

SEARS

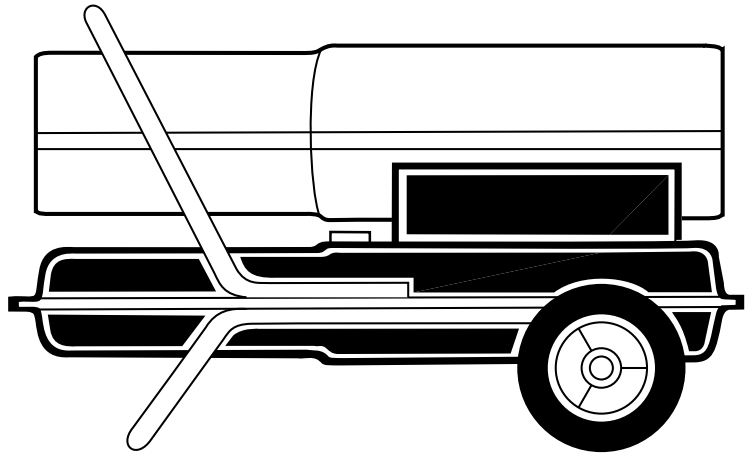
OWNER'S MANUAL

MODEL
NUMBERS:
583.756700
583.756720
583.756730

SERIAL NO. _____
(owner - write in No.)

CAUTION:
Read Rules for
Safe Operation
and Instructions
Carefully

SAVE THIS MANUAL FOR
FUTURE REFERENCE



Heater Sizes:
40,000 60,000 and 115,000 Btu/Hr

Operation and Maintenance
Instructions with Parts List





40,000, 60,000 and 115,000 Btu/Hr

PORTABLE FORCED AIR HEATERS

WARRANTY

For one year from the date of purchase, Sears will repair any defect in material or workmanship in this portable heater at no charge.

If the portable heater is used for commercial or rental purposes, this warranty applies for only thirty days from the date of purchase.


Warranty service is available by simply returning the heater to the nearest Sears Service Center. This warranty gives you the specific legal rights, and you may also have other rights which vary from state to state.

Sold by Sears, Roebuck and Co., 3333 Beverly Road, Hoffman Estates, IL 60179

SAFETY INFORMATION

WARNINGS

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.

- 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 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 if heater is 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 is equipped with a thermostat. Heater may start 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.

OWNER'S MANUAL

PRODUCT IDENTIFICATION

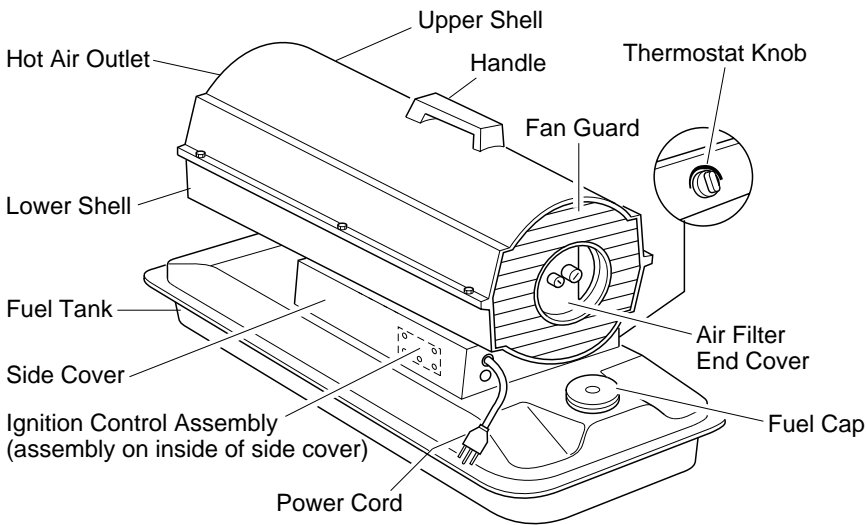


Figure 1 - 40,000 & 60,000 Btu/Hr Models

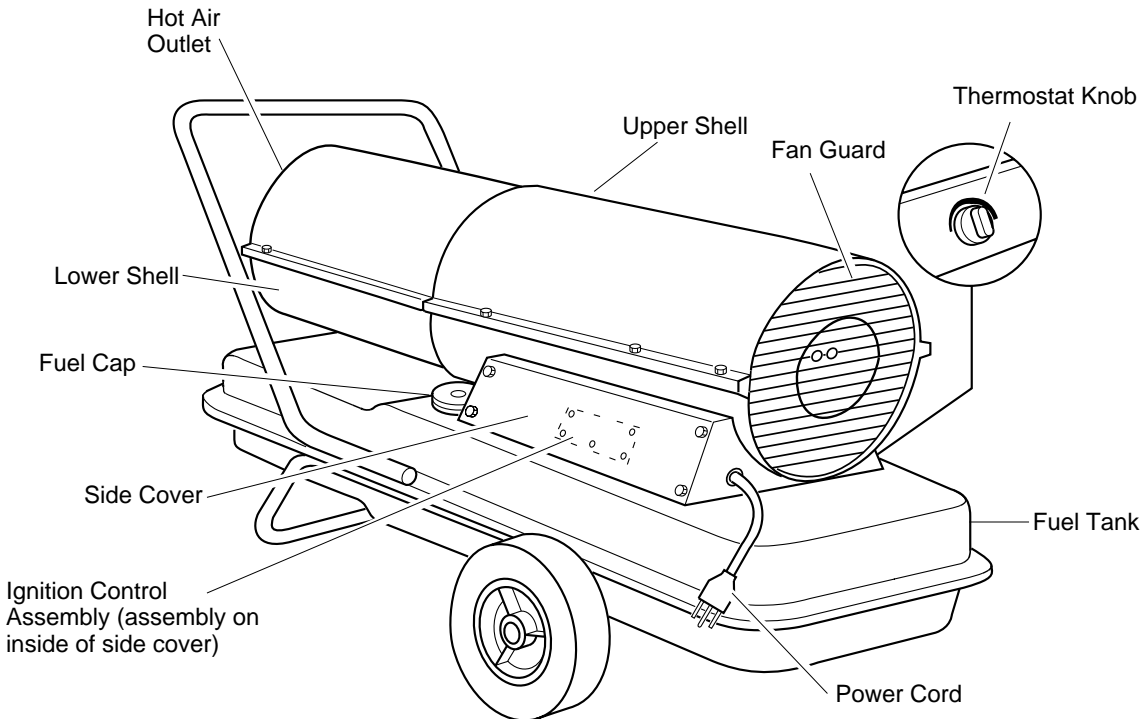


Figure 2 - 115,000 Btu/Hr Model

UNPACKING

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

PORTABLE FORCED AIR HEATERS

ASSEMBLY

Some models are furnished with wheels and a handle. Wheels, handle, and the mounting hardware are found in the shipping carton.

Tools Needed

- Medium Phillips Screwdriver
- 3/8" Open or Adjustable Wrench
- Hammer

1. Slide axle through wheel support frame. Install wheels on axle.
IMPORTANT: When installing wheels, point extended hub of wheels toward wheel support frame (see Figure 3).

2. Place cap nuts on axle ends. Gently tap with hammer to secure.
3. Place heater on wheel support frame. Make sure air inlet end (rear) of heater is over wheels. Line up holes on fuel tank flange with holes on wheel support frame.
4. Place handle on top of fuel tank flange. Insert screws through handle, fuel tank flange, and wheel support frame. Attach nut finger tight after each screw is inserted.
5. After all screws are inserted, tighten nuts firmly.

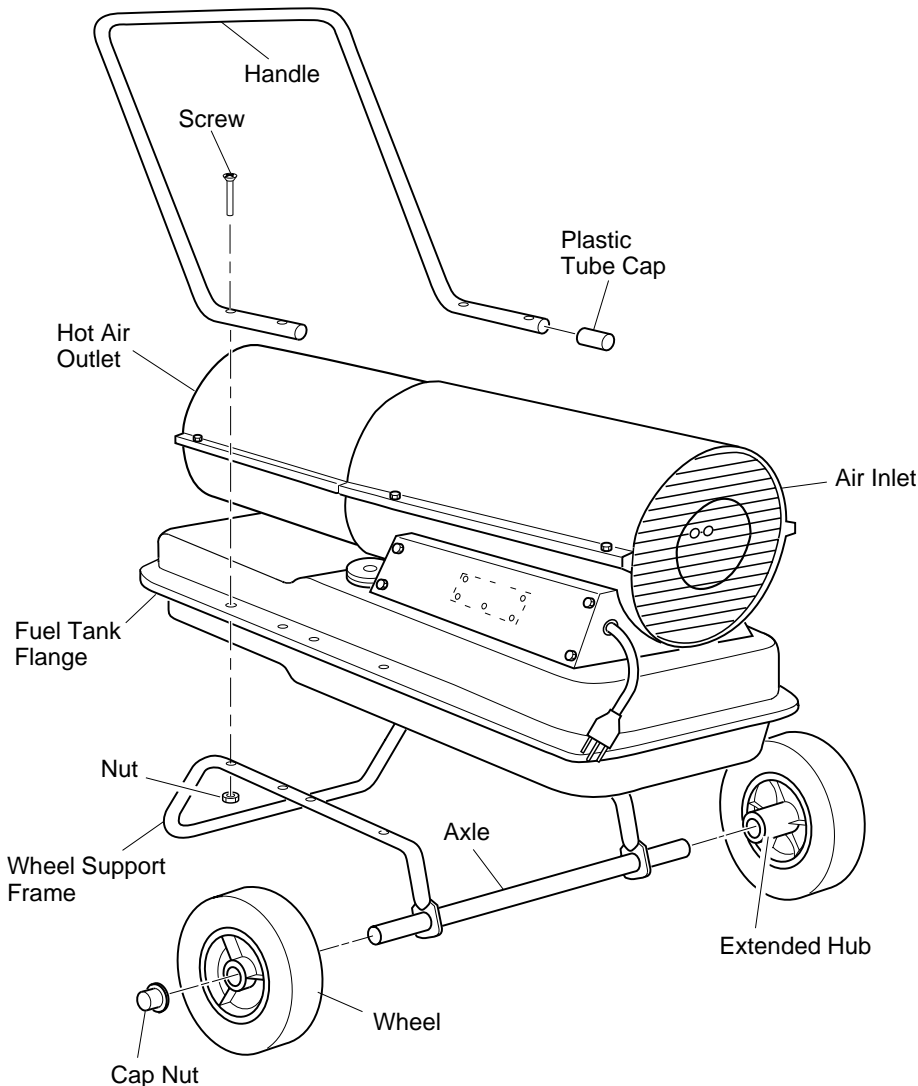


Figure 3 - Wheel and Handle Assembly

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 a clogged fuel filter and/or nozzle.

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

VENTILATION

⚠ 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.

Provide at least a three-square-foot opening of fresh, outside air for each 100,000 Btu/Hr rating. Provide extra fresh air if more heaters are being used.

Example: A 115,000 Btu/Hr heater requires one of the following:

- a two-car garage door (16 feet wide opening) raised three inches
- a single-car garage door (9 feet wide opening) raised five inches
- two 30 inch wide windows raised eight inches

OWNER'S MANUAL

THEORY OF OPERATION

The Fuel System: The air pump forces air through the air line. The air is then pushed through the nozzle. This air causes fuel to lift from the tank. 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 ignition control assembly provides power to the ignitor. This ignites the fuel/air mixture in the combustion chamber.

The Flame-Out Control System: This system causes the heater to shut down if the flame goes out.

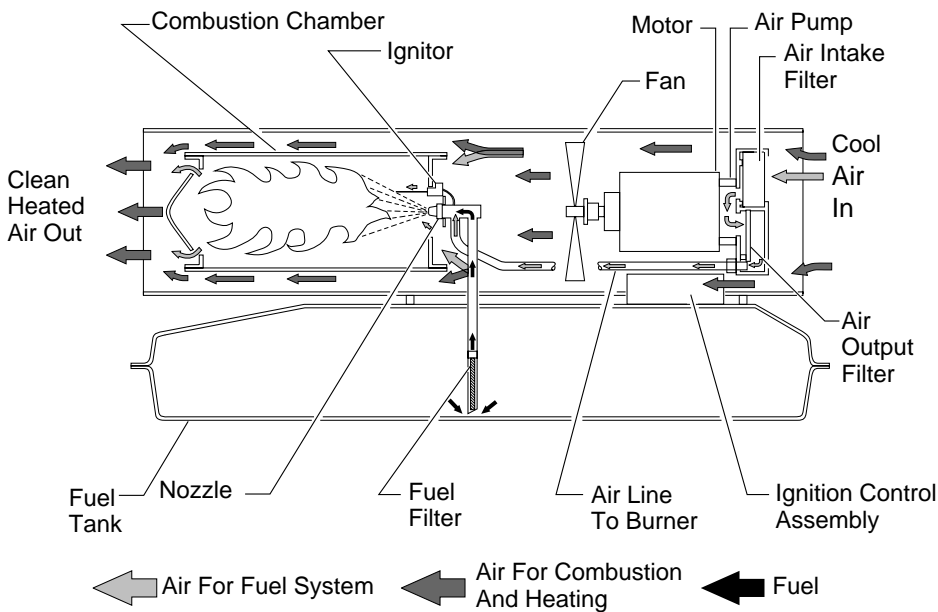


Figure 4 - Cross Section Operational View

OPERATION

⚠ WARNING: Review and understand the warnings in the *Safety Information* section, page 2. They are needed to safely operate this heater. Follow all local codes when using this heater.

TO START HEATER

1. Follow all ventilation and safety information.
2. Locate heater to provide maximum circulation of the heated air. Follow all location requirements noted in *Safety Information*, page 2.
3. Fill fuel tank with kerosene or No. 1 fuel oil.
4. Attach fuel cap.
5. Turn thermostat knob clockwise to the HIGH position.
6. Plug power cord of heater into three-prong, grounded extension cord. Extension cord must be at least six feet long.

Extension Cord Wire Size Requirements

- 6 to 10 feet long, use 18AWG rated cord
 - 11 to 100 feet long, use 16 AWG rated cord
 - 101 to 200 feet long, use 14 AWG rated cord
7. Plug extension cord into standard 120 volt/60 hertz, three-hole, grounded outlet. *Note:* Ignitor will preheat for five seconds then heater will start.
 8. Adjust thermostat knob to the desired setting. *Note:* A cold heater may affect the thermostat setting. Further adjustments may be needed until the heater cycles at the desired setting. This thermostat is a general-heating control. It is not intended for precise temperature control.

TO STOP HEATER

1. Unplug extension cord from outlet.

TO RESET HEATER

1. Unplug extension cord from outlet and wait 10 seconds (two minutes if heater has been running).
2. Repeat steps 5 through 8 of *To Start Heater*.



40,000, 60,000 and 115,000 Btu/Hr

PORTABLE FORCED AIR HEATERS

STORING, TRANSPORTING, OR SHIPPING

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

1. Drain fuel tank. Drain fuel through fuel cap opening. Be sure all fuel is removed.
2. 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.
3. Replace fuel cap. Properly dispose of old and dirty fuel. Check with local automotive service stations that recycle oil.
4. If storing, store heater in dry place. 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

Item	How Often	How To
Fuel tank	Flush every 150-200 hours of operation or as needed	See <i>Storing, Transporting, or Shipping</i>
Air output and lint filters	Replace every 500 hours of operation or once a year	See <i>Air Output, Air Intake, and Lint Filters</i> , page 8
Air intake filter	Wash and dry with soap and water every 500 hours of operation or replace as needed	See <i>Air Output, Air Intake, and Lint Filters</i> , page 8
Fuel filter	Clean twice a heating season or replace as needed	See <i>Fuel Filter</i> , page 9
Ignitor	No maintenance required	
Fan blades	Clean each season or as needed	See <i>Fan</i> , page 8
Motor	Not required/permanently lubricated	

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

OWNER'S MANUAL

TROUBLESHOOTING

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

OBSERVED FAULT

POSSIBLE CAUSE

REMEDY

Motor does not start five seconds after heater is plugged in

1. No power to heater
2. Thermostat setting too low

1. Check circuit breaker in electrical panel
2. Turn thermostat knob to a higher setting

 **WARNING: High voltage!**

3. Bad electrical connection between motor and ignition control assembly or ignition control assembly and power cord
4. Blown fuse on ignition control assembly (115,000 Btu/Hr only)
5. Binding pump rotor
6. Defective ignition control assembly
7. Defective motor

3. Check all electrical connections. See *Wiring Diagram*, page 17
4. See *Ignition Control Assembly*, page 11
5. If fan does not turn freely, see *Pump Rotor*, page 11
6. Replace ignition control assembly
7. Replace motor

Motor starts and runs but heater does not ignite

1. No fuel in tank
2. Pump pressure incorrect
3. Dirty fuel filter
4. Obstruction in nozzle assembly
5. Water in fuel tank

1. Fill tank with kerosene
2. See *Pump Pressure Adjustment*, page 9
3. See *Fuel Filter*, page 9
4. See *Nozzle Assembly*, page 10
5. Drain and flush fuel tank with clean kerosene. See *Storing, Transporting, or Shipping*, page 6

 **WARNING: High voltage!**

6. Bad electrical connection between ignitor and ignition control assembly
7. Defective ignitor
8. Defective ignition control assembly

6. Check electrical connections. See *Wiring Diagram*, page 17
7. Replace ignitor, see page 9
8. Replace ignition control assembly

Heater ignites but ignition control assembly shuts heater off after a short period of time

1. Pump pressure incorrect
2. Dirty air intake, air output, and/or lint filter
3. Dirty fuel filter
4. Obstruction in nozzle assembly
5. Photocell assembly not properly installed (not seeing the flame)

1. See *Pump Pressure Adjustment*, page 9
2. See *Air Output, Air Intake, and Lint Filters*, page 8
3. See *Fuel Filter*, page 9
4. See *Nozzle Assembly*, page 10
5. Make sure photocell boot is properly seated in bracket

 **WARNING: High voltage!**

6. Dirty photocell lens
7. Bad electrical connection between photocell and ignition control assembly
8. Defective photocell
9. Defective ignition control assembly

6. Clean photocell lens
7. Check electrical connections. See *Wiring Diagram*, page 17
8. Replace photocell
9. Replace ignition control assembly

PORTABLE FORCED AIR HEATERS

SERVICE PROCEDURES

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

UPPER SHELL REMOVAL

1. Remove screws along each side of heater using 5/16" nut-driver. These screws attach upper and lower shells together.
2. Lift upper shell off.
3. Remove fan guard.

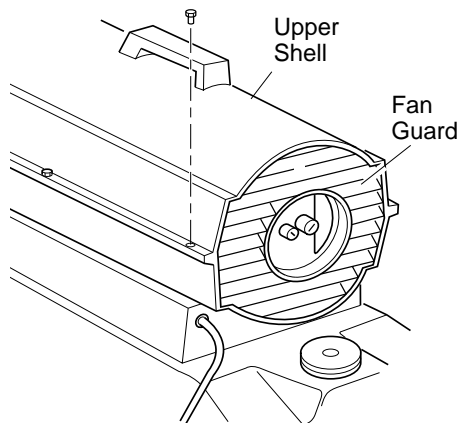


Figure 5 - Upper Shell Removal 40,000 & 60,000 Btu/Hr Models

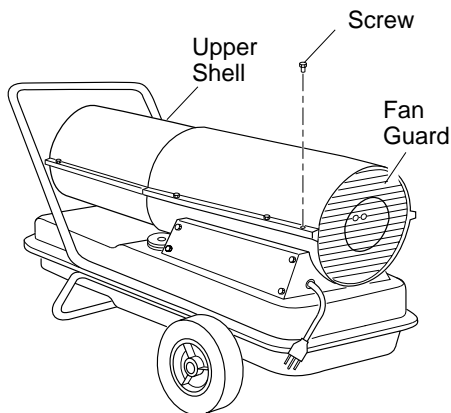


Figure 6 - Upper Shell Removal 115,000 Btu/Hr Models

FAN

IMPORTANT: Remove fan from motor shaft before removing motor from heater. The weight of the motor resting on the fan could damage the fan pitch.

1. Remove upper shell (see column 1).
2. Use 1/8" Allen wrench to loosen set-screw which holds fan to motor shaft.
3. Slip fan off motor shaft.
4. Clean fan using soft cloth moistened with kerosene or solvent.
5. Dry fan thoroughly.
6. Replace fan on motor shaft. Place fan hub flush with end of motor shaft (see Figure 7).
7. Place setscrew on flat of shaft. Tighten setscrew firmly (40-50 inch-pounds).
8. Replace fan guard and upper shell.

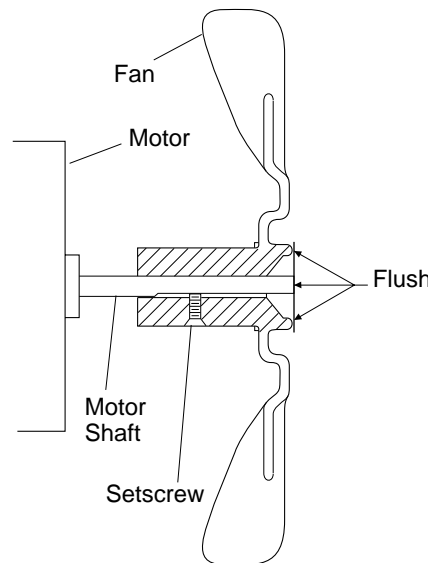


Figure 7 - Fan Cross Section

AIR OUTPUT, AIR INTAKE, AND LINT FILTERS

1. Remove upper shell (see *Upper Shell Removal*).
2. Remove filter end cover screws using 5/16" nut-driver.
3. Remove filter end cover.
4. Replace air output and lint filters.
5. Wash or replace air intake filter (see *Preventative Maintenance Schedule*, page 6).
6. Replace filter end cover.
7. Replace fan guard and upper shell. **IMPORTANT:** Do not oil filters.

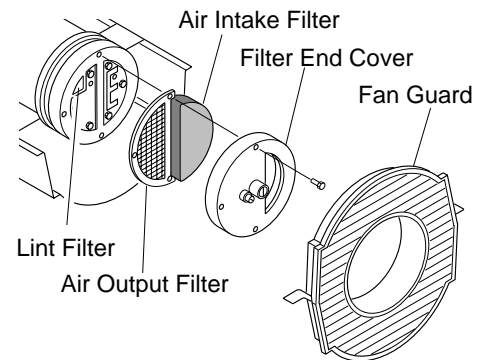


Figure 8 - Air Output, Air Intake, and Lint Filters 40,000 & 60,000 Btu/Hr Models

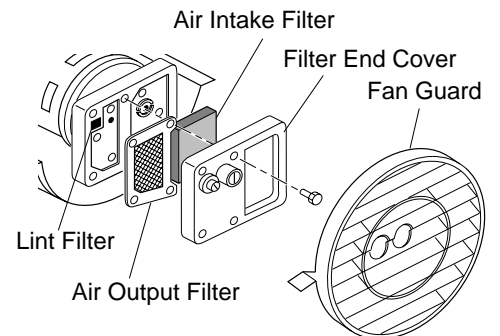


Figure 9 - Air Output, Air Intake, and Lint Filters 115,000 Btu/Hr Models

SERVICE PROCEDURES

Continued

PUMP PRESSURE ADJUSTMENT

1. Remove pressure gauge plug from filter end cover.
2. Install accessory pressure gauge (part number 583.75802).
3. Start heater (see *Operation*, page 5). Allow motor to reach full speed.
4. Using a flat blade screwdriver, adjust pressure. Turn relief valve to right to increase the pressure. Turn relief valve to left to decrease the pressure. Set pump pressure at 3.0 psi for 40,000 Btu/Hr model, 3.4 psi for 60,000 Btu/Hr model, and 5.3 psi for 115,000 Btu/Hr model.
5. Stop heater (see *Operation*, page 5).
6. Remove pressure gauge. Replace pressure gauge plug in filter end cover.

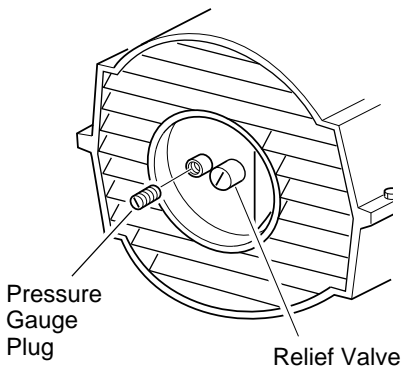


Figure 10 - Pressure Gauge Plug Removal 40,000 & 60,000 Btu/Hr Models Shown

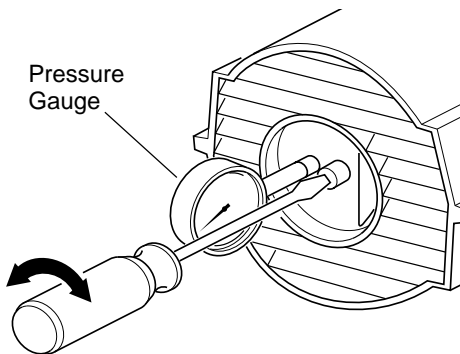


Figure 11 - Adjusting Pump Pressure 40,000 & 60,000 Btu/Hr Models Shown

FUEL FILTER

1. Remove side cover screws using 5/16" nut-driver.
2. Remove side cover.
3. Pull upper fuel line off fuel filter neck.
4. Carefully pry bushing, fuel filter, and lower fuel line out of fuel tank.
5. Wash fuel filter with clean fuel and replace in tank.
6. Attach upper fuel line to fuel filter neck.
7. Replace side cover.

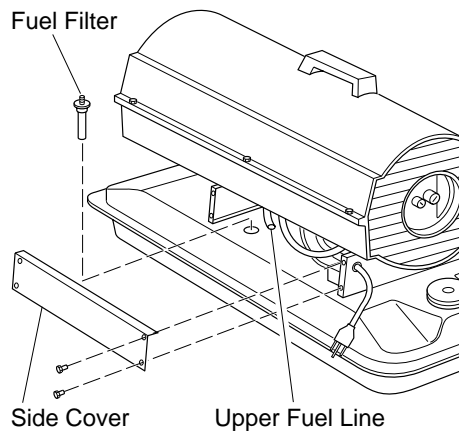


Figure 12 - Fuel Filter Removal 40,000 & 60,000 Btu/Hr Models

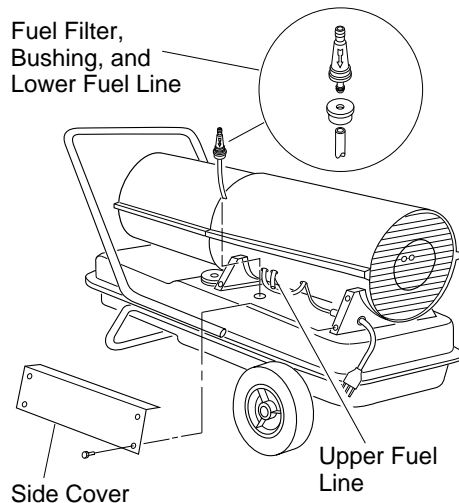


Figure 13 - Fuel Filter Removal 115,000 Btu/Hr Model

IGNITOR

1. Remove upper shell and fan guard (see page 8).
2. Remove fan (see page 8).
3. Remove 4 side cover screws with a 5/16" nut driver. Remove side cover (see Figures 12 and 13).
4. Disconnect ignitor wires (gray for 40,000 and 60,000 Btu/Hr models, yellow for 115,000 Btu/Hr model) from ignition control assembly (see Figure 14). Pull the ignitor wires up through the hole in the lower shell.
5. Disconnect fuel line hose and air line hose. Remove photocell from photocell bracket (see Figure 14).
6. Remove combustion chamber. Stand combustion chamber on end with nozzle adapter bracket on top (see Figure 15, page 10).
7. Remove ignitor screw with a 1/4" nut driver. Carefully remove ignitor from nozzle adapter bracket.

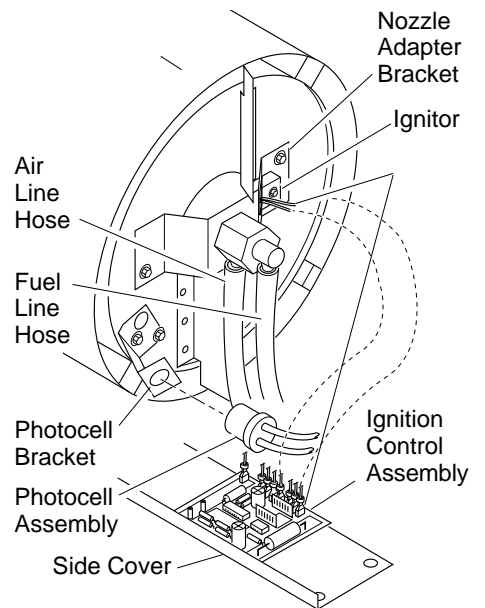


Figure 14 - Disconnecting Ignitor Wires from Ignition Control Assembly

Continued

PORTABLE FORCED AIR HEATERS

SERVICE PROCEDURES

Continued

CAUTION: Do not bend or strike ignitor element. Handle with care.

8. Carefully remove replacement ignitor from styrofoam packing.
9. Carefully guide ignitor into opening in nozzle adapter bracket. Do not strike ignitor element. Attach ignitor to nozzle adapter bracket with screw using a 1/4" nut driver (see Figure 15). Torque 8 to 15 in. lbs. Do not over torque.
10. Replace combustion chamber.
11. Route the ignitor wires back down through the hole in the lower shell. Connect wires to the ignition control assembly.
12. Replace side cover (see Figure 12 or 13, page 9).
13. Connect and route fuel line hose and air line hose to nozzle adapter assembly. See *Fuel and Air Line Replacement and Proper Routing*, page 11.
14. Replace photocell in photocell bracket. Route wires as shown in Figure 16 or 17.
15. Replace fan (see page 8).
16. Replace fan guard and upper shell (see page 8).

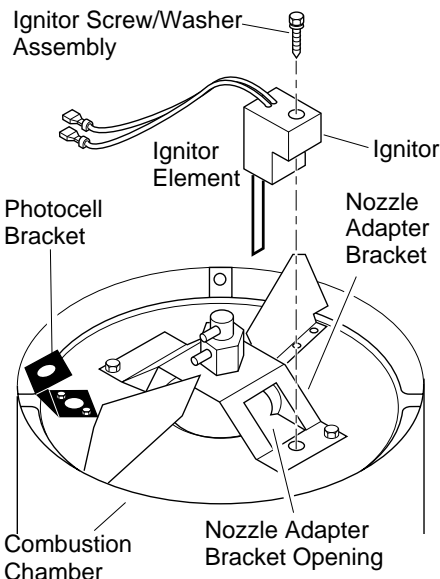


Figure 15 - Ignitor Replacement

NOZZLE ASSEMBLY

1. Remove upper shell (see page 8).
2. Remove fan (see page 8).
3. Remove fuel and air line hoses from nozzle assembly (see Figure 16 or 17).
4. Turn nozzle assembly 1/4 turn to left and pull toward motor to remove (see Figure 18).
5. Place plastic hex-body into vise and lightly tighten.
6. Carefully remove nozzle from the nozzle adapter using 5/8" socket wrench (see Figure 19).
7. Blow compressed air through face of nozzle. This will free any dirt in nozzle area.
8. Inspect nozzle seal for damage.
9. Replace nozzle into nozzle adapter until nozzle seats. Tighten 1/3 turn more using 5/8" socket wrench (40-45 inch-pounds). See Figure 19.
10. Attach nozzle assembly to burner strap.
11. Attach fuel and airline hoses to nozzle assembly. See *Fuel and Air Line Replacement and Proper Routing*, page 11.
12. Replace fan (see page 8).
13. Replace fan guard and upper shell (see page 8).

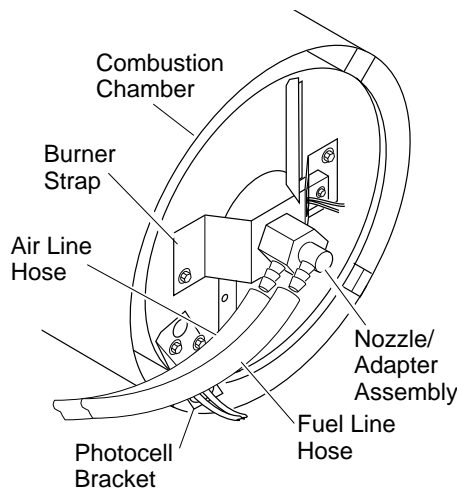


Figure 16 - Removing Air and Fuel Line Hoses (115,000 Btu/Hr Models Only)

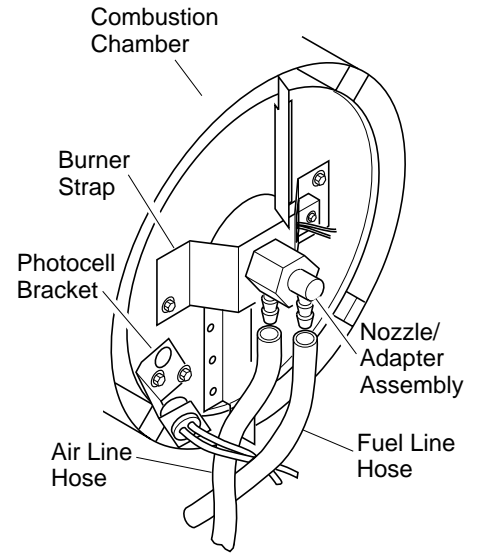


Figure 17 - Removing Air and Fuel Line Hoses (40, and 60,000 Btu/Hr Models Only)

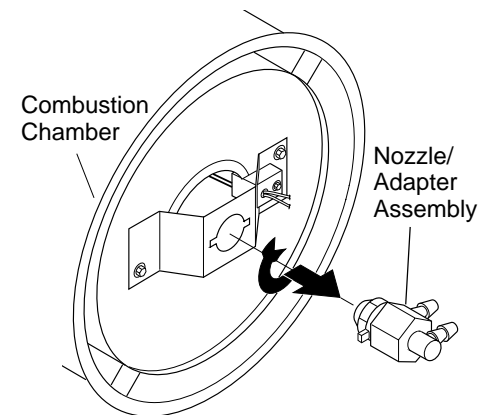


Figure 18 - Removing Nozzle/Adapter Assembly

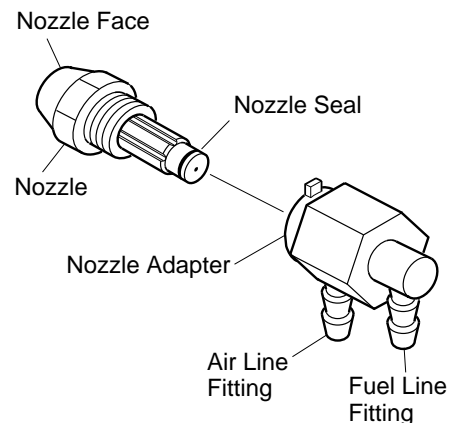


Figure 19 - Nozzle and Nozzle Adapter

SERVICE PROCEDURES

Continued FUEL AND AIR LINE REPLACEMENT AND PROPER ROUTING

1. Remove upper shell (see page 8).
2. Remove side cover screws using 5/16" nut driver.
3. Remove side cover.
4. Inspect fuel and air line hoses for cracks and/or holes. If fuel line hose is damaged, disconnect from nozzle adapter (see Figure 16 or 17, page 10) and from fuel filter (see page 9). If air line hose is damaged, disconnect from nozzle adapter (see Figure 16 or 17, page 10) and from barb fitting on pump end cover (see Figure 20).
5. Install new air and/or fuel line. Attach one end of air line hose to barb fitting on pump end cover (see Figure 20) and the other end to nozzle adapter (see Figure 16 or 17, page 10). Attach one end of fuel line hose to fuel filter (see page 9) and the other end to nozzle adapter (see Figure 16 or 17, page 10).
For 115,000 Btu heater, route air and fuel line approximately as shown in Figure 16. **Note:** Hoses are not to be touching photocell bracket.
For 40, and 60,000 Btu heaters, route air and fuel line approximately as shown in Figure 17, page 10. **Note:** Hoses are not to be touching photocell bracket.
6. Replace side cover.
7. Replace upper shell and fan guard (see page 8).

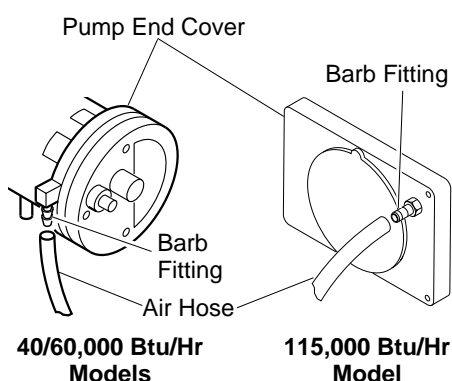


Figure 20 - Air Hose to Barb Fitting

PUMP ROTOR (Procedure if Rotor is Binding)

1. Remove upper shell (see page 8).
2. Remove filter end cover screws using 5/16" nut-driver.
3. Remove filter end cover and air filters (see Figure 21).
4. Remove pump plate screws using 5/16" nut-driver.
5. Remove pump plate.
6. Remove rotor, insert, and blades.
7. Check for debris in pump. If debris is found, blow out with compressed air.
8. Install insert and rotor.
9. Check gap on rotor. Adjust to .003"/.004" if needed (see Figure 22). **Note:** Rotate rotor one full turn to insure the gap is .003"/.004" at tightest position. Adjust if needed.
10. Install blades, pump plate, air filters, and filter end cover.
11. Replace fan guard and upper shell.
12. Adjust pump pressure (see page 9). **Note:** If rotor is still binding, proceed as follows.
13. Perform steps 1 through 6 above.
14. Place fine grade sandpaper (600 grit) on flat surface. Sand rotor lightly in "figure 8" motion four times (see Figure 23).
15. Reinstall insert and rotor.
16. Perform steps 10 through 12 above.

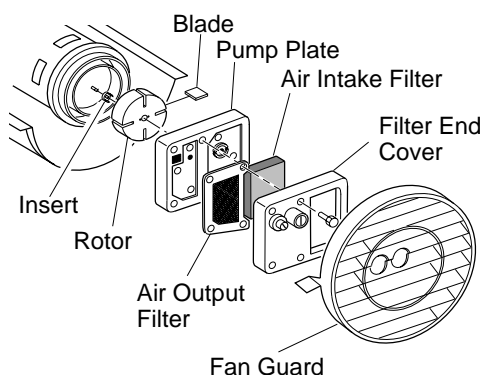


Figure 21 - Rotor Location 115,000 Btu/Hr Model Shown

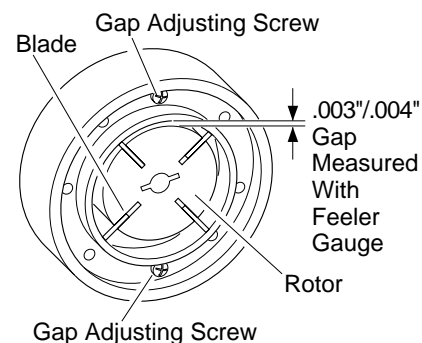


Figure 22 - Gap Adjusting Screw Locations

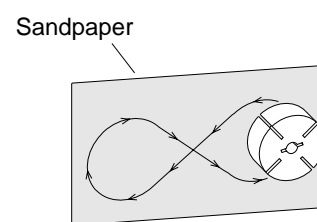


Figure 23 - Sanding Rotor

IGNITION CONTROL ASSEMBLY

(Procedure for Replacing Fuse, 115,000 Btu/Hr Model)

WARNING: High Voltage

1. Unplug heater
2. Remove side cover screws (4) using 5/16" nut-driver to expose ignition control assembly.
3. Remove fuse cover (see Figure 24).
4. Remove fuse from fuse clips.
5. Replace fuse with fuse of the same type and rating (GMA-10). Do not substitute a fuse with a higher current rating.
6. Replace fuse cover.
7. Replace side cover.

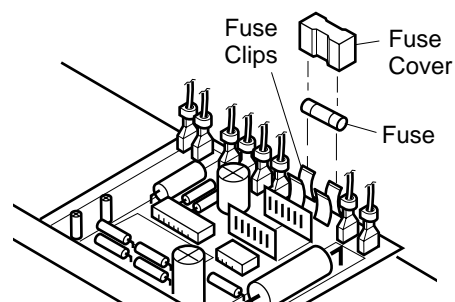
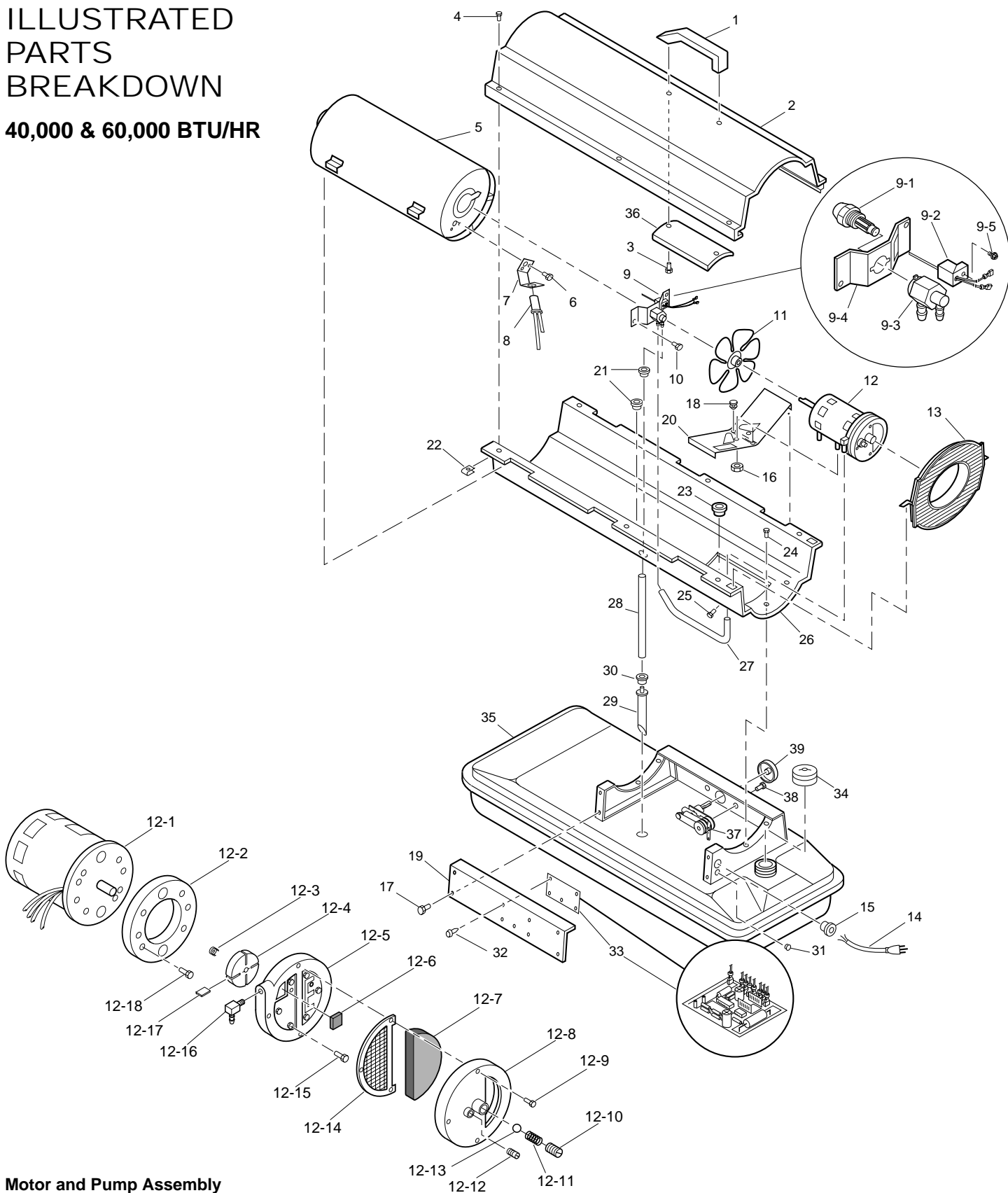


Figure 24 - Replacing Fuse

SEARS 40,000 and 60,000 Btu/Hr PORTABLE FORCED AIR HEATERS

ILLUSTRATED PARTS BREAKDOWN

40,000 & 60,000 BTU/HR



Motor and Pump Assembly

OWNER'S MANUAL

PARTS LIST 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.

40,000 & 60,000 BTU/HR

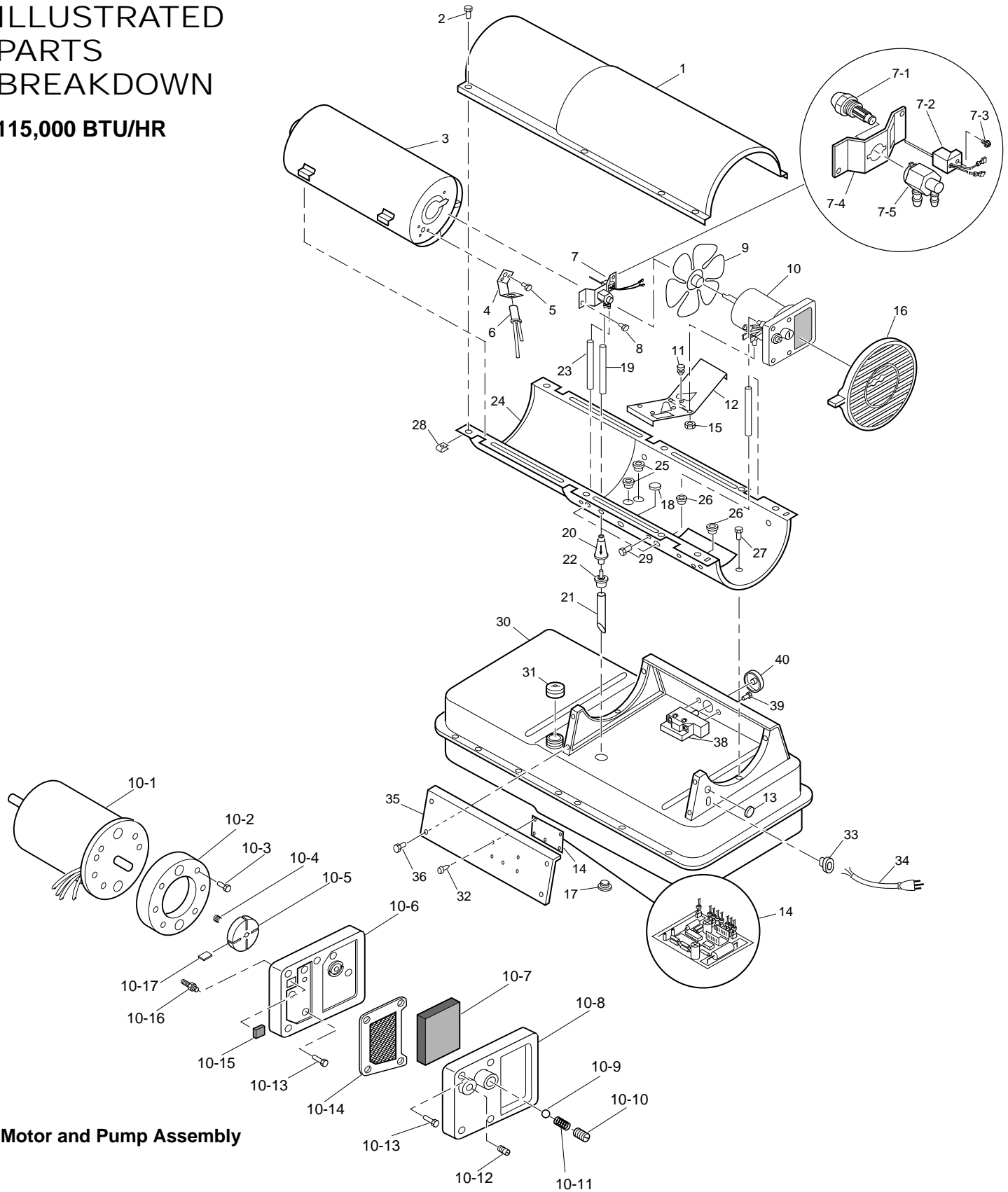
KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51104-01	Handle	1	13	M51105-01	Fan Guard	1
2	098511-156	Upper Shell	1	14	098219-27	Power Cord	1
3	M11084-29	Screw, #10-16 x 3/4"	2	15	M11143-1	Strain Relief Bushing	1
4	100647-01	Screw, #10-16 x 1/2"	6	16	NTC-4C	Hex Lock Nut, 1/4-20	2
5	098512-58	Combustion Chamber (40 Model)	1	17	M11084-26	Screw, #10-16 x 3/8"	4
	098512-50	Combustion Chamber (60 Model)	1	18	M50631	Rubber Bumper	2
6	M10908-2	Screw, #6-32 x 3/8"	2	19	097461-03AA	Side Cover	1
7	103154-03	Photocell Bracket	1	20	101205-01	Motor Bracket	1
8	M16656-23	Photocell Assembly	1	21	M30865-02	Bushing	2
9	Δ	Burner Head Assembly	1	22	M11271-8	Clip Nut	6
9-1	HA3006	Nozzle Assembly (40 Model)	1	23	M50104-02	Bushing	1
	100735-17	Nozzle Assembly (60 Model)	1	24	M11084-26	Screw, #10-16 x 3/8"	6
9-2	102548-01	Ignitor Kit	1	25	M10908-14	Screw, #8-32 x 3/8"	1
9-3	104056-01	Nozzle Adapter	1	26	098511-155	Lower Shell	1
9-4	102336-01	Nozzle Adapter Bracket	1	27	M50814-06	Rubber Airline	1
9-5	104023-01	Screw/Washer Assembly	1	28	079973-01	Fuel Line	1
10	M11084-26	Screw, #10-16 x 3/8"	2	29	M50876-04	Fuel Filter (with bushing) (40 Model)	1
11	103684-01	Fan	1		M50876-05	Fuel Filter (with bushing) (60 Model)	1
12	Δ	Motor and Pump Assembly	1	30	M10990-3	Rubber Bushing	1
12-1	102001-01	Motor	1	31	101695-01	Button Plug	1
12-2	079975-02	Pump Body (40 Model)	1	32	102349-01	PCB Support	5
	079975-03	Pump Body (60 Model)	1	33	104068-03	Ignition Control Assembly	1
12-3	M22009	Insert	1	34	097702-01	Fuel Cap (Includes Gasket)	1
12-4	M22456-1	Rotor (40 Model)	1	35	098513-99	Fuel Tank (40 Model)	1
	M22456-2	Rotor (60 Model)	1		098513-77	Fuel Tank (60 Model)	1
12-5	M29608	Pump End Cover	1	36	M51108-01	Shell Heat-Shield	1
12-6	M29632	Lint Filter	1	37	104458-01	Thermostat	1
12-7	M29633	Intake Filter	1	38	M12461-18	Screw, #8-32 x 7/8"	1
12-8	M29609	Filter End Cover	1	39	104460-01	Thermostat Knob	1
12-9	M12461-31	Screw, #10-32 x 1"	3	PARTS AVAILABLE - NOT SHOWN			
12-10	M27694	Adjusting Screw	1		100621-06	Thermostat Decal	1
12-11	M10993-1	Pressure Relief Spring	1		103814-01	Wire Tie (Groups wires connected to ignition control assembly)	1
12-12	M22997	Plug	1		099650-01	Wire Clips (secures wires of thermostat)	1
12-13	M8940	Steel Ball, 1/4" Diameter	1		M9900-170	Wire Assembly (Connects thermostat to ignition control assembly)	1
12-14	M29612-01	Output Filter	1				
12-15	M12461-31	Screw, #10-32 x 1" (40 Model)	6				
	M12461-32	Screw, #10-32 x 1 1/8" (60 Model)	6				
12-16	103676-01	Nylon Elbow, 90°	1				
12-17	M8643	Blade (40 Model)	4				
	M8643-2	Blade (60 Model)	4				
12-18	FHPF3-5C	Screw, #10-32 x 5/8" (40 Model)	2				
	FHPF3-6C	Screw, #10-32 x 3/4" (60 Model)	2				

Δ Not available as an assembly

PORTABLE FORCED AIR HEATERS

ILLUSTRATED PARTS BREAKDOWN

115,000 BTU/HR



Motor and Pump Assembly

OWNER'S MANUAL

PARTS LIST 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.

115,000 BTU/HR

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	098511-158	Upper Shell	1	14	104068-02	Ignition Control Assembly	1
2	100647-01	Screw, #10-16 x 1/2"	8	15	NTC-4C	Hex Lock Nut, 1/4-20	2
3	098512-54	Combustion Chamber	1	16	M51114-01	Fan Guard	1
4	103971-01	Photocell Bracket	1	17	M27417	Drain Plug (Includes "o" Ring)	1
5	M10908-2	Screw, #6-32 x 3/8"	2	18	099213-01	Button Plug	1
6	M16656-24	Photocell Assembly	1	19	M51345-06	Fuel Line	1
7	***	Burner Head Assembly	1	20	099743-01	Fuel Filter	1
7-1	100735-19	Nozzle Assembly	1	21	M51151-01	Fuel Line Tube	1
7-2	102548-03	Ignitor Kit	1	22	M10990-3	Rubber Bushing	1
7-3	104023-01	Assembly, Screw/Washer	1	23	M50814-03	Airline	1
7-4	102336-01	Nozzle Adapter Bracket	1	24	098511-157	Lower Shell	1
7-5	104054-01	Nozzle Adapter	1	25	M50104-03	Bushing	2
8	M11084-27	Screw, #10-16 x 1/2"	2	26	M50104-01	Bushing	2
9	097293-01	Fan	1	27	M11084-27	Screw, #10-16 x 1/2"	6
10	***	Motor and Pump Assembly	1	28	M11271-8	Clip Nut	8
10-1	102001-21	Motor	1	29	M10908-14	Screw, #8-32 x 3/8"	1
10-2	079975-02	Pump Body	1	30	098513-87	Fuel Tank	1
10-3	FHPF3-5C	Screw, #10-32 x 5/8"	2	31	097702-01	Fuel Cap (Includes Gasket)	1
10-4	M22009	Rotor Insert	1	32	102349-01	P.C. Board Support	5
10-5	M22456-1	Pump Rotor	1	33	M11143-1	Strain Relief Bushing	1
10-6	M50545	Pump End Cover	1	34	098219-24	Power Cord	1
10-7	M12179	Intake Filter	1	35	M51077-09AA	Side Cover	1
10-8	M16545	Filter End Cover	1	36	M11084-27	Screw, #10-16 x 1/2"	4
10-9	M8940	Steel Ball, 1/4" Diameter	1	37	103814-01	Wire Tie (Not Shown)	1
10-10	M27694	Adjusting Screw	1	38	097657-03	Thermostat	1
10-11	M10993-1	Relief Spring	1	39	M10908-1	Screw, #6-32 x 1/4"	2
10-12	M22997	Plug	1	40	104905-01	Thermostat Knob	1
10-13	M12461-31	Screw, #10-32 x 1"	10	PARTS AVAILABLE - NOT SHOWN			
10-14	M12244-1	Output Filter	1		100621-06	Thermostat Decal	1
10-15	M11637	Lint Filter	1		103814-01	Wire Tie (Groups wires connected to ignition control assembly)	1
10-16	M50820-02	Barb Fitting	1		099650-01	Wire Clips (secures wires of thermostat)	1
10-17	M8643	Blade	4				
11	M50631	Rubber Bumper	2				
12	101206-01	Motor Mounting Bracket	1				
13	101695-01	Button Plug	1				

*** Not available as an assembly.

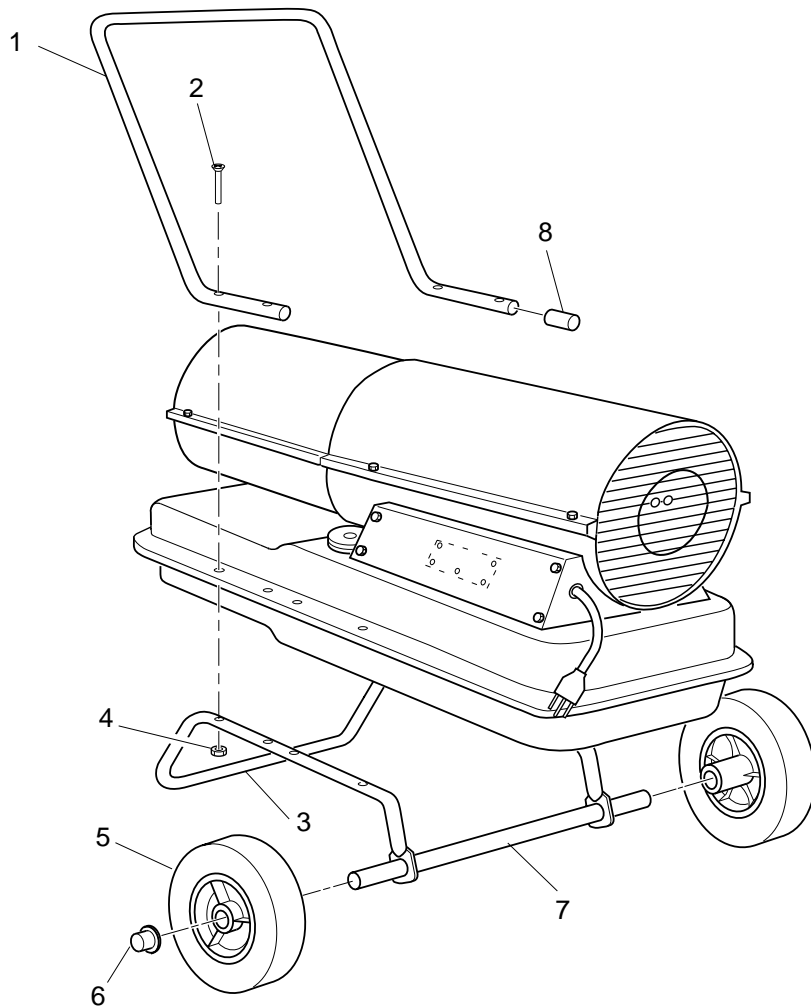
SEARS 115,000 Btu/Hr

PORTABLE FORCED AIR HEATERS

PARTS LIST

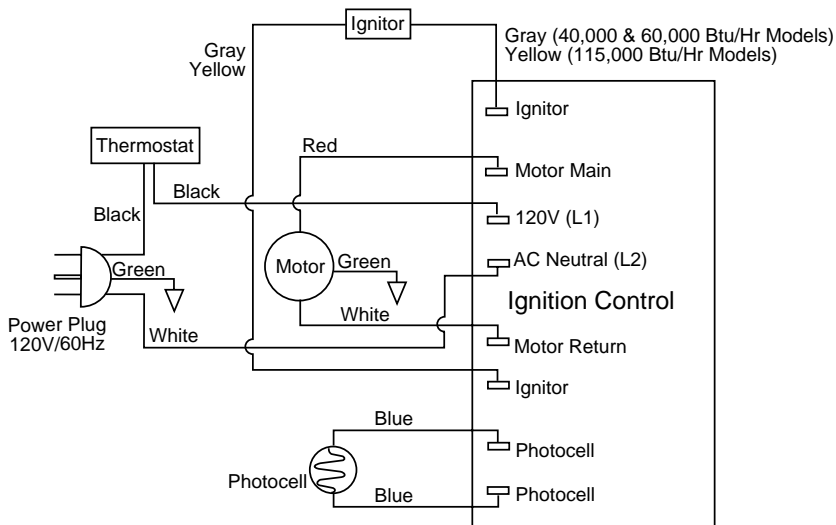
WHEELS AND HANDLE PARTS LIST 115,000 BTU/HR MODEL

KEY NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	HA2203	Handle	1
2	M12345-33	Screw, #10-24 x 1 3/4"	6
3	M12342-3	Wheel Support Frame	1
4	NTC-3C	Hex Nut, #10-24	6
5	097896-01	Wheel	2
6	M28526	Cap Nut	2
7	M51015-01	Axle	1
8	M51123-01	Tube Cap	2



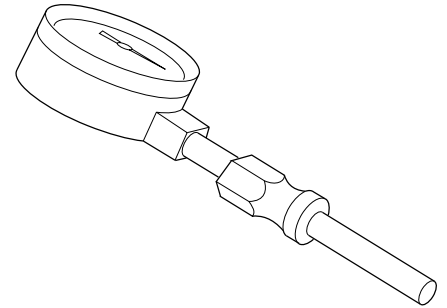
OWNER'S MANUAL

WIRING DIAGRAM



ACCESSORIES

Purchase accessories from your nearest Sears Store.



AIR GAUGE KIT - 583.75802

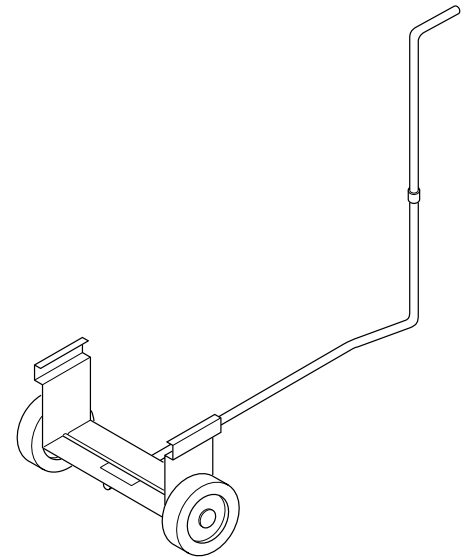
Special tool to check pump pressure.

SPECIFICATIONS

Output Rating (Btu/Hr)	40,000	60,000	115,000
Fuel	Use Only Kerosene or No. 1 Fuel Oil		
Fuel Tank Capacity (U.S. Gal.)	3.0	5.0	9.0
Fuel Consumption (Gal. Per Hr.)	.30	.44	.85
Electric Requirements	120 V/60 Hz		
Amperage (Normal Run)	2.0	2.0	3.6
Hot Air Output (CFM)	170	180	490
Motor RPM	3440	3440	3440
Motor HP	1/15	1/15	1/5
Shipping Weight (Approximate Pounds)	32	33	58
Heater Weight without Fuel (Approximate Pounds)	28	29	49

MAINTENANCE KITS

Btu/Hr	40,000	60,000	115,000
Fuel Tank Filter Screen	HA2210	HA2210	HA2210
Rotor/Air Pump Kit	HA3004	HA3005	HA3004
Filter Kit	HA3014	HA3014	HA3017
Pump Kit	HA3020	HA3020	HA3020



STANDARD WHEELS AND HANDLE KIT - 583.75800

Makes heater even more portable and convenient. Easy to assemble. Fits 40/60,000 Btu/Hr models.



OWNER'S
MANUAL

HOW TO ORDER
REPAIR PARTS

MODEL
NUMBERS:
583.756700
583.756720
583.756730

SEARS PORTABLE HEATERS

Now that you have purchased your portable heater, should a need ever exist for repair parts or service, simply contact any Sears service center. Be sure to provide all pertinent facts when you call or visit. The model and serial number of your portable heater will be found on a decal located on side of the Heater.

**WHEN ORDERING REPAIR PARTS,
ALWAYS GIVE THE FOLLOWING INFORMATION:**

1. Part Number
2. Model Number
3. Part Description
4. Name or Merchandise

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for "expedited handling."

Sold by Sears, Roebuck and Co., 3333 Beverly Road, Hoffman Estates, IL 60179

Printed in U.S.A.

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