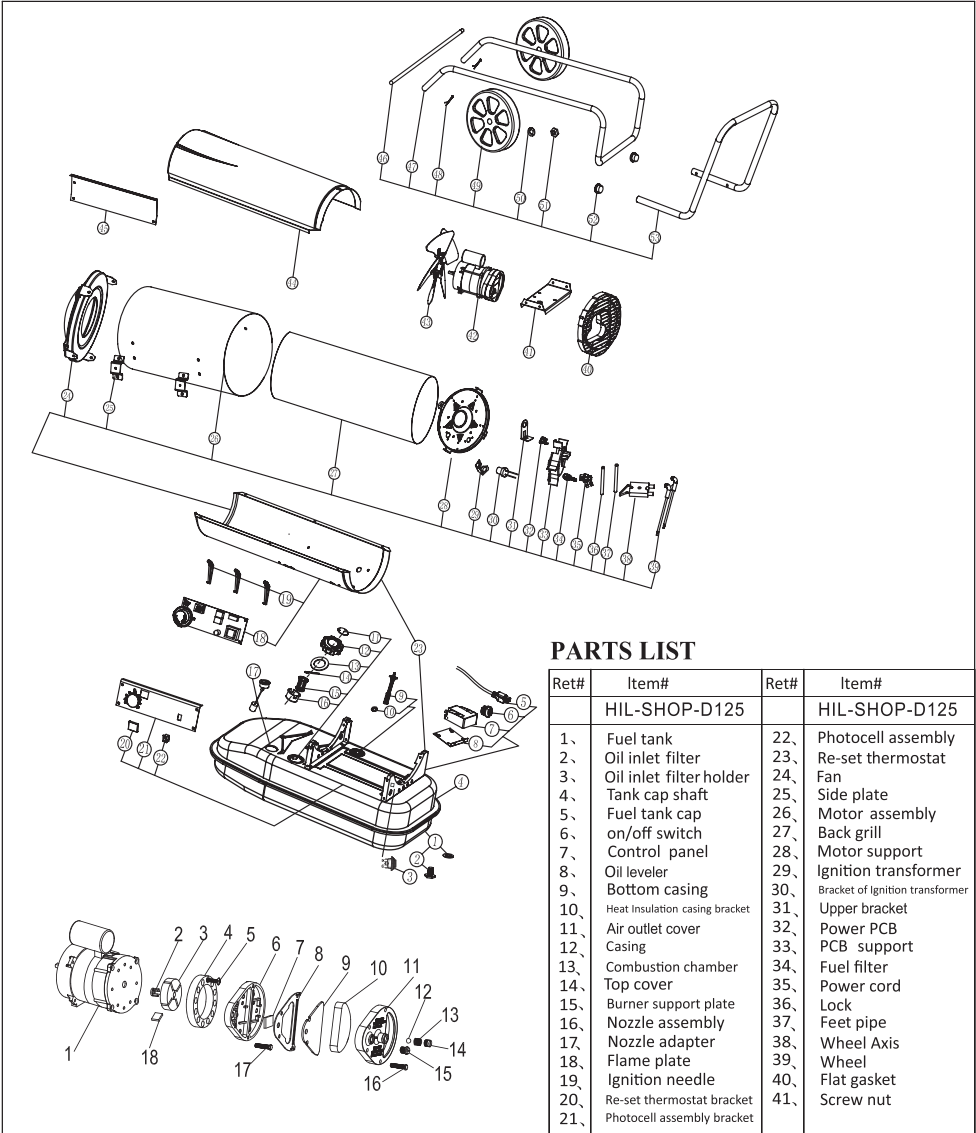
Toll Free Number **1-888-775-1330**

Sales Service and Repair

www.azpatioheaters.com

ILLUSTRATED PARTS BREAKDOWN

MODEL: HIL-SHOP-D125



PARTS LIST

Ret#	Item#	Ret#	Item#
	HIL-SHOP-D125		HIL-SHOP-D125
1、	Fuel tank	22、	Photocell assembly
2、	Oil inlet filter	23、	Re-set thermostat
3、	Oil inlet filter holder	24、	Fan
4、	Tank cap shaft	25、	Side plate
5、	Fuel tank cap	26、	Motor assembly
6、	on/off switch	27、	Back grill
7、	Control panel	28、	Motor support
8、	Oil leveler	29、	Ignition transformer
9、	Bottom casing	30、	Bracket of Ignition transformer
10、	Heat Insulation casing bracket	31、	Upper bracket
11、	Air outlet cover	32、	Power PCB
12、	Casing	33、	PCB support
13、	Combustion chamber	34、	Fuel filter
14、	Top cover	35、	Power cord
15、	Burner support plate	36、	Lock
16、	Nozzle assembly	37、	Feet pipe
17、	Nozzle adapter	38、	Wheel Axis
18、	Flame plate	39、	Wheel
19、	Ignition needle	40、	Flat gasket
20、	Re-set thermostat bracket	41、	Screw nut
21、	Photocell assembly bracket		