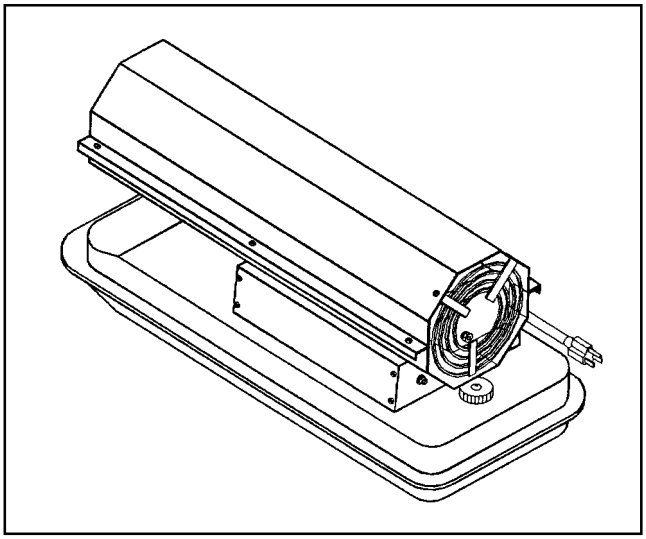
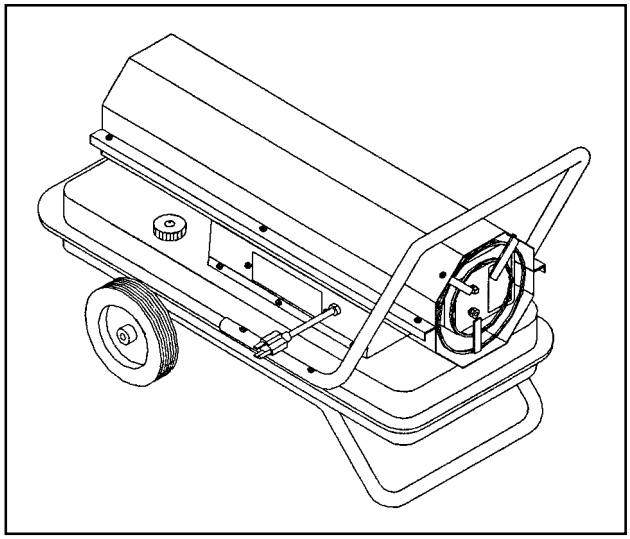
FORCED AIR OIL CONSTRUCTION HEATERS
INSTRUCTIONS AND PARTS LIST





MODELS

50,000 BTU/HR	100,000 BTU/HR	150,000 BTU/HR
K50-FA	K100-FA	K150-FA
SPC-K50	SPC-K100	SPC-K150

⚠ 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.

RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE

DESIGN CERTIFIED

8124B
September 2000

ANSI Z83.7b-1993
Construction Heater

SAFETY INSTRUCTIONS

This is an oil, direct-fired, forced air heater. It's intended use is primarily temporary heating of buildings under construction, alternation or repair.

⚠ WARNING
NOT FOR HOME OR RECREATIONAL VEHICLE USE

GENERAL PRECAUTIONS

This is a direct-fired forced air heater.

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. We can tolerate small amounts but not a lot. OSHA says that 50 parts per million (ppm) in the air we breathe is okay if it does not average more than that during an 8 hour working period. Regardless, 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

So be sure to follow advice about ventilation in these operating instructions.

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.

When the heater is to be operated in the presence of other people the user is responsible for properly acquainting those present with the safety precautions and instructions, and of the hazards involved.

SAFETY PRECAUTIONS

1. Check the heater thoroughly for damage. Never operate a damaged heater.
2. Never modify the heater or operate the heater if it has been modified from its original condition.
3. Use only Kerosene or #1 fuel oil. Never use gasoline, naphtha, paint thinner, alcohol or other fuels of any kind.
4. For indoor use only.
5. Use only in well ventilated areas. Provide at least 2 sq. ft. of opening near the floor and 2 sq. ft. of opening near the ceiling.
6. Always keep combustibles, like paper and wood at least 8 ft. from the heater outlet and 3 ft. from the top, sides and inlet. Locate 10 ft. from canvas or plastic coverings and secure them to prevent flapping or movement.
7. Install the heater such that it is not directly exposed to water spray, rain and/or dripping water or wind.
8. Never use in areas normally for habitation and/or where children may be present.
9. Operate only on a stable, level surface.
10. Do not use with ductwork. Do not restrict inlet or exit.
11. Use only the electrical power specified.
12. Use only a properly grounded 3 wire extension cord.
13. Do not move, handle or service while hot or burning.
14. Use only in accordance with State and Federal ordinances.

CAUTION: Hot while in operation. Do not touch. Keep children, clothing and combustibles away.

⚠ 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 UNKNOW CHEMICALS.

OPERATING INSTRUCTIONS

UNPACKING

1. Remove all protective material which may have been applied to the heater for shipment.
2. Remove the heater from carton
3. Check the heater for possible shipping damage. If any damage is found immediately notify the dealer from whom you purchased the heater.

ASSEMBLY (For 100,000 and 150,000 BTU/hr models only)

Wheel and handles are found in the shipping carton along with mounting hardware. The wheels, axle and mounting hardware are in a plastic package. Tools required are a 5/16" nutdriver, 3/8" open or adjustable wrench and hammer.

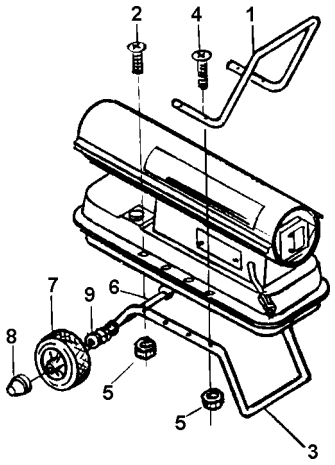
1. Slide the axle (6) through the wheel support frame (3). Install bushing (9) and wheels (7) on the axle.

IMPORTANT: The extended hub of the wheel should be positioned toward the wheels support frame. Position the cap nuts (8) on the axle ends and gently tap with a hammer to secure.

2. Position the heater on the wheel support frame assembly with the exit end over the wheels.
3. Use four screws (4) and nuts (5) to attach the front handle (1) to the top of the tank flange. The screws will go through the front handle, the tank flange and the wheel support frame. Install the nuts finger-tight-only.

IMPORTANT: Do not tighten nuts until Step 5.

4. Using four screws (2) and nuts (5) install the tank to support (1) as outlined in Step 3.
5. Tighten all nuts.



ITEM	PART NO.	DESCRIPTION	QTY.
1	3424	Handle, Front	1
2	7336	Machine Screw, Blk	4
3	3426	Support Tank	1
4	6977	Machine Screw, Blk	4
5	6037	Kep Nut, Blk	8
6	3439	Axle	1
7	6869	Wheel	2
8	6870	Push Nut	2
9	7333	Spacer	2

OPERATION

TO FUEL

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

Fill the fuel tank with clean kerosene, No. 1 fuel oil or No. 1 diesel fuel only. Kerosene is recommended for use when the temperature drops below zero degrees fahrenheit (-18◦ Celsius). In extremely cold weather, condensation may develop in the tank and it is recommended that a tablespoon of de-icer be added for each gallon (4 liters) of fuel in the tank.

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.

WARNING: To avoid fire, wipe up any spilled fuel immediately.

TO LOCATE

WARNING: To avoid fire, place the unit in a level location away from volatile substances and at a safe distance from combustible materials. Adequate ventilation is essential. Refer to the SAFETY PRECAUTION page for advice on adequate ventilation.

Not suitable for use on wood floors or other combustible materials. When used the heater should rest on suitable insulating material at least 1 inch thick and extending 3 feet or more beyond the heater in all directions.

If at any time the heater should fail to start, smoke excessively or fire intermittently, unplug it immediately and consult a qualified service person.

TO START

K50: Plug the heater into a grounded outlet.

K100/K150: Turn thermostat to lowest setting. Plug heater into a grounded outlet. Turn thermostat to highest setting (heater will start). Adjust thermostat to desired setting. Heater will cycle on/off, as heat is required.

In cold weather, starting may be improved by holding a finger over the end of the pressure adjusting screw until the heater starts. This unit is equipped with a circuit breaker located near the power cord. If the unit does not start, check to see that the reset is pressed in.

TO STOP

K50: Unplug the heater.

K100/K150: For a short duration shutdown, where temperatures will remain above 0°F, turn thermostat to "off" position. For extended shutdown, or where the temperature can go below 0°F unplug the heater.

TO RESTART

1. Wait 5 minutes.
2. Push reset button
3. If heater continues to cycle off on flame safety, see a service person.

SERVICING

A hazardous condition may result if a heater is used that has been modified or is not functioning properly. When the heater is working properly:

- The flame is contained within the heater with perhaps some yellow tippng from the exit cone.
- There is no strong disagreeable odor, eye burning or other physical discomfort.
- There is no smoke or soot internal or external to the heater.
- There are no unplanned or unexplained shutdowns of the heater.

The parts list 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. Contact the factory for the service center closest to you, phone 909/981-5343.

You may also obtain in warranty or out of warranty service by returning the product freight prepaid to:

Scheu Products Company
8855 Baker Avenue
Rancho Cucamonga, CA 91730

Contact customer service for Return Goods Authorization Number.

In warranty products returned to the Service Department will be repaired with no charge for either parts or labor and will be returned to you freight prepaid. Please include a brief statement indicating date and place of purchase and the nature of the problem, and proof of purchase.

Out of warranty products returned to the Service Department will be repaired with a charge for parts and labor and will be returned to you freight collect.

MAINTENANCE

WARNING: To prevent personal injury, unplug the heater form the wall outlet before servicing.

For maximum efficiency and trouble-free service make the following periodic maintenance cleaning and inspections.

DAILY SCHEDULE

1. GENERAL. Make general visual inspection of heater for loose or damaged parts. Check nuts and bolts to insure against looseness caused by vibration or rough handling. Damaged parts should be repaired or replaced before using heater again. Check heater operation to be sure it is operating normally (See "Servicing" section for description of normal operation).
2. FILTERS. Dirty air or oil filters will cause an imbalance in the air-fuel mixture. The best indication that this condition exists is an increase in odors or difficulty getting your heater to ignite. This heater should never be operated without the filters in place. If required clean filters as described under "500 HR" and "Annual Schedules".

500 HOUR SCHEDULE

1. AIR INTAKE FILTER: Remove and wash the filter element with a mild detergent, dry thoroughly and replace. Do not oil the filter element. If your heater is used where there is considerable dust or dirt, clean as often as necessary (approximately 50 hrs.).
2. REMOVE DUST: Clean heater twice a season (more often under dusty conditions). Remove accumulated dust from the transformer, burner, motor and fan blades with compressed air. Wipe area clean with a clean dry cloth. Inspect area to insure all foreign materials are removed, especially around the burner and combustion area.
3. CAD CELL: Clean the glass portion of the cad cell with a soft dry cloth.
4. NOZZLE: Accumulation of dirt from fuel and carbon from the compressor vanes will eventually fill up the passages in the nozzle, resulting in reduction of fuel and air flow. Pressure will gradually increase giving improper fuel-air mixture and excess odor and smoke. If this occurs, replace the fuel nozzle.
5. FUEL TANK: Clean twice a season (during frequently used periods clean twice a month). Drain and flush the fuel tank with clean fuel oil.
6. SPARK PLUG: Remove and clean the spark plug. Adjust spark plug gap to 1/16".

ANNUAL SCHEDULE

1. AIR OUTPUT FILTER: Remove the air output filter and tap the contaminated side gently on a solid object to remove contaminates.

   Compressed air or liquids should not be used to clean this filter. Reinstall cleaned filter in filter body in the same position as it was when removed. If the filter appears extremely dirty, replace it with a new filter of the same type. When replacing the filter cover, be sure the gasket is firmly in place and the screws in the filter cover are tight to prevent air leaks.
2. FUEL FILTER: Remove the fuel filter from fuel line and direct compressed air through the filter in the opposite direction of fuel flow. Safety glasses should be worn when using compressed air.
3. AIR AND FUEL LINES: If the air or fuel lines are removed during cleaning, be sure all connections are tight before operating unit.
4. AIR PRESSURE SETTING: The air pressure has been properly set at the factory. If the air pressure is out of adjustment, it will most likely be caused by dirty air filters, a partially plugged nozzle, an air leak in the system or improperly set pressure.

If adjustment becomes necessary, first determine the proper pressure setting for your heater which is printed on the serial label, located on the fuel tank.

Remove the plug from the air filter cover and attach an accurate pressure gauge calibrated to a maximum reading of 15 PSI. Start the heater and note the pressure reading. If the pressure is low, slowly turn the pressure adjusting screw in (clockwise) until the correct pressure is obtained. If the air pressure is high, turn the adjusting screw out (counter-clockwise) until the pressure is correct.

When correct pressure is reached, unplug the heater, remove the gauge and replace the plug.

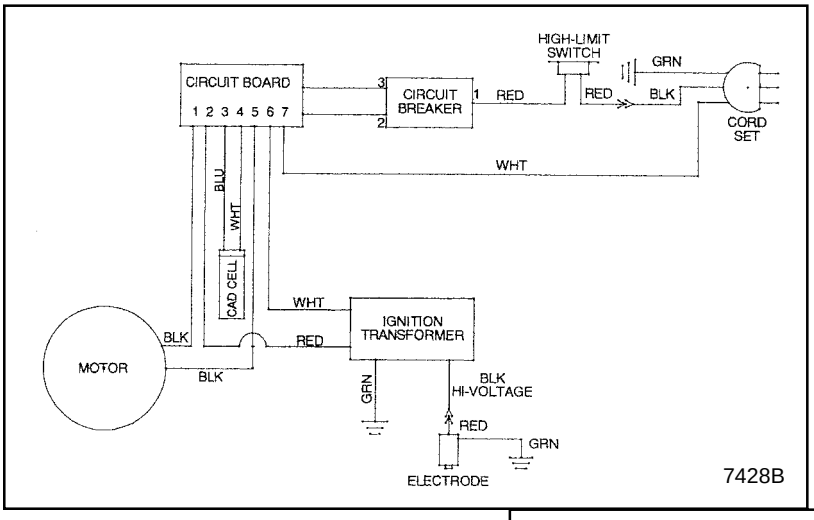
STORAGE

Store the heater in a dry location free from fumes or dust.

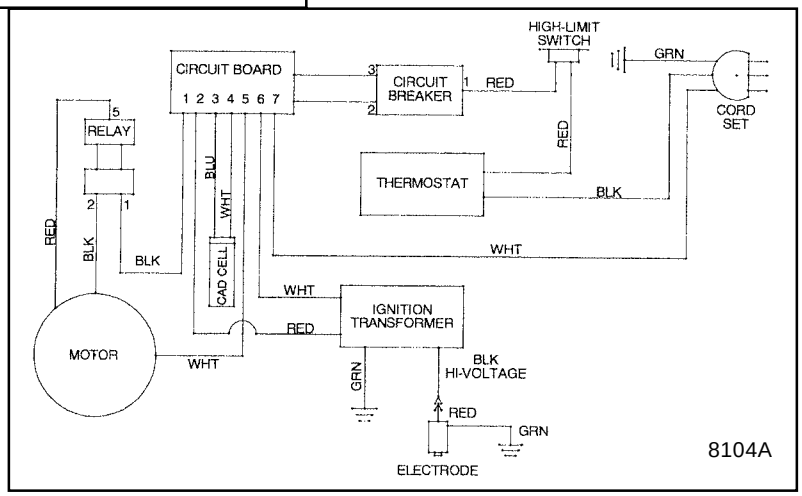
At the end of each heating season clean the heater as described in the MAINTENANCE section. Drain and flush the fuel tank with clean fuel. The manufacturer recommends completely filling the tank with fuel for extended storage to minimize condensation inside the tank.

HEATER SPECIFICATIONS

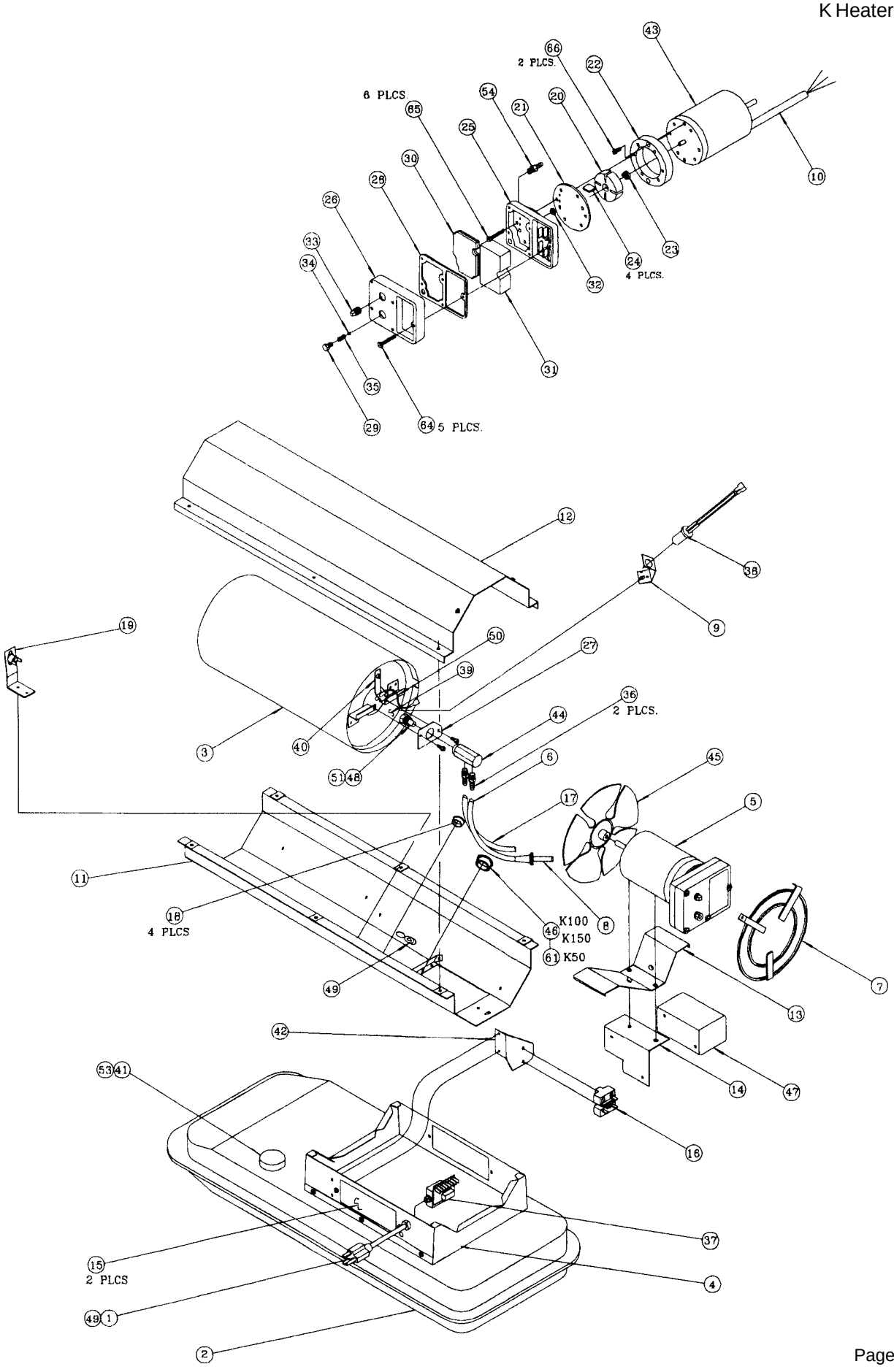
MODELS	50	100	150
Input Rating, BTU/hr	50,000	100,000	150,000
Type of Fuel	Kerosene or #1 Fuel Oil Only	Kerosene or #1 Fuel Oil Only	Kerosene or #1 Fuel Oil Only
Fuel Consumption, Gal/Hr	.38	.77	1.15
Air Supply Pressure, psig	3.6	4-1/4	5-1/4
Fuel Tank Capacity, gals.	4	12	12
Electrical Input	115V, 60Hz, 1ϕ, 3.5a	115V, 60Hz, 1ϕ, 5.5a	115V, 60Hz, 1ϕ, 5.5a
Minimum Operating	100V	100V	110V
Fan	1750 rpm, 165 cfm	3450 rpm, 275cfm	3450 rpm, 400cfm
Ignition	Direct Spark, continuous	Direct Spark, continuous	Direct Spark, continuous
Spark Generator	Ignitor, 7000V.sec. 10ma.	Transformer, 5,000V.sec. 20ma. or ignitor 7000V 1.0 ma	Transformer, 5,000V.sec. 20ma. or ignitor 7000V 1.0 ma
Electrode	Single post electrode	1/16" gap (.063) or single post electrode	1/16" gap (.063) or single post electrode
Primary Flame Safety Control	Solid State Control 25-second Timing	Solid State Control 25-second Timing	Solid State Control 25-second Timing
Power Cord	1 ft.	1 ft.	1 ft.
Size (Length x Width x Height)	30 x 12 x 13	34 x 16 x 25	38 x 16 x 25
Net Weight	30.5 lbs.	69 lbs.	76 lbs.
Shipping Weight	36.0 lbs.	74 lbs.	81 lbs.



WIRING DIAGRAM - K50



WIRING DIAGRAM - K100/K150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2 PLCS
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2

INSTRUCTIONS FOR ORDERING PARTS - All parts orders must show heater Model No., Item No., Part No. and Description. We recommend that only parts supplied by the manufacturer be used on this unit. A locally purchased part may appear to be identical, although in reality it might endanger the heater or the persons operating the heater.

The heater should be serviced only by a trained, experienced service person.

Read the section on "Servicing" before ordering parts.

For parts order, call (909) 981-5343.

Kerosene Heaters Parts List

Item	Part No. 50	Part No. 100	Part No. 150	Description	Item	Part No. 50	Part No. 100	Part No 150	Description
1	1036	1036	1036	Power Cord Assembly	37	6863	6863	6863	Oil Flame Cntrl Assy.
2	1676	1400	1400	Fuel Tank Assembly	38	6865	6865	6865	Cad Cell Flame Snsr.
3	1679	1773	1783	Radiation Shield Assy.	39	------	1775	1719	Comb.Cmbr.Cyl. Assy.
4	1688	1779	1782	Control Box Assembly	40	3843	3843	3843	Electrode Mtg. Brkt.
5	1682	1407	1407	Power Pac Assembly	41	6993	6993	6993	Oil Fuel Cap
6	1686	3429	3429	Fuel Tube	42	------	3423	3423	Start Relay Brkt.
7	1685	1771	1768	Grille Assembly	43	7399	6841	6841	Motor, 1/4 HP
8	-------	1408	1408	Fuel Filter Assembly	44	7417	7417	7417	Nozzle Adapter
9	4011	4011	4011	Oil Cad Cell Bracket	45	7421	6885	6866	Fan
10	3449	3449	3449	Motor Cord Sleeve	46	------	6227	6227	Snap Bushing
11	1756	1777	3795	Bottom Shell	47	1684	1684	1684	Ignitor Assembly
12	3715	3822	3810	Top Shell	48	7416	7538	7537	Fuel Air Aspir. Nozzle
13	3704	3500	3417	Motor Mounting Brkt.	49	6223	6223	6223	Strain Relief Bushing
14	3705	3818	3705	Ignition Mounting Brkt.	50	1803	1803	1803	Electrode Assembly
15	------	3427	3427	Access Panel	51	7429	7429	7429	Extrnl. Retaining Ring
16	------	6864	6864	Start Relay	*				
17	3725	3430	3421	Air Tube	53	3487	3487	3487	Fuel Cap Gasket
18	6225	6225	6225	Snap Bushing	54	6847	6847	6847	Hose Barb Fitting
19	1796	1797	1798	High Limit Control Assy.	*	------	------	------	
20	6831	6831	6831	Air Pump Rotor	*	3707	------	------	Left Side Panel
21	6832	6832	6832	Backing Plate	*	7094	------	------	Clip Handle Mtg.
22	6833	6833	6833	Air Pump Cylinder	*	7095	------	------	Handle, 3 piece
23	6834	6834	6834	Nylon Air Pump Insert	*	1683	1683	1683	Lead Wire Assy. Grn.
24	6835	6835	6835	Air Pump Vane	*	------	1040	1040	Lead Wire Assy. Blk.
25	6836	6836	6836	Lower Housing	61	7424	------	------	Snap Bushing, Nylon
26	6837	6837	6837	Upper Housing	*	------	------	6225	Snap Bushing, Nylon
27	3761	3761	3761	Nozzle Mounting Plate	*	------	6862	6862	Fuel Filter Bushing
28	6839	6839	6839	Gasket	64	6838	6838	6838	Screw, Tapping #9 x 1¼
29	6842	6842	6842	Adjustment Screw	65	6908	6908	6908	Screw, Machine #10 x 1¼
30	6843	6843	6843	Outlet Filter	66	6906	6906	6906	Screw, Machine #10 x ½
31	6844	6844	6844	Inlet Filter	*		1942	1942	Knob Assembly
32	6848	6848	6848	O Ring	*		2098	2098	Thermostat Panel Assy.
33	6849	6849	6849	Nylon Pipe Plug	*		3441	3441	Bracket Thermostat Mtg.
34	6850	6850	6850	Relief Ball, 1/4" Dia.	*		1734	1734	Thermostat Assembly
35	6851	6851	6851	Spring, 24 O.D. x .58	*		6070	6070	Clamp Loop
36	6856	6856	6856	Hose Barb Fitting					

* K50 items may not be located as shown in exploded view or they may not be shown at all.

FOR THE SPC MODELS ONLY

Item	SPC K50	SPC K100	SPC K150	Description
25-1	1802	1805	3846	Lower Housing
26-1	3701	3845	3847	Upper Housing

SCHEU PRODUCTS COMPANY, INCORPORATED
Mail: P.O. Box 250, Upland, CA 91785
Plant: 8855 Baker Ave., Rancho Cucamonga, CA 91730
Telephone: 909/981-5343