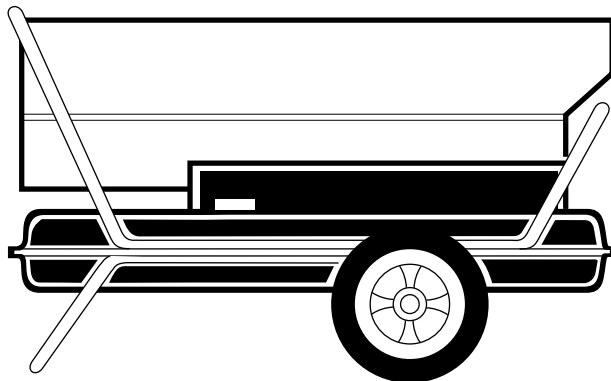


TRADESMAN K350

HIGH PRESSURE KEROSENE PORTABLE FORCED AIR HEATER (with Thermostat)

OWNER'S MANUAL



**Model Number: CP350AK
Heater Size: 350,000 Btu/Hr**

IMPORTANT

Read and understand this manual before assembling, starting, or servicing heater. Improper use of heater can cause serious injury. Keep this manual for future reference.



L.B.WHITE[®]

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SAFETY INFORMATION

WARNING

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 carbon monoxide poisoning.

DANGER

Carbon monoxide poisoning may lead to death!

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, and/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.

Make certain you read and understand all Warnings. Keep this manual for reference. It is your guide to safe and proper operation of this heater.

SAFETY INFORMATION

- Use only kerosene or No. 1 fuel oil to avoid risk of fire or explosion. Never use gasoline, naphtha, paint thinners, alcohol, or other highly flammable fuels.
- Fueling
 - a) Personnel involved with fueling shall be qualified and thoroughly familiar with the manufacturer's instructions and applicable federal, state, and local regulations regarding the safe fueling of heating units.
 - b) Only the type of fuel specified on the heater's data plate shall be used.
 - c) All flame, including the pilot light, if any, shall be extinguished and the heater allowed to cool, prior to fueling.
 - d) During fueling, all fuel lines and fuel-line connections shall be inspected for leaks. Any leaks shall be repaired prior to returning the heater to service.
 - e) At no time shall more than one day's supply of heater fuel be stored inside a building in the vicinity of the heater. Bulk fuel storage shall be outside the structure.
 - f) All fuel storage shall be located a minimum of 25 feet from heaters, torches, welding equipment, and similar sources of ignition (exception: the fuel reservoir integral with the heater unit).
 - g) Whenever possible, fuel storage shall be confined to areas where floor penetrations do not permit fuel to drip onto or be ignited by a fire at lower elevation.
 - h) Fuel storage shall be in accordance with the federal, state, or local authority having jurisdiction.
- Never use heater where gasoline, paint thinner, or other highly flammable vapors are present.
- Follow all local ordinances and codes when using heater.
- Heaters used in the vicinity of tarpaulins, canvas, or similar enclosure materials shall be located a safe distance from such materials. The recommended minimum safe distance is 10 feet. It is further recommended that these enclosure materials be of a fire retardant nature. These enclosure materials shall be securely fastened to prevent them from igniting or from upsetting the heater due to wind action.
- Use only in well vented areas. Before using heater, provide at least a three-square-foot opening of fresh, outside air for each 100,000 Btu/Hr of rating. This heater produces carbon monoxide, which is listed by the State of California as a reproductive toxin under Proposition 65.
- Use only in places free of flammable vapors or high dust content.
- Use only with the electrical voltage and frequency specified on model plate.
- Use only a three-prong, grounded extension cord.
- Minimum heater clearances from combustibles:
Outlet: 8 Ft. Sides: 4 Ft. Top: 4 Ft. Rear: 4 Ft.
- Locate heater on a stable and level surface while hot or running or a fire may occur.
- When moving or storing heater, keep heater in a level position or fuel spillage may occur.
- Keep children and animals away from heater.
- Unplug heater when not in use.
- This heater has a built-in thermostat. Plugged-in heater may start at anytime.
- Never use heater in living or sleeping areas.
- Never block air inlet (rear) or air outlet (front) of heater.
- Never move, handle, refuel, or service a hot, operating, or plugged-in heater.
- Never attach duct work to front or rear of heater.

PRODUCT IDENTIFICATION

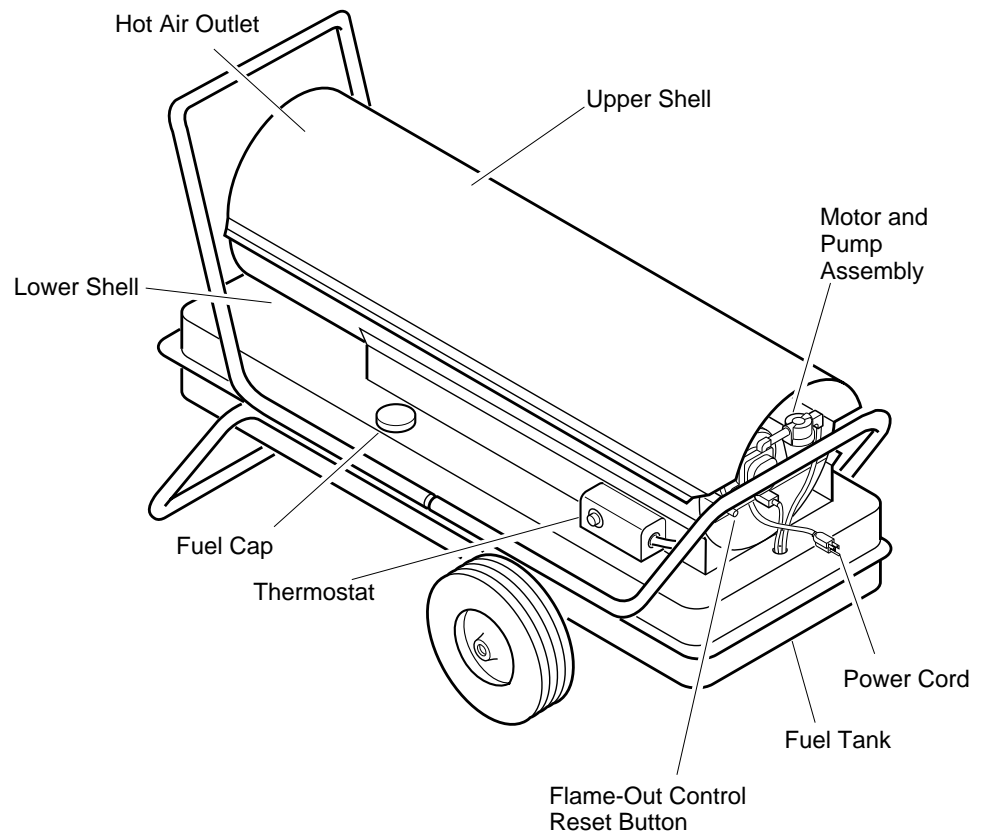


Figure 1 - 350,000 BTU Unit

UNPACKING

1. Remove all protective packing applied to heater for shipment.
2. Remove heater from shipping container.
3. Check heater for any shipping damage. If heater is damaged, promptly inform dealer where you bought heater.

FUELS

⚠ WARNING

Use only kerosene or No. 1 fuel oil to avoid risk of fire or explosion. Never use gasoline, naphtha, paint thinners, alcohol, or other highly flammable fuels.

Do not use heavy fuels such as No. 2 fuel oil or No. 2 diesel. Using heavy fuels will result in:

- clogged fuel filter and nozzle
- carbon build-up on spark plug
- the need of non-toxic anti-icer in fuel during very cold weather

IMPORTANT: Use a KEROSENE ONLY storage container. Be sure storage container is clean. Foreign matter such as rust, dirt, or water will cause flame-out control to shut down heater. Foreign matter may also require you to clean fuel system often.

VENTILATION

⚠ WARNING

Follow the minimum fresh, outside air ventilation requirements. If proper fresh, outside air ventilation is not provided, carbon monoxide poisoning can occur. Provide proper fresh, outside air ventilation before running heater.

Fresh Air Opening Requirements

Heater Size	Square Feet Opening
350,000 Btu/Hr	10.5

Note: If you use more than one heater, provide extra fresh air. Provide a fresh air opening of at least three square feet for each 100,000 Btu/Hr rating.

THEORY OF OPERATION

The Fuel System: The motor turns the fuel pump. The fuel pump pulls fuel from the fuel tank. The fuel pump pushes fuel through a filter and a solenoid valve and out the burner head nozzle. A fine mist of fuel is sprayed into the combustion chamber.

The Air System: The motor turns the fan. The fan pushes air into and around the combustion chamber. This air is heated and provides a stream of clean, hot air.

The Ignition System: The electronic ignitor sends voltage to the spark plug. The spark plug ignites the fuel and air mixture.

The Flame-Out Control System: This system causes the heater to shut down if the flame goes out. It also allows the fan to continue running after normal shutdown of heater. This cools the combustion chamber.

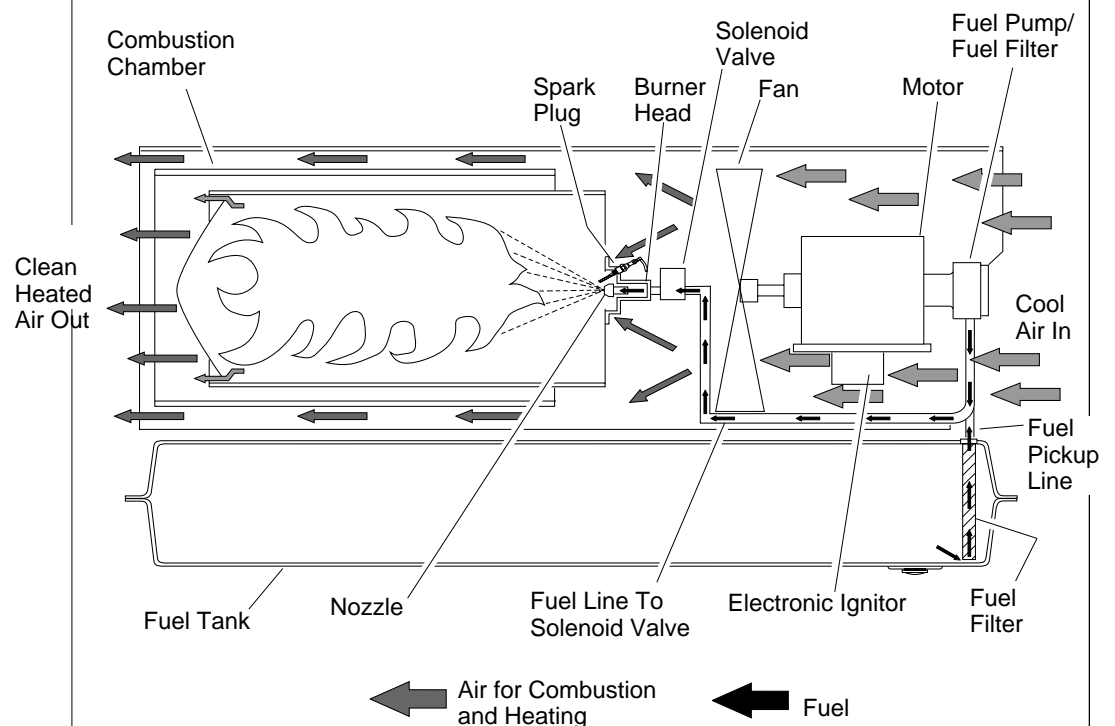


Figure 2 - Cross Section Operational View

OPERATION

⚠ WARNING

Review and understand the warnings in the Safety Information Section. They are needed to safely operate this heater.

To Start Heater

1. Follow all ventilation and safety information.
2. Fill fuel tank with kerosene or No. 1 fuel oil.
3. Attach fuel cap.
4. Set thermostat dial to desired temperature. *Note:* Thermostat setting must be higher than surrounding air temperature.
5. Plug power cord of heater into three-prong, grounded extension cord. Extension cord must be at least six feet long.

⚠ WARNING

Use only a three-prong, grounded extension cord. Use cord with proper wire size to assure 120 volt operation. See *Extension Cord Wire Size Requirements* below.

Extension Cord Wire Size Requirements

6 to 100 feet long, use 14 AWG rated cord
101 to 200 feet long, use 12 AWG rated cord
201 to 300 feet long, use 10 AWG rated cord
301 to 400 feet long, use 8 AWG rated cord
401 to 500 feet long, use 6 AWG rated cord

6. Plug extension cord into standard 120 volt/60 hertz, three-hole, grounded outlet.
7. The motor will start when extension cord is plugged into outlet. The heater should ignite at once. If heater does not ignite, restart heater. To restart heater, wait 60 seconds, then push in flame-out control reset button. Flame-out control reset button is at rear of heater near power cord (see Figure 3).

Note: If starting heater for first time, you may need to restart heater several times before heater ignites. You may also have to do this after taking heater out of storage. To facilitate starting, remove the canister bottom from the pump's fuel filter and fill with fuel. Reassemble filter (see *Pump Fuel Filter*, page 15).

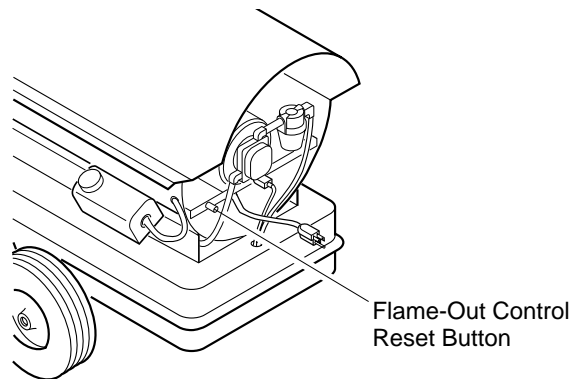


Figure 3 - Flame-Out Control Reset Button

Continued

OPERATION

Continued

STORING, TRANSPORTING, OR SHIPPING

To Stop Heater

CAUTION

Never unplug heater while heater is running. Heater must go through purge cycle. The purge cycle cools the combustion chamber. Damage to heater can occur if combustion chamber is not cooled. Do not restart heater until purge cycle is complete.

1. Turn thermostat dial to lowest temperature setting. This will cause heater flame to go out. The motor will continue to run during the purge cycle. This allows the fan to cool the combustion chamber. When the purge cycle is finished, the motor will stop. Do not unplug heater until purge cycle is finished.
2. Unplug extension cord from outlet.
3. To temporarily stop heater, set thermostat at a temperature lower than air around heater. Heater will cycle back on if air temperature around heater matches thermostat setting.

To Restart Heater

CAUTION

Do not restart heater until purge cycle is finished. The purge cycle cools the combustion chamber.

1. Wait until purge cycle is finished after stopping heater.
2. Repeat steps under *To Start Heater*, page 6.

Note: If shipping transport companies require fuel tanks to be empty.

1. Drain all fuel from fuel filters, fuel lines, and pump (see *Fuel Filters [Tank Fuel Filter]*, page 15).
2. Clean and flush fuel filter and canister attached to fuel pump (see *Fuel Filters [Pump Fuel Filter]*, page 15).
3. Remove drain plug and drain fuel tank.
4. Replace drain plug.
5. If any debris is noted in old fuel, add 1 or 2 quarts of clean kerosene to tank, stir, and drain again. This will prevent excess debris from clogging filters during future use.
6. Replace fuel cap or drain plug. Properly dispose of old and dirty fuel. Check with local automotive service stations that recycle oil.
7. Add two gallons of clean kerosene or No. 1 fuel oil to fuel tank.
8. Replace fuel cap.
9. Operate heater for 5 minutes (see *Operation*, page 6).
10. Stop heater and let cool completely.
11. Remove drain plug and drain fuel tank.
12. Replace drain plug.
13. Properly dispose of old and dirty fuel.
14. If storing, store heater in a dry location. Make sure storage place is free of dust and corrosive fumes.

IMPORTANT: Do not store kerosene over summer months for use during next heating season. Using old fuel could damage heater.

PREVENTATIVE MAINTENANCE SCHEDULE

WARNING

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

Item	How Often	How To
Fuel tank	Flush every 150-200 hours of operation or as needed.	See <i>Storing, Transporting, or Shipping</i> , page 7.
Filler neck screen	Check for particles in fuel when filling fuel tank. Clean when dirty.	Lift out of fuel tank and rinse with clean kerosene.
Fuel filter assembly (Fuel tank)	Clean twice a heating season or replace as needed.	See <i>Fuel Filters</i> , page 15.
Fuel filter lines	Check and tighten loose connections occasionally.	See <i>Fuel Lines</i> , Page 14.
Fuel filter (Pump)	Clean fuel filter element every 250 hours.	See <i>Fuel Filters</i> , page 15.
Spark plug	Clean and regap every 300 hours of operation or replace as needed.	See <i>Spark Plug</i> , page 13.
Fan blades and air deflectors	Clean each season or as needed.	See <i>Fan Blades and Air Deflectors</i> , page 12.
Air passages around burner head	Check each season for dirt and debris.	Remove debris and trash with a clean, soft cloth.
Motor	Not required, permanently lubricated.	

TROUBLE-SHOOTING

WARNING

Never service heater while it is plugged in, operating, or hot. Severe burns and electrical shock can occur. Only a qualified service person should service and repair heater.

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Motor does not start when heater is plugged in and thermostat setting is higher than surrounding air temperature.	1. No power or low voltage at heater due to: A) Damaged power cord or extension cord B) Wrong size extension cord C) Heater plugged into outlet with voltage lower than 120 volt	1. A) Check condition of power cord or extension cord. Repair or replace if damaged. B) Use extension cord with proper wire size (see <i>To Start Heater</i> , page 6). C) Make sure heater is plugged into 120 volt/60 hertz outlet.
	2. Loose electrical connections	2. Check connections. Tighten if loose.
	3. Motor overload protector tripped due to: A) Dirty fan B) Debris pulled into fan area by fan C) Binding pump D) Low voltage	3. A) See <i>Fan Blades and Air Deflectors</i> , page 12 B) Remove debris from fan and fan guard area. C) Turn fan by hand. If fan is hard to turn, see <i>Pump</i> , page 14. D) See steps B and C under item 1 above. <i>Note:</i> Be sure to reset motor overload protector by pressing reset button on top of motor.
	4. Flame-out control not reset	4. Press and release flame-out control reset button. See Figure 3, page 6 for button location.
	5. Damaged flame-out control	5. Replace flame-out control.
	6. Damaged power relay	6. Replace power relay.
	7. Damaged thermostat	7. Replace thermostat.
	8. Binding pump	8. Turn fan by hand. If fan is hard to turn, see <i>Pump</i> , page 14.

TROUBLE-SHOOTING

Continued

OBSERVED PROBLEM

POSSIBLE CAUSE

REMEDY

Heater will not ignite, but motor runs for a short period of time.

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. A) Fuel tank empty
B) Water in fuel
C) Wrong fuel 2. Dirt in nozzle 3. Very low temperature may cause fuel to thicken and not flow 4. Dirty fuel filters 5. Wrong pump pressure 6. Spark plug wire disconnected from plug 7. Spark plug problems due to: <ol style="list-style-type: none"> A) Wrong gap B) Plug wet with fuel C) Carbon deposits on plug D) Damaged plug 8. Solenoid valve not opening | <ol style="list-style-type: none"> 1. A) Add fuel to tank.
B) Check fuel tank for bubbles of water in bottom. If found, remove fuel (see <i>Storing, Transporting, or Shipping</i>, page 7). Clean tank and fuel filters (see <i>Fuel Filters</i>, page 15). Fill with clean fuel.
C) Remove wrong fuel (see <i>Storing, Transporting, or Shipping</i>, page 7). Clean tank and fuel filters (see <i>Fuel Filters</i>, page 15). Fill with correct fuel. 2. Replace nozzle (see <i>Nozzle</i>, page 13). 3. Move heater to warmer place until fuel flows freely. 4. Clean fuel filters (see <i>Fuel Filters</i>, page 15). 5. Adjust pump pressure (see <i>Pump Pressure Adjustment</i>, page 14). 6. Connect spark plug wire to spark plug. 7. A) Adjust electrode gap to .075" (see <i>Spark Plug</i>, page 13).
B) Clean fuel from spark plug with clean, soft cloth.
C) Replace plug if heavily coated with carbon (see <i>Spark Plug</i>, page 13).
D) Inspect plug for worn or eroded electrodes. If found, replace plug (see <i>Spark Plug</i>, page 13). 8. Check electrical connections and voltage to solenoid. If good, replace solenoid valve. |
|--|--|



WARNING

High Voltage!

- | | |
|---|--|
| <ol style="list-style-type: none"> 9. Damaged electronic ignitor | <ol style="list-style-type: none"> 9. Replace electronic ignitor. |
|---|--|

TROUBLE-SHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Heater ignites, but flame-out control shuts off heater after a short period of time.	<ol style="list-style-type: none"> 1. Wrong pump pressure 2. Dirty fuel filters 3. Dirt in nozzle 4. Dirty photocell lens 5. Open or damaged photocell 6. Bad flame-out control 7. Damaged fan switch 	<ol style="list-style-type: none"> 1. Adjust pump pressure (see <i>Pump Pressure Adjustment</i>, page 14). 2. Clean fuel filters (see <i>Fuel Filters</i>, page 15). 3. Replace nozzle (see <i>Nozzle</i>, page 13). 4. Clean photocell lens with clean, soft cloth. 5. Replace photocell. 6. Replace flame-out control. 7. Replace fan switch.
<p>Heater burns, but puffs of smoke can be seen.</p> <p>Heater does not burn steady.</p> <p>Heater burns with odor.</p> <p>Heater smokes continuously.</p>	<ol style="list-style-type: none"> 1. Wrong pump pressure 2. A) Heater almost out of fuel B) Water condensation in fuel tank C) Wrong fuel 3. Dirty fuel filters 4. Air leak in suction system 5. Dirty nozzle 6. Low voltage causing motor to operate below rated speed 7. Loose fuel line 	<ol style="list-style-type: none"> 1. Adjust pump pressure (see <i>Pump Pressure Adjustment</i>, page 14). 2. A) Add fuel to tank. B) Check fuel tank for bubbles of water in bottom. If found, remove fuel (see <i>Storing, Transporting, or Shipping</i>, page 7). Clean tank and fuel filters (see <i>Fuel Filters</i>, page 15). Fill with clean fuel. C) Remove wrong fuel (see <i>Storing, Transporting, or Shipping</i>, page 7). Clean tank and fuel filters (see <i>Fuel Filters</i>, page 15). Fill with correct fuel. 3. Clean fuel filters (see <i>Fuel Filters</i>, page 15). 4. Tighten all fuel line connections (see <i>Fuel Lines</i>, page 14). 5. Replace nozzle (see <i>Nozzle</i>, page 13). 6. Check voltage at heater. Voltage at heater should be not less than 90% of rated voltage (108V minimum for 120V heaters). 7. Check and tighten all fuel line connections (see <i>Fuel Lines</i>, page 14).

SERVICE PROCEDURES

WARNING

Never service heater while it is plugged in, operating, or hot. Severe burns and electrical shock can occur. Only a qualified service person should service and repair heater.

Upper Shell Removal

1. Remove screws along each side and top of heater using 5/16" nut-driver. These screws attach upper and lower shells together (see Figure 4).
2. Lift upper shell off.

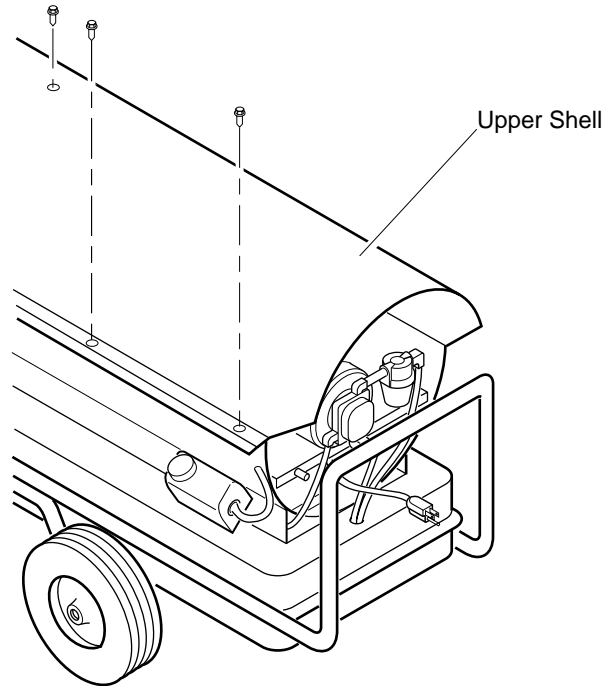


Figure 4 - Upper Shell Removal

Fan Blades and Air Deflectors

1. Remove upper shell (see above).
2. Clean fan blades and air deflectors with clean, soft cloth moistened with kerosene or solvent (see Figure 5).
3. Dry fan blades and air deflectors thoroughly.
4. Replace upper shell.

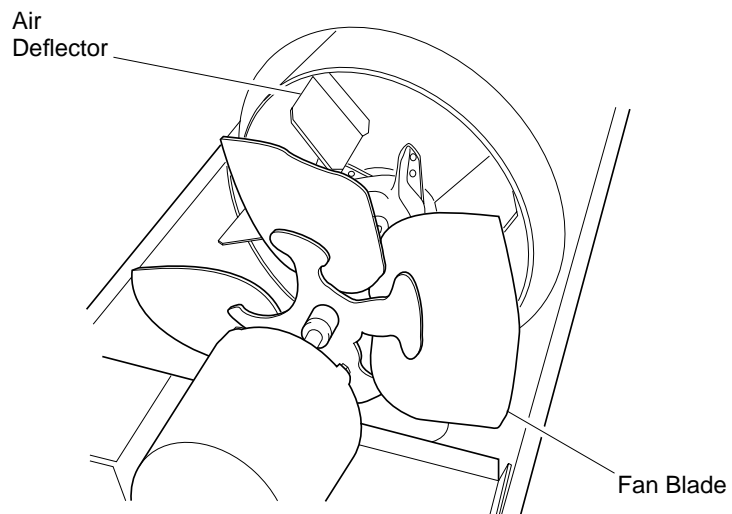


Figure 5 - Fan Blades and Air Deflectors

Spark Plug

1. Remove upper shell (see page 12).
2. Remove spark plug wire from spark plug (see Figure 6).
3. Remove spark plug from burner head using 13/16" open-end wrench (see Figure 6).
4. Replace spark plug if damaged or heavily coated with carbon.
5. Clean and regap spark plug electrodes to .075 inch (see Figure 7).
6. Install spark plug in burner head.
7. Attach spark plug wire to spark plug.
8. Replace upper shell.

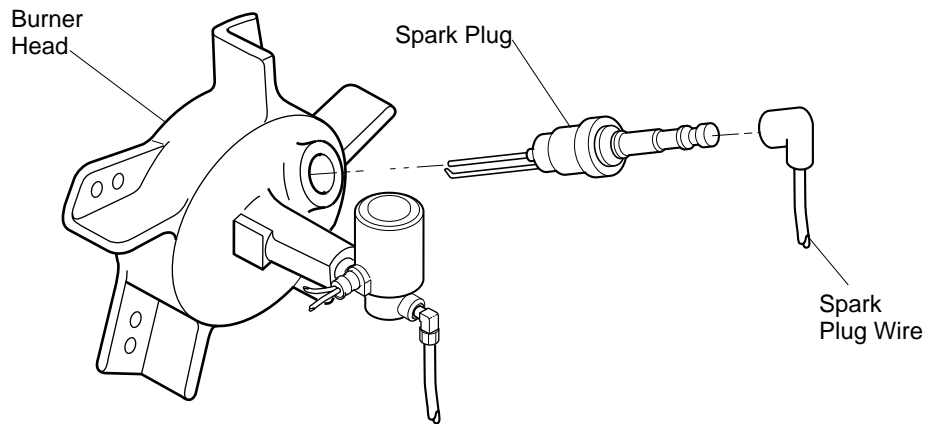


Figure 6 - Spark Plug Removal

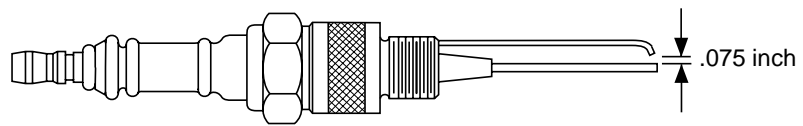


Figure 7 - Spark Plug Gap

Nozzle

1. Remove uppershell (see page 12).
2. Remove fuel line from solenoid valve using 7/16" wrench.
3. Remove spark plug wire from spark plug.
4. Remove spark plug from burner head using 13/16" open-end wrench.
5. Remove five screws using 5/16" nut-driver and remove burner head from combustion chamber.
6. Place burner head into vise and lightly tighten.
7. Carefully remove nozzle from burner head using 5/8" socket wrench (see Figure 8).
8. Inspect nozzle for damage. If damaged or clogged, replace nozzle.
9. Make sure plug is in place on burner head.
10. Replace nozzle into burner head and tighten firmly (175-200 inch-pounds).
11. Attach burner head to combustion chamber.
12. Install spark plug in burner head.
13. Attach spark plug wire to spark plug.
14. Attach fuel line to solenoid valve. Tighten firmly.
15. Replace upper shell.

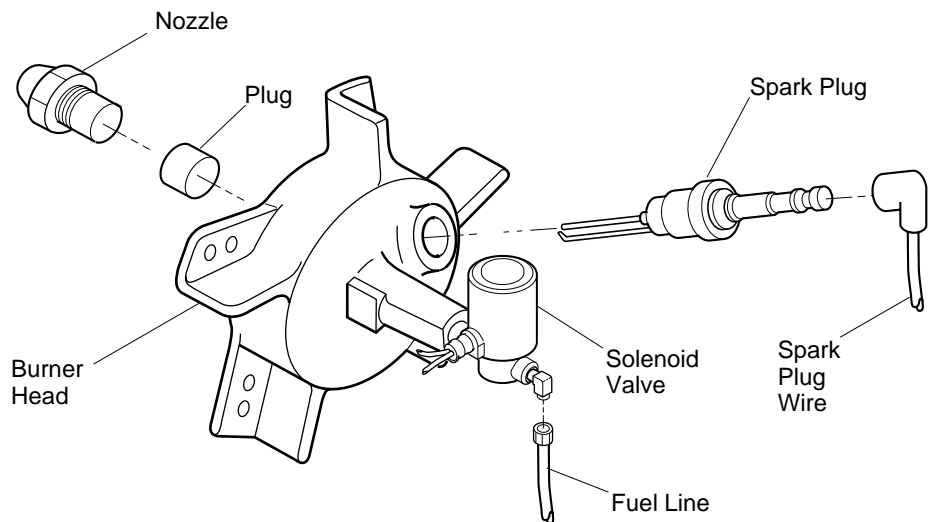


Figure 8- Replacing Nozzle

Pump Pressure Adjustment

1. Remove pressure gage plug from fuel pump port marked "GAGE."
2. Install accessory pressure gage (part no. 500-20914) to fuel pump port marked "GAGE" (see Figure 9).
3. Start heater (see *Operation*, page 6). Allow motor to reach full speed.
4. Adjust pressure. Use small flat blade screwdriver to turn slotted screw at fuel pump port marked "PRESS ADJ." Turn screw clockwise to increase pressure. Turn screw counterclockwise to decrease pressure. See specifications at right for correct pressure for each model.
5. Stop heater (see page 7).
6. Remove pressure gage. Replace pressure gage plug in fuel pump port marked "GAGE."

Model	Pump Pressure
CP350AK	100 PSI

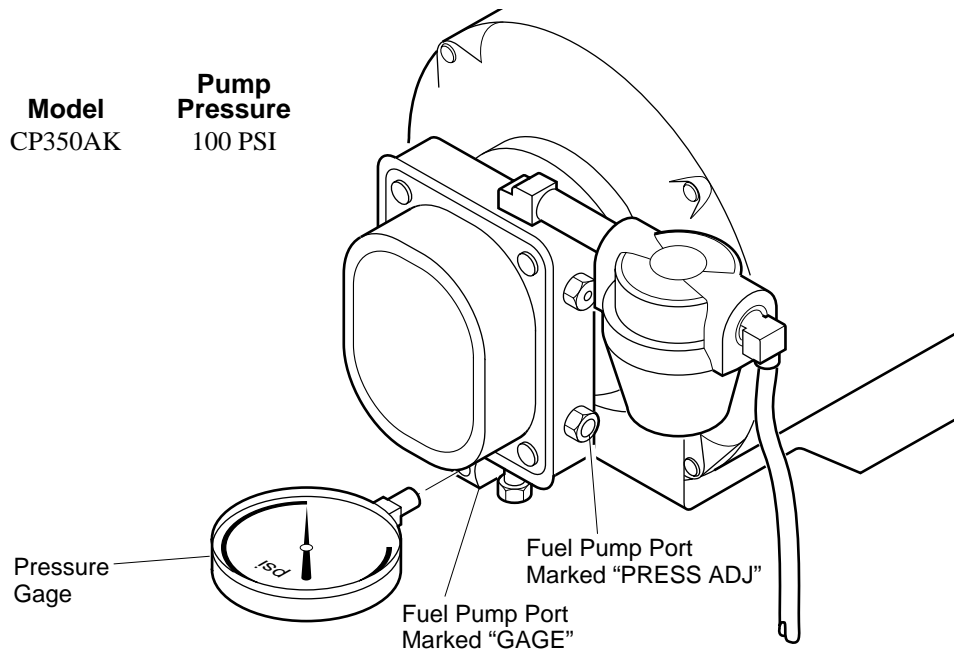


Figure 9 - Adjusting Pump Pressure

Pump (Procedure if pump is binding)

1. Remove upper shell (see page 12).
2. Loosen hex screw on flange clamp at rear of motor with 5/16" nut-driver (see Figure 10).
3. Turn fan with hand (see Figure 11).
4. If fan turns freely, tighten screw on flange clamp.
5. If fan does not turn freely, replace pump.
6. Replace upper shell.

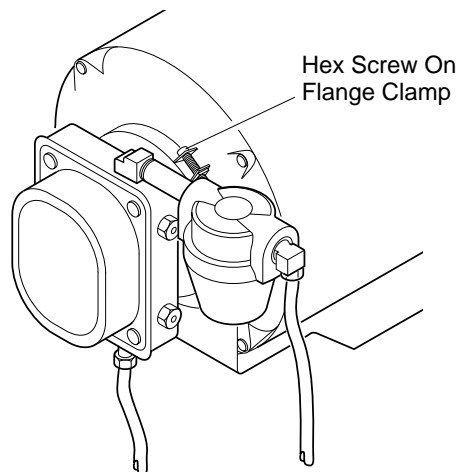


Figure 10 - Location of Screw on Flange Clamp

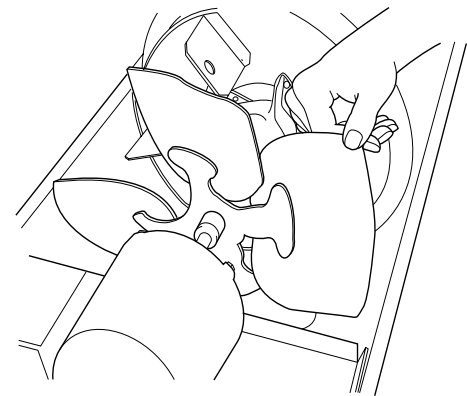


Figure 11- Turning Fan with Hand

Fuel Lines (Procedure for tightening fuel lines)

1. Remove upper shell (see page 12).
2. Use an adjustable wrench as a backup on 90° fittings.
3. Use 7/16" wrench and tighten fuel lines at solenoid valve (see Figure 12), pump, and pump fuel filter assembly (see Figure 13).

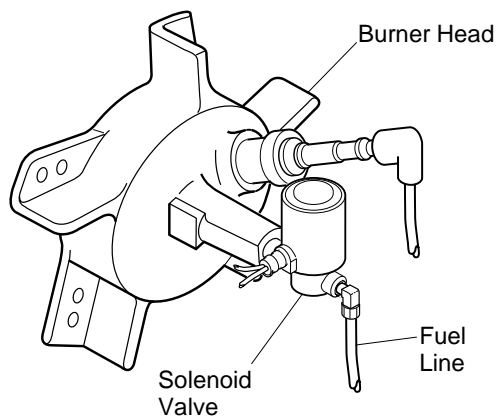


Figure 12 - Fuel Line at Solenoid Valve

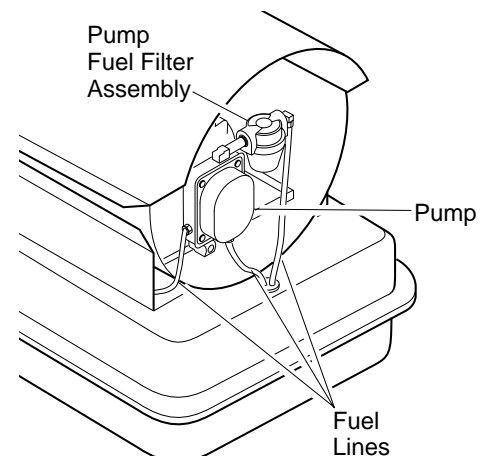


Figure 13 - Fuel Lines at Pump and Pump Fuel Filter Assembly

Fuel Filters

A. Tank Fuel Filter

1. Disconnect fuel lines from pump and pump fuel filter assembly with 7/16" wrench (see Figure 14).
2. Carefully pry fuel filter loose from fuel tank with flat end of screwdriver.
3. Inspect fuel filter for water or dirt.
4. Rinse fuel filter and fuel lines with clean kerosene.
5. Replace fuel filter into fuel tank.
6. Connect fuel lines to pump and pump fuel filter assembly.

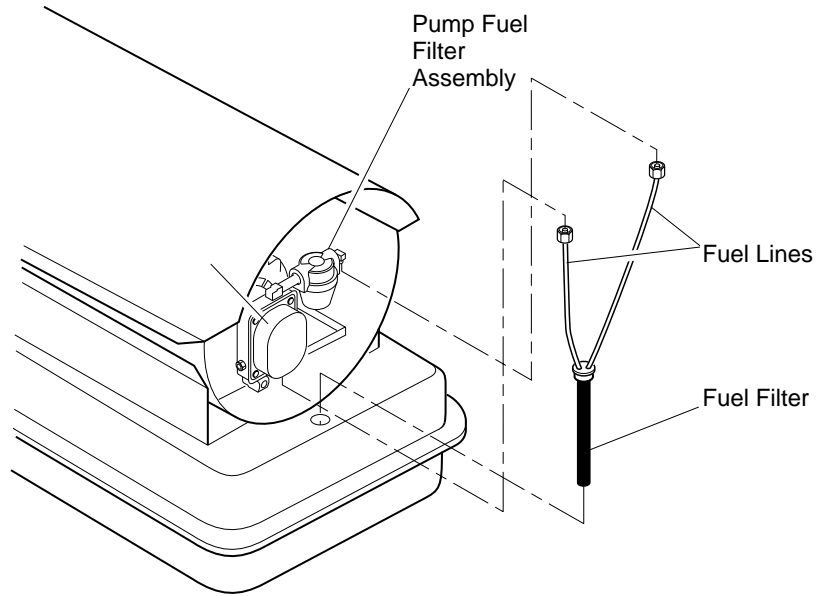


Figure 14 - Removing Tank Fuel Filter

B. Pump Fuel Filter

1. Unscrew canister bottom from canister top with adjustable pliers.
2. Remove fuel filter and gasket from canister bottom (see Figure 15).
3. Inspect canister bottom and fuel filter for water droplets or dirt.
4. Rinse canister bottom in clean kerosene.
5. Wipe inside of canister bottom dry with clean cloth.
6. Rinse fuel filter in clean kerosene.
7. Put clean fuel filter and gasket back in canister bottom.
8. Screw canister bottom into canister top.
9. Tighten securely.

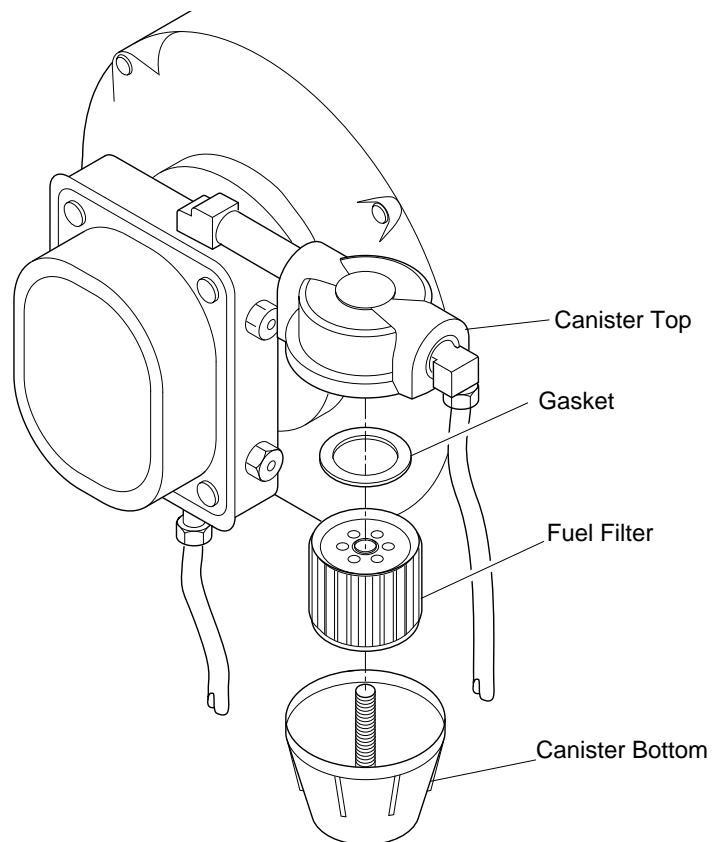


Figure 15 - Fuel Pump Filter and Canister

SPECIFICATIONS

350,000 BTU Unit

Output Rating (Btu/Hr)	350,000
Fuel	Use Only Kerosene or No. 1 Fuel Oil
Fuel Tank Capacity (U.S. Gallons)	30
Fuel Consumption (Gallons Per Hr)	2.5
Electric Requirements	120V/60 Hz
Amperage (Normal Run)	7.1
Motor RPM	1725
Fuel Pump Pressure (PSI)	100
Spark Plug Gap	.075"
Weight (approx. lbs.) Dry	180
With Full Fuel Tank	390

WIRING DIAGRAM

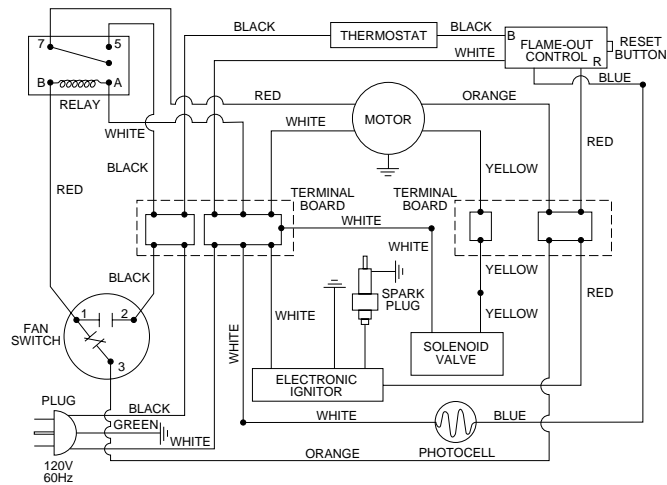


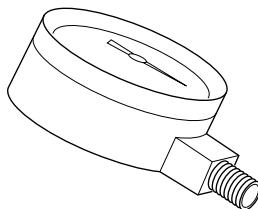
Figure 16 - Wiring Diagram

MAINTENANCE KITS

<u>Kit</u>	<u>Part Number</u>
Flame-Out Control	500-20904
Spark Plug	500-20905

ACCESSORY

Purchase this heater accessory from your nearest dealer or service center. If they cannot supply this accessory, contact L.B.White's Parts Department at 1-800-345-7200 for information. You can also write to the address listed on the back page of this manual.



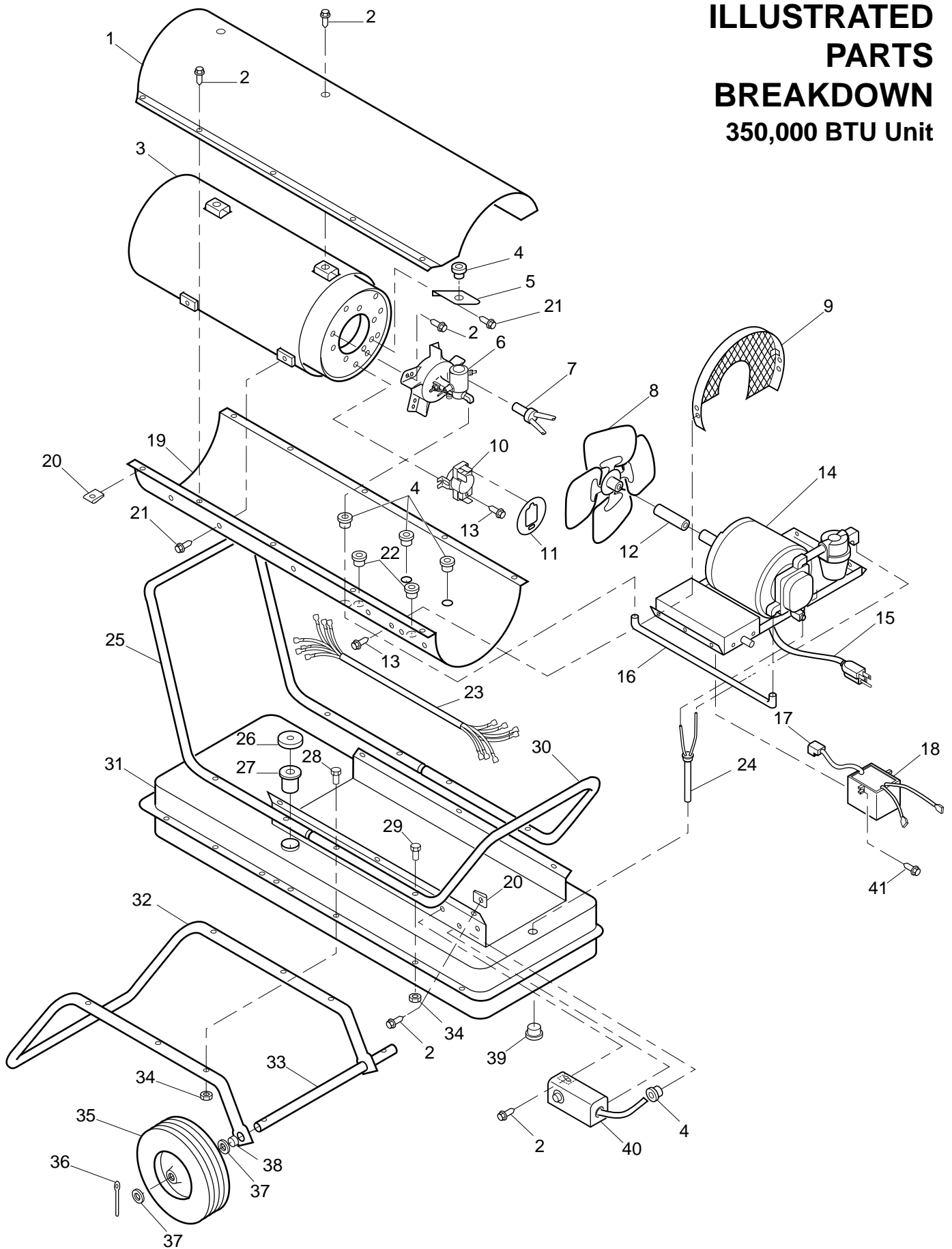
FUEL PRESSURE GAGE (500-20914)

Special tool to check fuel pump pressure

TECHNICAL SERVICE

You may have further questions about installation, operation, or troubleshooting. If so, contact L.B.White's Technical Service Department at 1-800-345-7200.

ILLUSTRATED PARTS BREAKDOWN 350,000 BTU Unit



PARTS LIST

350,000 BTU Unit

This list contains replaceable parts used in your heater. When ordering parts, be sure to provide the correct model and serial numbers (from the model plate), then the part number and description of the desired part.

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	130-20768	Upper shell	1
2	130-20805	Screw, #10-16 x 1/2"	15
3	130-20776	Combustion chamber & shield	1
4	130-20931	Bushing	7
5	130-20942	Air deflector	5
6	400-20829	Burner head assembly	1
7	130-20828	Photocell assembly	1
8	130-20845	Fan	1
9	130-20937	Fan guard	1
10	120-20938	Fan switch	1
11	130-20939	Fan switch cover	1
12	130-20941	Sleeve	1
13	130-20806	Screw, #10-16 x 3/8"	13
14	†	Motor & pump assembly	1
15	120-20892	Power cord	1
16	130-20940	Fuel line	1
17	120-20891	Ignition boot	1
18	120-20890	Electronic Ignitor	1
19	130-20769	Lower shell	1
20	130-20936	Clip nut	16
21	130-20815	Screw, #12-14 x 1/2"	14
22	130-20932	Bushing	2
23	120-20897	Wire harness	1
24	130-20943	Fuel line assembly	1
25	130-20780	Front handle	1
26	130-20944	Fuel cap	1
27	130-20946	Filler neck screen	1
28	130-20817	Screw, 1/4-20 x 2 1/4"	6
29	130-20816	Screw, 1/4-20 x 1 1/2"	2
30	130-20781	Rear handle	1
31	130-20779	Fuel tank	1
32	130-20846	Wheel support frame	1
33	130-20848	Axle	1
34	130-20818	Hex lock nut, 1/4-20	8
35	130-20847	Wheel	2
36	130-20824	Cotter pin, 5/32 x 1 1/4"	2
37	130-20823	Flatwasher, 5/8"	4
38	130-20849	Wheel spacer	2
39	130-20945	Drain plug	1
40	120-20898	Thermostat	1
41	130-20807	Screw, #10-16 x 3/4"	2

†Not available as complete assembly. See page 19.

Burner Head Assembly 350,000 BTU Unit

REF NO.	PART NO.	DESCRIPTION	QTY.
1	130-20808	Screw, #6-32 x 3/8"	2
2	130-20826	Photocell bracket	1
3	130-20830	Spark plug	1
4	130-20767	Nozzle	1
5	130-20839	Plug	1
6	130-20836	Burner head body	1
7	130-20841	Straight nipple	1
8	120-20840	Solenoid valve	1
9	130-20842	Compression elbow	1

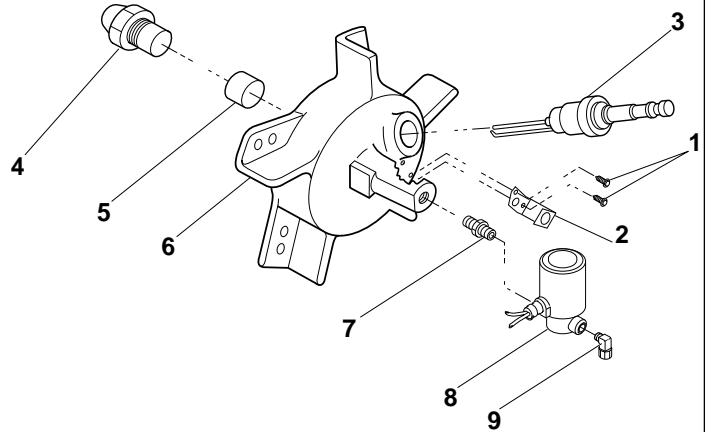


Figure 17 - Burner Head Assembly

Motor and Pump Assembly 350,000 BTU Unit

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	130-20868	Wiring cover	1
2	130-20819	Screw, 5/16-24 x 5/16"	4
3	130-20820	External lockwasher, 5/16"	4
4	130-20806	Screw, #10-16 x 3/8"	3
5	120-20870	Motor	1
6	130-20866	Flange clamp (holds pump to motor)	1
7	130-20865	Motor support	1
8	130-20871	Street elbow	2
9	130-20872	Pipe nipple	1
10	400-20873	Fuel filter assembly	1
	130-20874	Filter element (inside fuel filter assembly, includes rubber gaskets)	1
11	130-20869	90° Male elbow	1
12	130-20842	Compression elbow	1
13	130-20925	Straight fitting	1
14	130-20867	Fuel pump	1
15	130-20820**	Lockwasher, 5/16"	4
16	130-20821	Hex nut, 5/16-24"	4
17	120-20875	Flame-out control	1
18	120-20896	Power relay	1
19	130-20926	Snap bushing	3
20	130-20808	Screw, #6-32 x 3/8"	2
21	130-20927	Strain relief bushing	1
22	130-20811	Screw, #8-32 x 1/4"	1
23	120-20887	Terminal board	1
24	120-20895	Terminal board	1
25	130-20927	Rivet	2

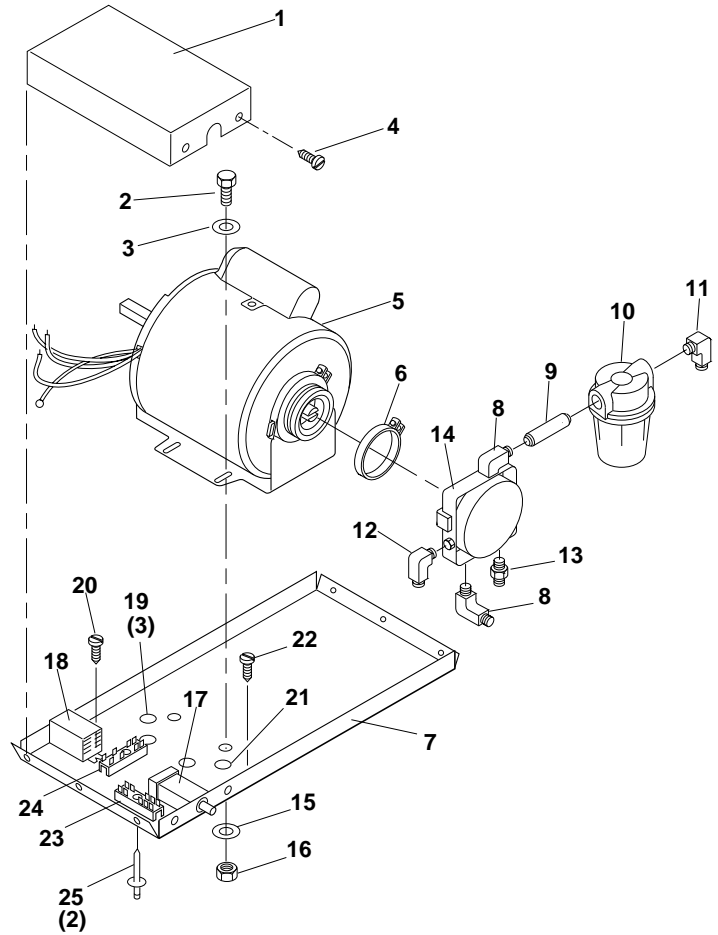


Figure 18 - Motor And Pump Assembly

** Standard hardware item

Thank
you

for purchasing L. B. White. This L. B. White heater incorporates the benefits from the most experienced manufacturer of heating products using state-of-the-art technology.

If you have any suggestions or comments, please call us toll-free at 1-800-345-7200 or write or fax us at:

L.B. White Co., Inc.
W6636 L.B. White Road
Onalaska, Wisconsin 54650
Fax: 608 783-6115

I. WARRANTY

A. Equipment

L.B. White Co., Inc. warrants that the component parts of its equipment are free from defects in material and workmanship, when properly operated and maintained in accordance with the maintenance instructions, safety guides and labels contained with each unit. If, **within 12 months from the date of purchase by the end user**, any component is found to be defective, L. B. White Co., Inc. will, at its option, repair or replace the defective part or equipment with a new part or equipment, F.O.B., Onalaska, Wisconsin.

B. Parts

L. B. White Co., Inc. warrants that replacement parts purchased from the company and used on the appropriate L. B. White equipment are free from defects both in material and workmanship for **12 months from the date of purchase by the end user**. Warranty is automatic if a component is found defective within 12 months of the date code marked on the part. If the defect occurs more than 12 months later than the date code but within 12 months from the date of purchase by the end user, a copy of a bill of sale will be required to establish warranty qualification.

II. GENERAL INFORMATION

IMPORTANT

This Owner's Manual and all safety-related information as shipped with this unit should be kept by the owner for future reference.

Read this Owner's Manual and any other safety-related information accompanying this product before attempting to use or service it.

Save this manual and all other safety-related information for future reference.

This Manual will instruct you in the service and care of your unit. The parts lists within this manual are designed for ease of parts selection. Wherever possible, the parts list allows parts selection without use of the model number. Parts may be selected by referring to applicable illustrations.

Contact your local L. B. White distributor or the L. B. White Co., Inc. for assistance or if you have any questions about the use of the equipment or its application.

The L. B. White Co., Inc. has a policy of continuous product improvement. It reserves the right to change specifications and design without notice.

L.B.WHITE®

W6636 L.B. White Rd., Onalaska, WI 54650 ■ (800) 345-7200 ■ (608) 783-5691 ■ Fax: (608) 783-6115

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