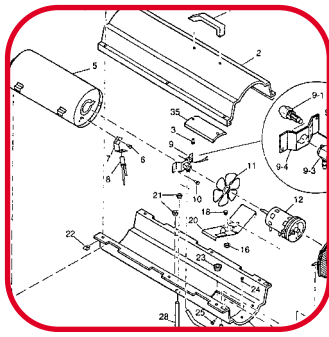
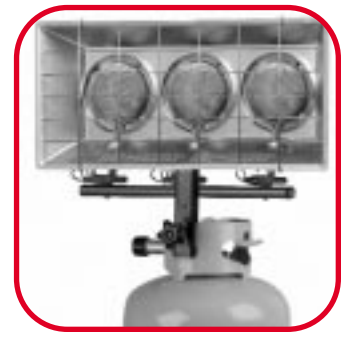




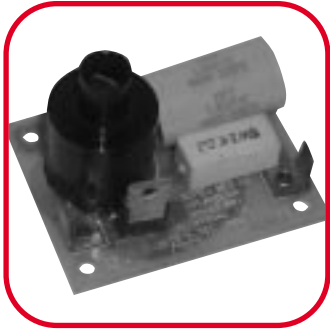
Propane Heaters



Breakdowns



Tanktop Heaters



Heater Parts



Oil-Fired Heaters



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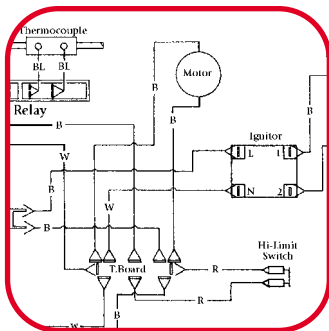
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How to use this manual:

Always begin with the make and model number of the heater. For ENERCO brand heaters which include Heatstar and Mr. Heater, the serial number from the heater will be needed. The part lists are divided into sections for each make or manufacturer. Turn to the index for the manufacturer and locate the model or btu size next. The most common heaters have an exploded part breakdown view. Following these breakdowns are Quick Part Reference sections which list the most commonly replaced parts for hundreds of models. PHP also maintains an extensive library of heater and equipment part lists available upon request.

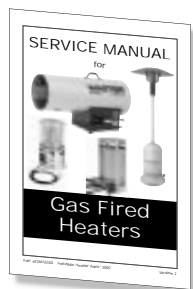
Oil Fired Heater Service Manual

- Includes info on Desa HSI heaters
- It also covers all three manufacturers of low pressure oil fired heaters; Desa, Toro, and National Riverside



Gas Fired Service Manual

- Gives an understanding of gas fired heaters, parts description & troubleshooting
- It also covers three manufacturers of gas fired heaters: Desa, National Riverside and L.B. White



Low Pressure Manual On CD

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Part #
SM70106

Part #
GM70103

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**Ground Time-in-Transit Map
From Valparaiso, IN 46383**



Oil Heater Service Information

This section is designed to give you the information you will need when you service your customers' heaters. You will find useful information including test procedures for split phase motors and trouble shooting for various heaters.

The information contained in this section has been compiled using techniques that have been proven and tested in the field.

PHP recommends that these tests and procedures be performed by a certified technician or mechanic. Some of the tests and procedures may be dangerous should they be performed inaccurately or carelessly.

Use common sense in handling anything with electrical current or that has exposed moving parts when performing tests or procedures. Always wear proper safety equipment, such as safety glasses and gloves when necessary.

If you have questions, contact the PHP technical service department at **800-362-6951 ext. 2** or email us at **techservice@phpdistribution.com**.

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Oil Fired Heaters

General Precautions

Direct-fired forced air heaters

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.

Preparation/Tools Required

Low Pressure Oil Heaters have many small parts: Start by making a clean work area. This will give you an area to layout the disassembled parts. Gather the tools required before work is started. You will need the following: 1/4" and 5/16" Nut drivers, 1/8" Allen wrench, common size open end wrenches and screwdrivers, 0-15 PSI Pressure gauge (HA1180), flashlight, oil drain pan, .001 to .1 Feeler gauge, AC250V/RX1 Volt/Ohm meter, and a few gallons of fresh clean kerosene.

In addition to the tools mentioned above, every shop should have an HA1170 Tester. It is equipped with a three-position switch (off, solid, flashing) for a red LED and a set of alligator clips.

The HA1170 Tester is designed to take the guess work out of repairing HSI heaters. The HA1170 Tester will troubleshoot HSI photocells and Ignition Control Boards. It is an essential tool when telling the difference between a good part and a bad part in HSI heaters. Specific instructions on using the HA1170 Tester are found in the Photocell Section and the Ignition Control Board Section. The HA1170 Tester can also be used to test components for a heater with solid state ignition, making it more practical to own.

DESA Service Information

Low Pressure Solid State Oil Heaters

Helpful Hints For Problems

PROBLEM	POSSIBLE CAUSE	REMEDY
Pulsation or uneven firing	<ol style="list-style-type: none"> 1. Low fuel level or unit not level 2. Air leak 3. Water in fuel 4. Low air pressure 5. Nozzle leaking air into oil passages 	<ol style="list-style-type: none"> 1. Level unit. Keep tank filled. 2. Check air & fuel lines for air leaks. Filter not tight. No filter gasket. 3. Drain, flush & refill with clean, water-free fuel 4. Adjust air pressure. Clean or replace air filters. 5. Replace nozzle seal/O-Ring
Motor does not start	<ol style="list-style-type: none"> 1. No power to unit 2. Defective motor 3. Circuit breaker tripped 4. Loose circuit breaker connections 5. Defective circuit breaker 	<ol style="list-style-type: none"> 1. Check outlet & fuse. Check power cord for good contact. 2. Replace motor 3. Depress reset button 4. Check terminals on circuit breaker for good contact 5. Replace circuit breaker
Motor runs slowly	<ol style="list-style-type: none"> 1. Low voltage 2. Tight compressor 3. Motor defective 	<ol style="list-style-type: none"> 1. Check voltage. Check length & size of extension cord 2. With unit unplugged turn fan by hand. If fan does not turn freely, adjust compressor ring. 3. With unit unplugged fan turns freely. Replace motor
Cannot adjust air pressure	<ol style="list-style-type: none"> 1. Air leak 2. Air line fitting or filter body loose 3. Compressor ring out of adjustment 4. Plugged nozzle 5. Defective nozzle seal 6. Dirty output filter 7. Dirty seat for ball in relief valve or dirty relief valve ball 8. Spring in relief valve stuck or defective 9. Worn or broken compressor vanes. 10. Rotor worn 	<ol style="list-style-type: none"> 1. Check air line, replace with O.E.M. airline if necessary. No "O" ring between filter body & compressor plate. Filter gasket not in place. 2. Tighten 3. Adjust gap between rotor and compressor ring. Gap too wide. 4. Clean 5. Replace 6. Clean filter or replace 7. Clean relief valve and seat. Replace valve ball. 8. Replace spring and ball 9. Replace rotor and vanes 10. Replace worn rotor and blades
Runs indoors, not outdoors in cold weather	<ol style="list-style-type: none"> 1. Water in fuel 2. Improper fuel 3. Low air pressure 4. Incorrect nozzle or spark plug adjustment 	<ol style="list-style-type: none"> 1. Drain, flush & refill with clean water-free fuel 2. If weather is below 0°F (-18°C) kerosene should be used as fuel. It may also be necessary to add a de-icer. 3. Adjust pressure. Clean or replace air filters. Check for air leaks. 4. Adjust nozzle spacing. Check spark plug alignment
Heater starts then shuts off, does not fire.	<ol style="list-style-type: none"> 1. Low fuel level. 2. Defective transformer 3. Dirty or plugged nozzle 4. Low air pressure 5. Loose connectors 6. Defective spark plug 7. Water in fuel 	<ol style="list-style-type: none"> 1. Check that sufficient fuel is in fuel tank 2. Replace 3. Clean nozzle 4. Clean filters & or nozzle. Adjust proper air pressure 5. Check transformer-to-spark plug wire. Check fuel & air lines. 6. Check for wear or adjust properly/replace. 7. Drain, flush, & refill tank.
Flames shoot from end of heater.	<ol style="list-style-type: none"> 1. Wrong Fuel 2. Excess air pressure 3. Improper air flow 4. Air leak in oil line 	<ol style="list-style-type: none"> 1. Use proper fuel only 2. Adjust pressure 3. Dirty or loose fan, air entrance at rear of heater blocked 4. Replace
Excessive spark plug wear.	<ol style="list-style-type: none"> 1. Incorrect nozzle-to-spark plug spacing 2. Excessive air pressure 	<ol style="list-style-type: none"> 1. Replace spark plug. (Nozzle adapter pulled back to far) 2. Adjust air pressure
Smoking or odors	<ol style="list-style-type: none"> 1. Dirty filters 2. Low air pressure 3. Contaminated or incorrect fuel 4. Insufficient air flow 5. Dirty nozzle 	<ol style="list-style-type: none"> 1. Clean or replace 2. Adjust to proper setting. Check for air leaks 3. Drain fuel tank, flush and fill with clean fuel. Use proper fuel 4. Check that fan is tight on shaft. Check for dirt in fan or burner area or blocked air entrance. 5. Clean nozzle

DESA Service Information H.S.I. Oil Fired Heaters

Component Description and Operation

Hot Surface Ignition Heaters (HSI)

On hot surface ignition (HSI) heaters the ignition control board (ICB) is what controls the entire heater electronically. There is no reset button and no motor start relay, with exception to some older HSI models. The ICB takes care of those components internally. Older HSI models have a motor start relay inline with motor and the ICB. The ICB needs to maintain a reading from the photocell to keep the heater running. All boards are now equipped with an inline fuse that is located on the board or in the main voltage supply line to the board. The fuse is a common GMA-10 fuse that can be found at a local automotive parts retail store or electrical supply store. The ICB should be handled with care. Always handle the board by its edges and never touch the male terminals or the electronics on the board. The oils from your skin can transfer to the ICB and cause a hot spot and will result in failure in the operation of the board. When a board becomes dirty, you should wipe it with a clean cotton cloth. Rubbing alcohol can be used if a solvent is needed.

A photocell for a Hot Surface heater works entirely differently than one from a Solid State heater. An HSI photocell actually looks at the COLOR of the flame inside the combustion chamber. Under normal operating conditions, the flame will be orange in color. If the heater begins to burn lean, the flame begins to turn a blue in color. The photocell reacts almost immediately and shuts down the heater. A drop in pressure will cause the change in color of the flame thus causing a changed light intensity. This sequence will cause the photocell to build up enough resistance to force the heater to shut down in less than ONE SECOND. This makes proper air pressure adjustment crucial. See specs on the proper air pressure adjustment on your model.

Glowbar

Proper Handling

Handle the glowbar with care. Do not touch the heating element with bare fingers. The oils from your skin can cause a hot spot on the heating element, which could result in the glowbar disintegrating. Handle the glowbar by its ceramic mounting block only. If a glowbar becomes dirty, use a clean cotton cloth to wipe debris or dust off the heating element.

When installing the glowbar, it is important not to strike the heating element on any surface. Doing so will cause the glowbar to shatter. Carefully follow the recommended instructions when installing a new glowbar.

Installation

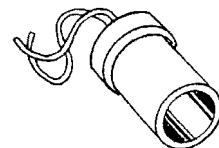
1. Unplug the heater from the 120 volt source.
2. Remove the two wires for the existing glowbar from the pc board mounted inside the access panel.
3. Disconnect the air line and fuel line from the fittings on the nozzle adapter or burner head. Note the location placement of the hoses to avoid confusion on reconnection. If you have an older heater with a burner head, skip step 4 and go to step 5.
4. Leave the nozzle bracket attached to the combustion chamber and carefully remove the nozzle by twisting the nozzle adapter in a counter clockwise motion.
5. Remove the combustion chamber from the lower shell of the heater.
6. Stand the combustion chamber up on a workbench in a vertical position, nose cone down.
7. Loosen the set screw from ceramic mounting block on glowbar and carefully remove the glowbar.
8. Install new glowbar into combustion chamber, taking special care not to strike the heating element upon entry.
9. Replace the set screw with a black oxide mounting screw to avoid future vibration problems with original set screw. Repeat steps 2 – 5 in reverse order to re-install combustion chamber.

DESA Service Information

Hot Surface Ignition Tips

Photocell/H.S.I.

The photocell works by sending a pulsating signal back to the PC board. The more intense the flame, the more intense the signal will be to the board. If the signal drops below a maintainable level, the photocell will tell the PC board to shut down the heater. A common symptom involving the photocell will be that the heater fires for five seconds, and then shuts down. Make sure that the pump pressure is set to factory specifications, since the pressure can drastically change the output of the flame and confuse the photocell. There are two ways to test the HSI photocell: 1) Use an HA1170 tester to effectively bypass the photocell, OR, 2) Replace the suspected bad photocell with a known working photocell. For instructions on using an HA1170, please refer to repair manual SM70101. Without an HA1170, the photocell CANNOT be bypassed.



Photocell

Glowbar/HSI

There are two types of glowbars: an older 85 VAC elongated glowbar, a 120 VAC "L-Shaped" glowbar, and a newer 85 VAC elongated glowbar made in heaters after 2004. The descriptions refer to the shape of the ceramic portion of the glowbars. The glowbar heats up to about 2,500°F and radiates enough heat to ignite the fuel spraying from the nozzle. Power will remain at the glowbar, coming from the PC board, for approximately 7 seconds. The glowbar will not come on again unless the thermostat calls for heat. The main symptom that occurs with the glowbar is that motor comes on, but the glowbar will not glow.

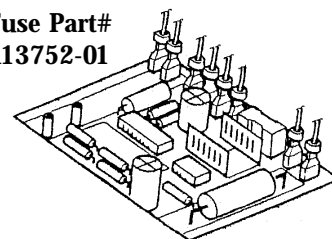
Testing the Glowbar

Disconnect the glowbar leads from the PC board and carefully remove the glowbar from the combustion chamber. Set a multi-meter to the 1000 ohm setting and connect the leads to each of the wires on the glowbar. The multi-meter should show a reading of 30 – 175 ohms. Next, gently tap the CERAMIC portion of the glowbar against your hand and observe the needle on the multi-meter. If you see any movement in the needle, the glowbar has developed a hair line crack. The glowbar is defective and should be replaced immediately.

PC/HSI BOARD

The PC board is basically the brains of the hot surface ignition heater. The PC board works specifically by timing when certain components will receive power. The PC board also is the recipient of the signal from the photocell, which determines if the heater is operating safely. When the heater is plugged into a 120VAC, the board sends power to the glowbar. Approximately five seconds later, the board sends power to the motor. The motor rotates and reaches full RPM, sending air to the nozzle. The nozzle siphons fuel from the tank and is ignited from the radiant heat on the glowbar. Power is then removed from the glowbar and ignition has occurred. The board senses the photocell signal and keeps the heater operating. The main symptom that will occur with the PC board is that the heater does nothing when the thermostat calls for heat or the heater is connected to a power source. The PC board should be the main focus of the testing. Make sure that the heater is connected to a reliable 120VAC source. The first thing to do is check for power coming from the terminals that the glowbar is connected to on the PC board. Remove the pressure gauge port plug to assure that there is no pressure to generate fuel spray during the test. Set a multi-meter to the 200VAC level and connect the leads to the terminals on the board. Plug the heater into a 120VAC source and observe the multi-meter. Almost immediately, the multi-meter should register either 85VAC or 110VAC and maintain the voltage for approximately seven seconds. Which reading should appear will depend on which type of glowbar is in the heater. (See the glowbar paragraph for the descriptions.) Power should then cut off to zero, showing no voltage being sent to the glowbar. If the test performs as stated, then the glowbar should be tested for defects. Next, remove the leads running to the motor and perform the same test as above. This time, there will not be any voltage at the motor terminals for the first five seconds. After five seconds, there should be a constant supply of 120VAC to the multi-meter. The meter will eventually drop to zero volts because there is not a flame present in the combustion chamber for the photocell to send the signal to the PC board. If the test is performed as stated and the motor still will not come on, the motor should be bench tested and replaced if necessary. If the board fails any part of this test, the PC board should be replaced.

Fuse Part#
113752-01



PC Board/H.S.I.

DESA Service Information

Oil Fired Heaters

Component Description and Operation

Motors

The motors used on the low pressure heaters are fractional horsepower motors ranging from 1/35 HP on the smallest heaters to 1/4 HP on the largest heaters. The motors used can be grouped into two categories. The first category is the shaded pole motor (FIG. 5.1). The shaded pole motor contains a single winding and does not require an external start relay for operation.

These motors are used on the smaller heaters (30,000, 35,000 & 50,000 BTU) and are easily identified by observing that only two wires (usually red and white) are necessary for operation.

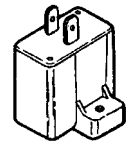
The second category is the split-phase motor (FIG. 5.2). This motor contains two separate windings. The first winding being the auxiliary or start winding and the second being the main or run winding. This motor requires an external means of switching the power off to the auxiliary winding after the motor reaches a predetermined speed. This power off switching is accomplished by a motor start relay or solid state relay. These motors are identified by observing that three wires (black, red and white) are routed from the motor.

Motor Relay

The motor start relay is used to de-energize the start winding on split-phase motors. As mentioned in the *Motor Section*, remember that split-phase motors have both an auxiliary (start) and a main (run) winding. For proper motor operation, both the auxiliary and main winding are energized during start-up. After the motor starts and reaches approximately 80% of rated speed, the auxiliary winding must be de-energized to prevent overheating. This is accomplished by the use of a motor start relay. The operation of the relay functions because the main winding amperage decreases as the motor speed increases. The coil of the relay is wired in series with the main winding. The contacts of the relay are in series with the auxiliary winding. When voltage is applied to the motor, the high inrush current through the main winding creates a magnetic force in the relay coil and closes the contacts of the relay, which energized the auxiliary winding. As the motor speed increases, the current through the relay decreases and the contacts open, with gravity, de-energizing the auxiliary winding.

Solid State Relay (Applicable models use 097061-01 Solid State Relay)

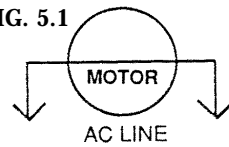
The solid state relay is used to de-energize the start winding on split-phase motors. As mentioned in the *Motor Section*, remember that split-phase motors have both an auxiliary (start) and a main (run) winding. For proper motor operation, both the auxiliary and main winding are energized during start up. After the motor starts and reaches approximately 80% of rated speed, the auxiliary winding must be de-energized to prevent overheating. This is accomplished by the use of a solid state relay. The operation of the relay functions as a positive temperature coefficient resistor. When voltage is applied to the motor, the main and auxiliary windings are energized as current flows through the solid state relay which is connected in series with the auxiliary winding only. The resistance is increased over time in the solid state relay where it eventually rises to the point theoretically no current flows, de-energizing the auxiliary winding.



Safety Control

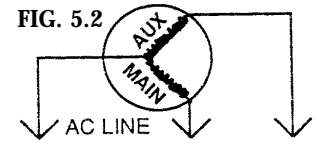
The safety control circuit consists of a photocell (light sensitive cell) and a safety control. The photocell is used to sense the presence of light inside the combustion chamber. The photocell varies its electrical resistance in relation to the light rays which contact its surface. When the heater is operating properly, the photocell sees sufficient and the proper color light, which keeps its resistance low. When the photocell does not sense the proper color or amount of light, the resistance of the photocell increases and ceases current to flow to the solid state trigger circuit, which in turn sends current flows into the circuit breaker and heats a (bimetal) bar causing the bar to warp. The warpage releases the spring loaded reset button, which brakes all power to the heater. As a service technician, it is important to understand the operation of the safety control. In the past, it has been the single most misdiagnosed part of the heater. It is suggested that all controls be checked per instructions listed in the *Troubleshooting Section*, prior to replacement.

FIG. 5.1



SHADED POLE MOTOR

FIG. 5.2



SPLIT-PHASE MOTOR

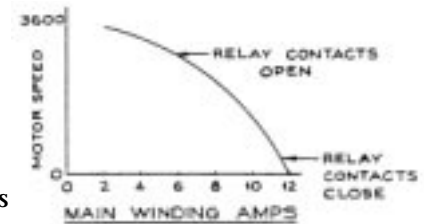
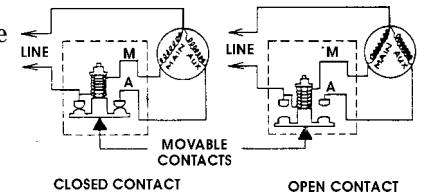


FIG. 6



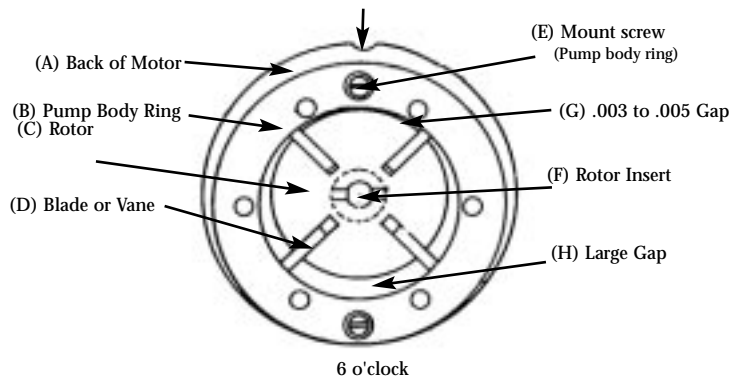
DESA Service Information

Oil Fired Heaters

Component Description and Operation

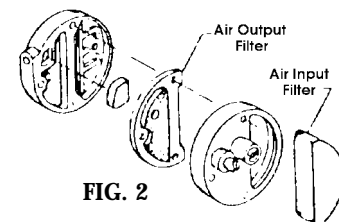
Air Pump

The heater's air pump consists of a rotor (c) with four carbon blades (d) rotating inside a pump body (b). The rotor is driven directly by the motor (a) and is attached to the motor shaft by means of a plastic insert (f). As the motor rotates, the carbon blades travel outward rubbing against the inside surface of the steel pump body (d). The rotor's position inside the pump body is such that it is off centered with the pump body and a .003/.004 of an inch gap is set at the uppermost quadrant (g). As the motor rotates, the air between the blades (h) is compressed and routed to the nozzle through the air line.



Air Filters

The air filtering system consists of an air input filter and air output filter. The air input filter is located at the right rear of the motor and its purpose is to filter all incoming air prior to entering the air pump.

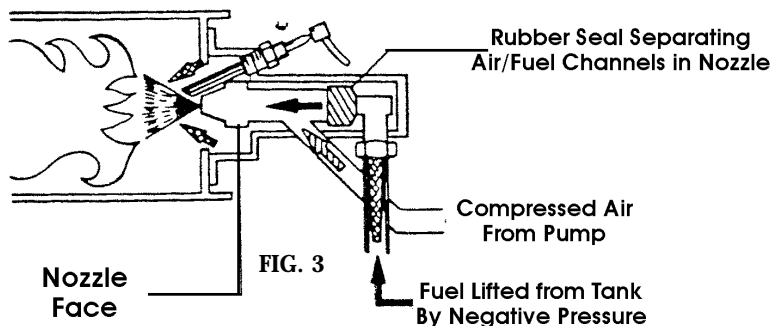


The filter design is such that it can be cleaned in a mild, soapy solution, thoroughly dried and used over again.

The air output filter is located under the plastic end cover. This filter's purpose is to prevent any carbon dust (from rotor or blade wear) from entering the air passages in the nozzle. This filter is non-cleanable and should be replaced when considerable build-up of carbon dust is observed.

Nozzle

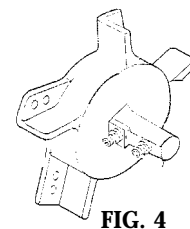
As mentioned previously, the purpose of the air pump is to compress air and deliver it to the nozzle. The compressed air, as it travels through the nozzle, creates a negative pressure and lifts the fuel from the fuel tank. The fuel from the fuel tank and the compressed air are mixed at the nozzle which results in a very fine mist of fuel being sprayed into the combustion chamber. The air pump/nozzle combination eliminates the need for a conventional type fuel pump. It is important for the service technician to understand the nozzle operation.



In many cases concerning improper operation of a heater, the problem is the result of a seal leak or a restriction (dust/dirt) being present within the nozzle. It should also be pointed out that each model heater requires different nozzles due to different fuel flow rates.

Combustion System (Burner Head)

The burner head is mounted to the rear of the combustion chamber. The purpose of the burner head is to meter and mix the amount of air entering the chamber to obtain proper combustion characteristics. The nozzle is mounted in the chamber from the burner head and is surrounded by fins, so that the amount of air entering the chamber from the burner head is equal and balanced. The size of the slots in the burner head differ between models.

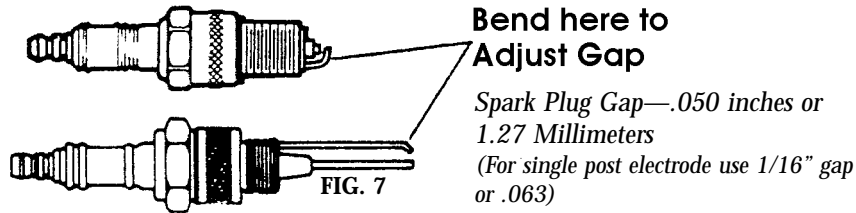


DESA Service Information Oil Fired Heaters

Component Description and Operation

Desa Spark Plug

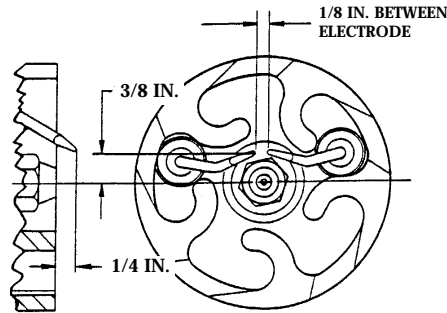
The spark plug is the igniter for the fuel. The electrical energy from the ignition transformer causes a spark to jump across the gap between the electrodes of the spark plug. The proper spark gap is shown in FIG 7.



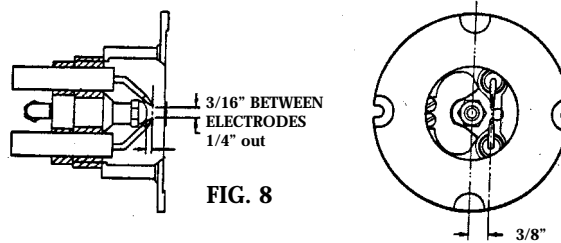
Spark plugs suffer from a number of maladies including dirty electrodes, gap wear or erosion, cracked ceramic, etc. Spark plugs should be inspected frequently and replaced periodically if faulty. Some heaters use two independent electrodes. Independent electrodes also require proper setting (FIG. 8)

Electrode Settings

Models:	
B80 & B99	75,000
B120	120,000



Models:	
B100	100,000 BTU
B125	125,000 BTU

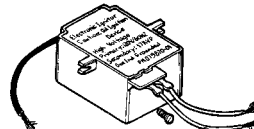


Electric Igniter

(Applicable models use 079870-01 or 102482-01 Electronic Igniter)

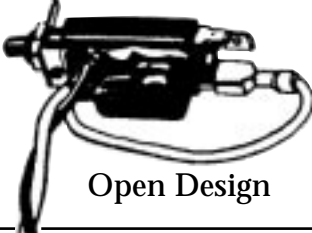
The electronic igniter operates on 120V60 Hz. It delivers approximately 15,000 volts average to the spark plug causing the kerosene sprayed from the nozzle assembly to ignite. The igniter operates on a pulse basis. The igniter has no internal service parts and must be replaced when found defective.

Note: It is important for the service technician to be cautious when working with the electronic igniter due to its high voltage output.



DESA Service Information Desa Common Safety Controls


Flameout Safety Controls




Open Design

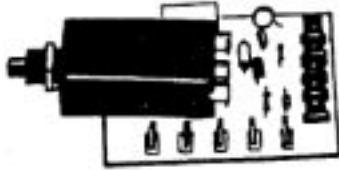
If you have this
Old part no. M30719
or M28898-03 . . .

. . . the replacement part
is Part #HA3003






Enclosed Design

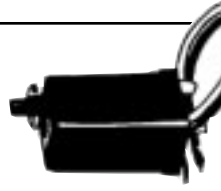


Printed Circuit Board

If you have this
Old part no. M51060-03
or M50671-02 . . .

. . . the replacement part
is Kit #097528-01





**Solid State Relay
097061-01**

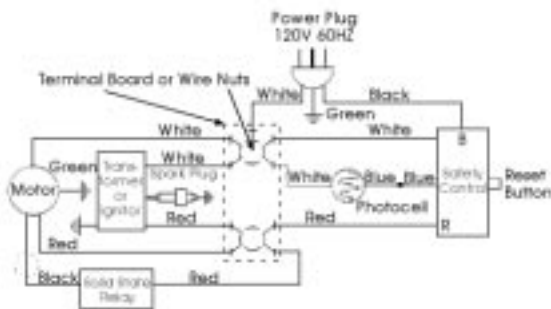
Both are used primarily on older 100,000 BTU Reddy, Master and Knipco Heaters.

One of the most common questions we get concerns converting the old 3 Wire Safety Controls, with the new 2 Wire Safety Control.

The adjoining space has the step by step instructions and the proper wiring diagram.

Flame Out Safety Control Instructions

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



Wiring Diagram

NOTE: This wiring diagram shows the new style motor start relay which may not be in your heater.

TOOLS REQUIRED

- 5/16" Nut Driver
- 9/16" Socket

1. Unplug Heater
2. Locate safety control by removing upper shell, side cover, or end cover. The location will vary depending on model.
3. Disconnect all electrical terminals connected to old safety control. Disconnect blue wire connected to photocell wire. Disconnect the white wire connected to terminal board or wire nut (depending on model).
4. Remove old safety control.
5. Install new safety control.
6. Refer to wiring diagram above, and connect wiring to new safety control as follows:
 - A. Red wire to "R" terminal of safety control.
 - B. Black wire to "B" terminal of safety control.
 - C. Blue safety control wire to blue photocell wire.*
 - D. White safety control wire with remaining white wires.*

*NOTE: If heater is equipped with terminal board and blue and white wires on old safety control have terminals installed, the following instructions must be followed:

- A. Connect terminal on blue safety control wire with terminal on blue photocell wire.
- B. Connect terminal on white safety control wire to terminal block as shown in wiring diagram above.

If heater is equipped with wire nuts, and blue and white wires on old safety control do not have terminals installed, the following instructions must be followed:

- A. Using old safety control as a guide, cut off both terminals on new safety control.
- B. Strip wire insulation back 3/8" on blue wire and 9/16" on white wire of new safety control.
- C. If white power cord wire has a terminal, cut terminal off and strip insulation to 9/16".
- D. Make all connections with wire nuts previously used.
7. Install upper shell, side cover, or end cover that was removed in step 2.

DESA Service Information

350,000 & 600,000 BTU Heaters made by Desa Master, Reddy, Dayton, Koehring, Knipco, & Others

Troubleshooting - Problem Solving

Observed Problem

Motor starts, but heater will not ignite

Possible Cause

If No Spark Observed at Spark Plug

- A. Spark plug has incorrect gap
- B. Defective transformer or transformer not grounded properly.
- C. Cracked spark plug

Possible Cause

If Spark Observed at Spark Plug

- D. Incorrect fuel pump pressure
- E. Defective fuel solenoid valve
- F. Fuel line leak on suction side of pump
- G. Dirty or damaged nozzle
- H. Dirty fuel filter

Test Procedures

A. Spark Plug has incorrect gap

1. Unplug heater.
2. Remove upper shell of heater
3. Remove spark plug from burner head
4. Check gap between spark plug electrodes with feeler gage. Correct gap for spark plug is .05/.06 inch. Reset gap if needed.
5. Follow steps in procedure "B" to test for spark at spark plug electrodes.

B. Defective transformer

1. Unplug heater.
2. Remove upper shell of heater.
3. Remove spark plug from burner head.
Make sure spark plug is properly gapped (see test procedure "A" for spark plug gap)
4. Check to make sure the transformer is properly grounded by the 2 mounting screws. Look for loose fasteners, corrosion, broken tabs, etc.
5. Connect the transformer secondary lead to the spark plug.
6. Establish a good ground between the spark plug body and heater. To do this, attach a grounding wire to heater shell. Clip grounding wire to grounding (outer) electrode on spark plug. Use insulated pliers to hold spark plug at spark plug

hex. Note: Only use pliers with plastic or rubber sleeved handles.

7. Connect heater to electrical supply
8. Look for spark between electrodes. If the ground is good and there is no spark between electrodes, the transformer is defective.

Note: No spark between electrodes may be caused by cracked porcelain on spark plug. Before replacing transformer, see test procedure "C". If porcelain on spark plug is not cracked, proceed with replacing defective transformer.

C. Cracked spark plug

Follow steps under **DEFECTIVE TRANSFORMER** procedure, to test for spark at spark plug electrodes. If spark is seen at any place on the spark plug other than the electrodes, the porcelain insulator is cracked. Replace spark plug.

D. Defective fuel solenoid valve

1. Remove upper shell of heater
2. Check for fuel flow to nozzle. Do this by turning thermostat knob to warmest position and connecting heater to electrical supply. With motor running, look through air openings on rear of combustion chamber. See if nozzle is spraying out fuel. If nozzle is spraying out fuel, solenoid valve is working properly. If nozzle is not spraying out fuel, unplug heater and follow steps below to determine if solenoid valve is defective.
3. Disconnect yellow and white wires from solenoid valve.
4. Set ohmmeter on the 250VAC position.
5. Connect ohmmeter test leads to yellow and white wires that were connected to solenoid valve.
6. Connect heater to electrical supply. If 120VAC is being sent to solenoid valve and fuel pump pressure is correct, the solenoid valve is defective. Replace defective solenoid valve.

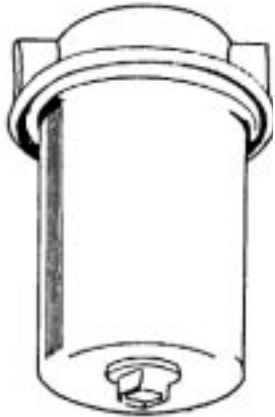
E. Fuel line leak on suction side of pump

Check all fuel lines on the suction side of the pump for tightness. An air leak in one of these fittings can allow air to enter the system. This will result in improper pump pressure.

DESA Service Information

High Pressure Heater - Parts Information

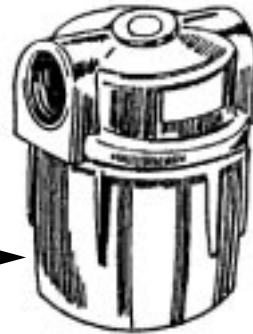
General Purpose Oil Filter



Part No. M50398

If you have this

You may replace it with this filter



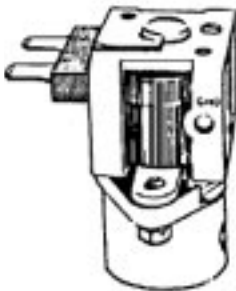
PART NO. 098102-01

This filter will replace any filter on an oil fired heater with an operating range of 5 gallons per hour or less. NO more high price cartridge filters! The steel element is washable!
Filter element with gaskets part no. 098103-01

Part No. M51102-01 (includes gasket)
This "string type" filter was used on the older 350's and 600's. This is the filter element from the filter canister part no. M50398



Part No. M51102-01

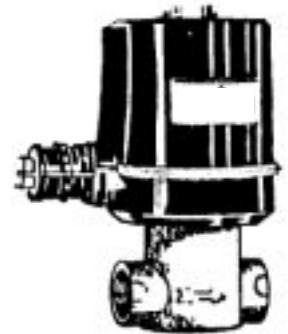


Part No. M50077
General Purpose Solenoid Valve

You can replace this solenoid valve (part no. M50077,) with this general purpose solenoid valve (part no. 50010).

This can be used on ANY brand of high pressure oil fired heater. (120 volt)

These also can be used on steam cleaners!



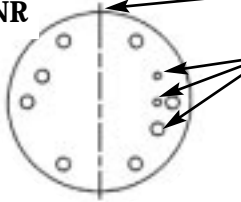
Part No. 50010

Toro Service Information

Possible Brands: Champion, Porta Heat, Lawn Boy, Arctic Flame, Stone, Other

Two styles of back plates, and inner housings were used at time of production. Determine which style the heater involved contains to insure proper Assembly and Operation.

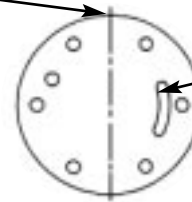
Part No.
6832NR



Note the Position of these 3 Holes.
(Small holes must be in Upper Right when mounted correctly. Polished side of plate should be toward the Motor.)

Top of Motor

Part No.
154797

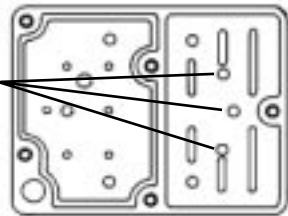


Inlet Slot

Back plates and housings are **not** interchangeable!

Part No.
6836NR

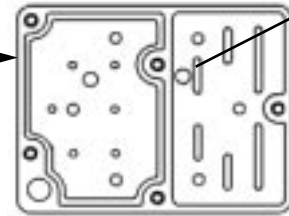
INLET HOLES



Original Style
1983-1989
Inlet holes on R.H. side of plate and housing half.

New "Quite" Style
1990 & Newer

Backing plate has slot in it instead of holes and housing half has inlet hole moved to location shown.



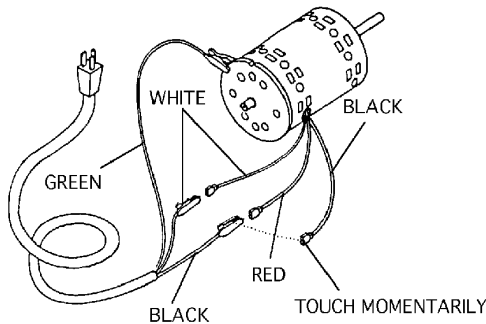
Inlet Slot

Part No.
154710

To Test 3 Wire Motor (Split Phase)

Connect wires as illustrated

- White motor wire - to white power cord lead
- Red motor wire - to black power cord lead
- Momentarily (2-3 seconds maximum) touch black motor wire to the black power cord then release. This engages the "Start" winding long enough to bring motor up to speed for the "Run" windings to take over and continue running.

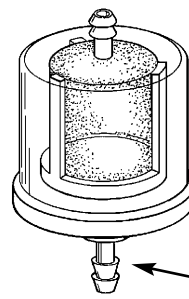


NOTE: The start windings are burned out when the motor turns slowly and does not increase speed after Step C.

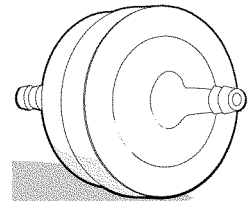
The motor is no longer usable if during Step C the motor comes up to speed but stops when black motor wire is released from the power lead.

Fuel Filter

Annually (or as needed), remove the filter from the fuel line and blow compressed air through it in the opposite direction of fuel flow. Safety glasses should be worn when using compressed air. If compressed air does not clean the filter, flow through filter is restricted. Filter must be placed.



Threads



Part No. 148647
Used on 40,000
and 55,000 BTU
Toro heaters.

Toro Service Information

Troubleshooting the Flame Out Safety

The Safety Flameout Control operates on the photoelectric principle whereby the presence or absence of light is changed to OHMs of resistance by the cad cell and monitored by the PC Board. The system consists of the flame detector (cad cell), printed circuit board (PCB) and the circuit breaker.

The function of these parts as a whole is to monitor the flame in the combustion chamber and to shut off power to the heater if no flame is present after about 20 seconds.

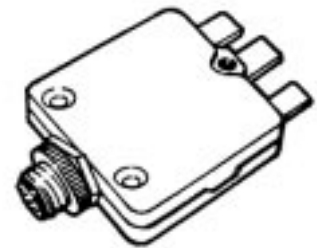
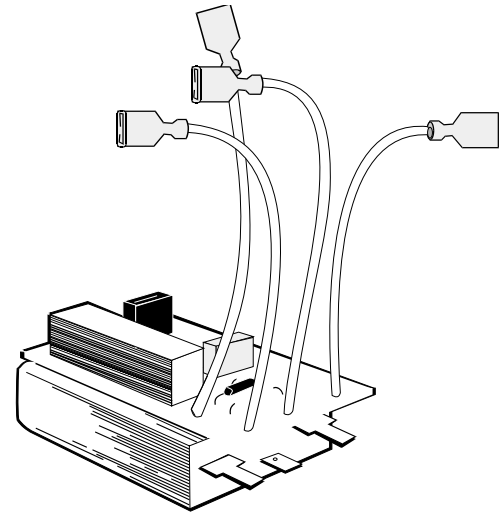
All power is supplied to the heater through the circuit breaker. The circuit breaker is controlled by the printed circuit board (PCB) which receives a sensing signal from the flame detector (cad cell) based upon the amount of light it "sees".

During normal operation the flame detector is energized by the light of the burner flame and the safety circuit is not activated. When the absence of flame exists the flame detector does not sense light and activates the safety circuit. When the safety circuit is energized the small neon light on the PC Board will light up. This indicates that the timed cycle for automatic shut down has started and if the burner does not ignite within 20-35 seconds the main circuit breaker will trip shutting off all power to the heater.

If you find one of these parts are defective, they are no longer available. Please call for assistance.

There are two conditions that will alert you to a malfunctioning system:

1. The heater will continue to run after cool down cycle is completed with no flame in combustion chamber.
2. The circuit breaker will trip prematurely with a well established flame present in the combustion chamber.

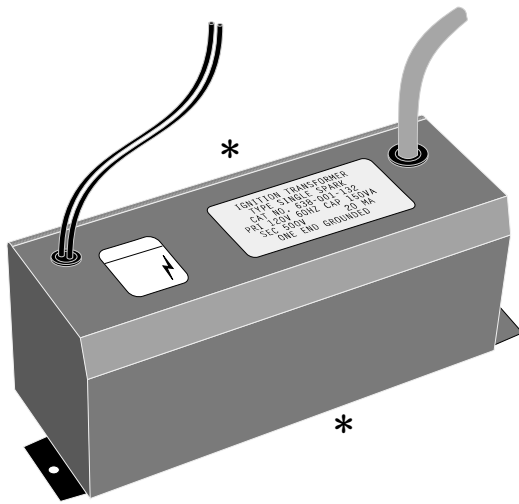


BREAKER ASSEMBLY



CAD CELL ASSEMBLY

Toro Service Information

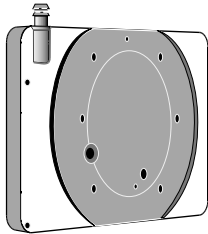


Old style Jefferson Transformer
 Cat. # on transformer is 638-001-132. This exact transformer is no longer available. If you want to order the newer style transformer, the part # is 154009.
 The newer style transformer is less expensive and it will last longer.

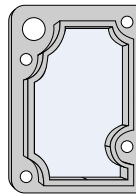
If the mounting tabs are where the "*" is, your part# is 102482-01

Parts for 40K & 55K Toro Heaters (1992 & 1993)

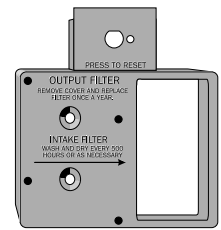
Part No. 148420
Filter Housing



Part No. 154822
Output Filter Kit



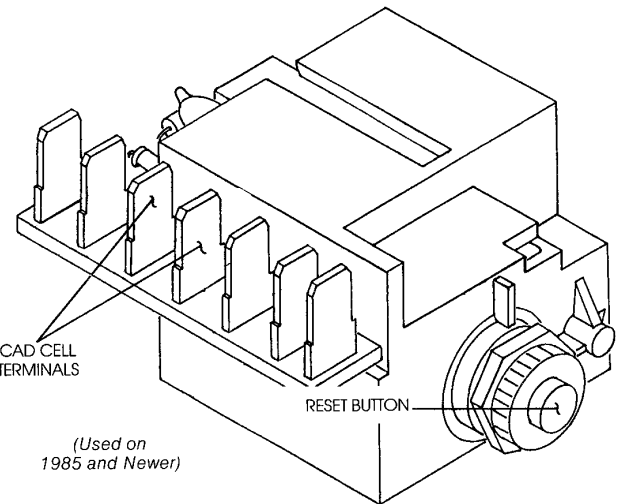
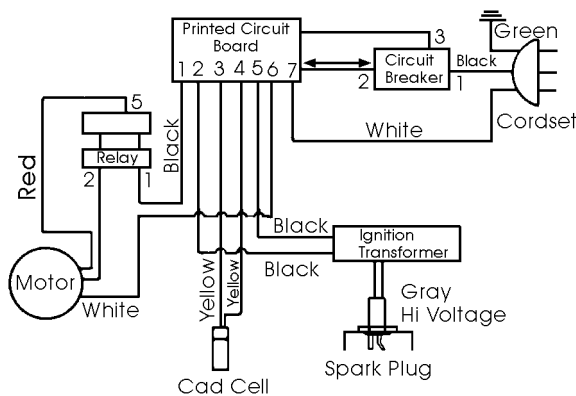
Part No. 148419
Filter End Cover



Wiring Diagram With Motor Relay

If there is no motor relay see page 84.

97,000 - 150,000 BTU
1986 - Current



7 Terminal Safety Control for Toro

Used on newer heaters
 Old Part No. 88336
 New Part No. 0854
 Comes without plastic cover.

Toro Service Information

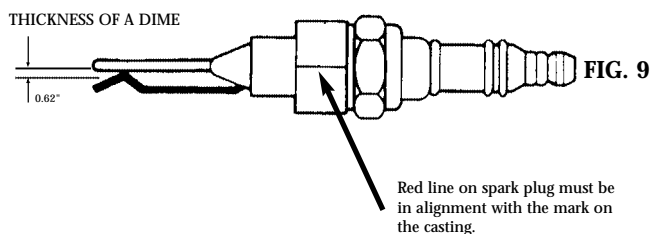
Oil Fired Heaters

Component Description and Operation

Toro Spark Plug

The spark plug must be positioned all the way in against the housing; line up the red line of the spark plug with the casting line on the burner. Gap the spark plug to .062" (FIG. 9). If plug is fouled, clean or replace.

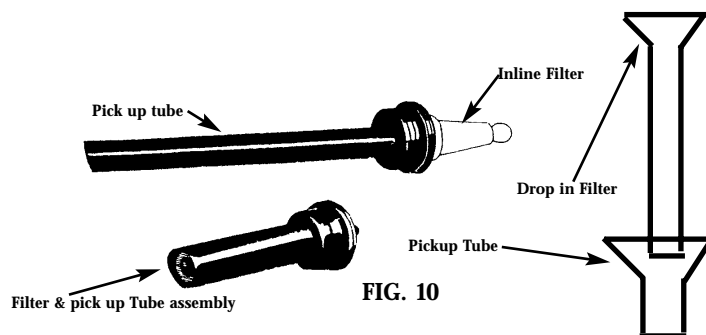
Test spark plug by removing top cover, remove air gauge plug, loosen setscrew and remove spark plug from the burner. Leave the wire attached to the spark plug and lay the plug across the sheet metal of the heater. Loosen setscrew and remove fan blade, plug in the heater and the spark should jump continuously across the electrodes.



Important: Spark plug is secured in burner casting with a setscrew only. Burner casting has no threads. Do not "unscrew" spark plug to remove.

Fuel System (Fuel Filters)

There are several types of fuel filters used on different model heaters. The filters are always located in line with the fuel pickup tube (FIG. 10). The purpose of the filter is to eliminate the possibility of dirt, dust, etc. from entering the nozzle and restricting the flow. The filters should be inspected and cleaned whenever a heater is brought in for service. It is also important that the bottom of the tank be inspected for sedimentation or dirt build-up. The filters design is such that a possible restriction in the filter screen can be present during operation and be dislodged back into the tank when the heater is shut off.



Enerco Service Information

Diagnostic Safety Shutdown and Troubleshooting

These instructions are applicable for HS50K, HS75KT, HS125KT, HS175KT, HS210KT

SYMPTOM	TROUBLE SHOOTING
High limit switch Open Circuit	1) Make sure heater is cooled off, toggle switch to "OFF" position, wait 5 minutes and retry.
Sparks, calling for flame, but no or slow motor operation	1) Check wiring to motor (per wiring schematic in manual). 2) Make sure that the gauge plug is in place and not damaged. 3) Adjust pressure for proper heater operation per manual. 4) With heater disconnected from AC source, rotate fan clockwise to verify motor is free. 5) Remove air filter housing from motor and inspect the pump rotor for damage. If damaged, replace rotor assembly. 6) If wiring is correct, pump rotor is okay, and motor is not rotating freely, replace motor or power-pack assembly. 7) If problem persists, replace oil flame control assembly. 8) Check for spark arching from the electrode assembly, to the combustion cylinder. 9) Check the cad cell for continuity.
No Spark	1) Check length and gage of extension cord for proper amp. draw. 2) Check wiring to igniter (per wiring schematic in manual). 3) Check gap between electrode probes (2.3 - 3 mm). 4) Still no spark, replace igniter assembly. 5) Replace oil flame control assembly.
Abnormal Motor Operation - Motor overheats or Stops	1) Motor speed too low (Motor should operate at 3450rpm) - Replace motor. 2) With heater disconnected from AC source, rotate fan clockwise to verify motor is free. 3) Remove air filter housing from motor and inspect the pump rotor for damage. If damaged, replace rotor assembly. 4) If wiring is correct, pump rotor is okay, and motor is not rotating freely, replace motor or power-pack assembly. 5) Replace oil flame control assembly.
Unable to Detect Flame	1) Check wiring to cad cell (per wiring schematic in manual). 2) Clean cad cell photo cell. a) Slide cad cell out of cad cell holder. b) Push the photo cell out of the black rubber cad cell housing by pushing on the 2 purple wires. c) Clean the photo cell with a soft cloth and rubbing alcohol. d) Pull the photo cell back into the cad cell housing and reinstall into holder. e) Test heater. 3) If the heater still does not operate, replace cad cell. 4) Replace oil flame control assembly.
Flame Control Failure	1) Check wiring in heater (per wiring schematic in manual). 2) Replace oil flame control assembly.

L.B. White Service Information

Troubleshooting

Symptom	Possible Cause(s)	Corrective Action
Heater ignites but MAIN PCB assembly shuts heater off after a short period of time. (Indicator Lamp is flickering and room temp. display indicates "E1")	<ol style="list-style-type: none"> 1. Wrong pump pressure 2. Dirty Air Output, Air Intake or Lint Filter 3. Dirty Fuel Filter 4. Dirt in Nozzle 5. Dirt Photocell Lens 6. Photocell Assembly not Properly Installed (not seeing the flame) 7. Bad electrical connection between photocell and MAIN PCB Assembly 8. Defective photocell 	<ol style="list-style-type: none"> 1. See Pump Pressure Adjustment 2. See Air Output, Air Intake and Lint Filters 3. See Fuel Filter 4. See Nozzle 5. Clean Photocell Lens 6. Make sure photocell boot is properly seated in bracket 7. Check electrical components. See Wiring Diagrams 8. Replace Photocell
Heater will not ignite but motor runs for a short period of time. (Indicator Lamp is flickering and room temp. display indicates "E1")	<ol style="list-style-type: none"> 1. No fuel in tank 2. Wrong pump pressure 3. Carbon deposits on spark plug and/or improper gap 4. Dirty fuel filter 5. Dirt in Nozzle 6. Water in fuel tank 7. Bad electrical connection between igniter and MAIN PCB Assembly 8. Igniter wire is not attached to spark plug 	<ol style="list-style-type: none"> 1. Fill tank with kerosene 2. See Pump Pressure Adjustment 3. See Spark Plug 4. See Fuel Filter 5. See Nozzle 6. Flush fuel tank with clean kerosene 7. Check electrical components 8. Attach igniter to spark plug. See Spark Plug
Fan does not turn when heater is plugged in and power switch was in the "ON" position. (Indicator Lamp is on or flickering)	<ol style="list-style-type: none"> 1. Thermostat setting is too low 2. Bad electrical connection between motor and MAIN PCB Assembly 	<ol style="list-style-type: none"> 1. Turn thermostat control knob to a higher setting 2. Check electrical connections. See Wiring Diagram
(Indicator Lamp is flickering and room temp. display indicates "E2")	<ol style="list-style-type: none"> 1. Room Temp. sensor disconnected 	<ol style="list-style-type: none"> 1. Reconnect sensor. See Wiring Diagrams
(Indicator Lamp is flickering and room temp. display indicates "E3")	<ol style="list-style-type: none"> 2. Sensor Failure 	<ol style="list-style-type: none"> 2. Replace sensor. See Wiring Diagram
Heater will not turn-on (Indicator Lamp is off)	<p>Thermostat switch failure</p> <ol style="list-style-type: none"> 1. Temperature limit safety device is overheated 2. No electrical power 3. Blown fuse 4. Bad electrical connection between temperature limit safety device and PCB board 	<p>Replace MAIN PCB</p> <ol style="list-style-type: none"> 1. Turn power switch to "OFF" and allow to cool (about 10 min.) 2. Check to insure heater cord and extension cord are plugged in. Check power supply 3. Replace safety fuse in PCB board. See Replacing Fuse 4. Check electrical connections. See Wiring Diagrams

Common Replacement Parts

This section focuses on the parts that will commonly fail in oil and gas fired heaters. There are many parts that you can put into a heater. Hopefully, this portion of the tech book will give you a better understanding of what common parts you will need to stock in your repair shop for expedient repair service.

Of course, you can call one of our technicians at **PHP** at **800-362-6951** for advice on servicing your heaters and getting set up to repair your customers heaters.

Brand Names Include:

Desa
Master
Reddy
Remington
Knipco
Sears

One of the most common things to replace in an oil fired heater is the Filter Kit. This replacement should be done **AT LEAST** once per season, or on an as needed basis. Dirty filters will cause poor performance in your heater.

Common Replacement Parts	Page No.
Pre-Packaged Kits/Parts	23

Pre-Packaged Parts

These pre-packaged parts are for the following brands: Master, Dayton, Desa, Knipco, Remington, Reddy
Below are the part numbers for the individual blister packs, the part it contains, and where used.

Helpful Hint: It is usually less expensive to order HA part kits, than ordering all of the individual parts inside each kit.



Part#	Description	Compatibility
PP203	M50671-03 Safety control	Non HSI models
PP204	M22456-1 Rotor (1/2"), (4) M8643 Blades, M22009	Various
PP205	M22456-2 Rotor (5/8"), (4) M8643-2 Blades, M22009 Insert	Various
PP206	079744-01 Nozzle	35,000 BTU
PP207	M50597 Nozzle	50,000 BTU
PP208	M50880-01 Nozzle, M8882 Seal	70,000 BTU
PP209	M51120-01 Nozzle, M8882 Seal	100-110,000 BTU
PP210	M18022 Nozzle, M8882 Seal	150,000 BTU before 1992
PP211	M10962-2 Spark plug	70, 100, 150 - non HSI
PP212	M29835 Spark plug	35, 50 - non HSI
PP213	M29632 Filter, M29633 Filter, M29612-01 Filter	35, 50, 70
PP214	M12179 Filter, M12244-1 Filter M11637 Filter, M51150-01 Fuel Filter after 1992	100,000 BTU 150,000 BTU
PP215	M12179 Filter, M12244-1 Filter, M11637 Filter, M19630 Fuel Filter	150,000 BTU before 1992
PP216	M16656-4 Photo Cell	Various
PP217	M8940 Ball, M10993-1 Spring, M27694 Adj. Screw, M22997 Plug	All models
PP218	100070-01 Nozzle Kit	55,000 BTU
PP219	Nozzle	60,000 BTU
PP220	Nozzle	70,000 BTU
PP221	Nozzle	110-115,000 BTU
PP222	Nozzle	150-155,000 BTU
PP223	Nozzle	165,000 BTU
HA1170	(Safety Control / Photo Cell) Tester	All Models
PP232	Heavy Duty Wheel Kit	35, 50, 70
PP234	Thermostat with numbers on dial	All models w/o thermostat
PP200	Ignitor (L-shaped block type)	Most HSI models
PP201	Ignitor (cigarette type)	Few HSI models
PP228	Pilot ODS	LP
PP236	Photocell	M16656-24

Enerco Oil Fired Heaters

Always remember to match the serial number of your heater with the serial number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact serial number match for your particular heater. If your serial number does not appear in the breakdowns, please call one of our technicians for assistance.

Brand Names Include:

Enerco
Mr. Heater
HeatStar
Tractor Supply

If you need technical assistance, feel free to call **PHP at 1-800-362-6951** or e-mail us at **techservice@phpdistribution.com**. Whenever possible, please have your serial number and the nature of your problem before you place a call for technical service.

HEATER INDEX

BTU and Description	Serial Number Range	Page No.
50,000 (2003-2004)	0 - 0117000	25
75-175,000 (2003-2004)	0 - 0117000	26
50-175,000 (2004-2005)	0117001 - 0148811	28
50-210,000 (2005-2006)	0149000 - 0215151	30
50-210,000 (2006-2007)	0215152 - 0253699	32
50-210,000 (2007-2008)	0253700 - 0296656	34
50-210,000 (2008-2009)	08001001 - 08005632	36
50-210,000 HeatStar (2009-2010)	09001001 - Present	38
50-210,000 Mr. Heater (2009-2010)	09001001 - Present	40

50,000 BTU Forced Air Enerco Oil Fired Heater

2003-2004 Model Year

Model Numbers

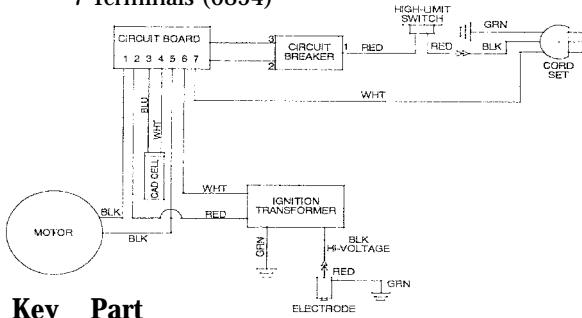
HS/MH/TS50K

Serial Numbers Range
0 to 0117000

Pump Pressure Setting

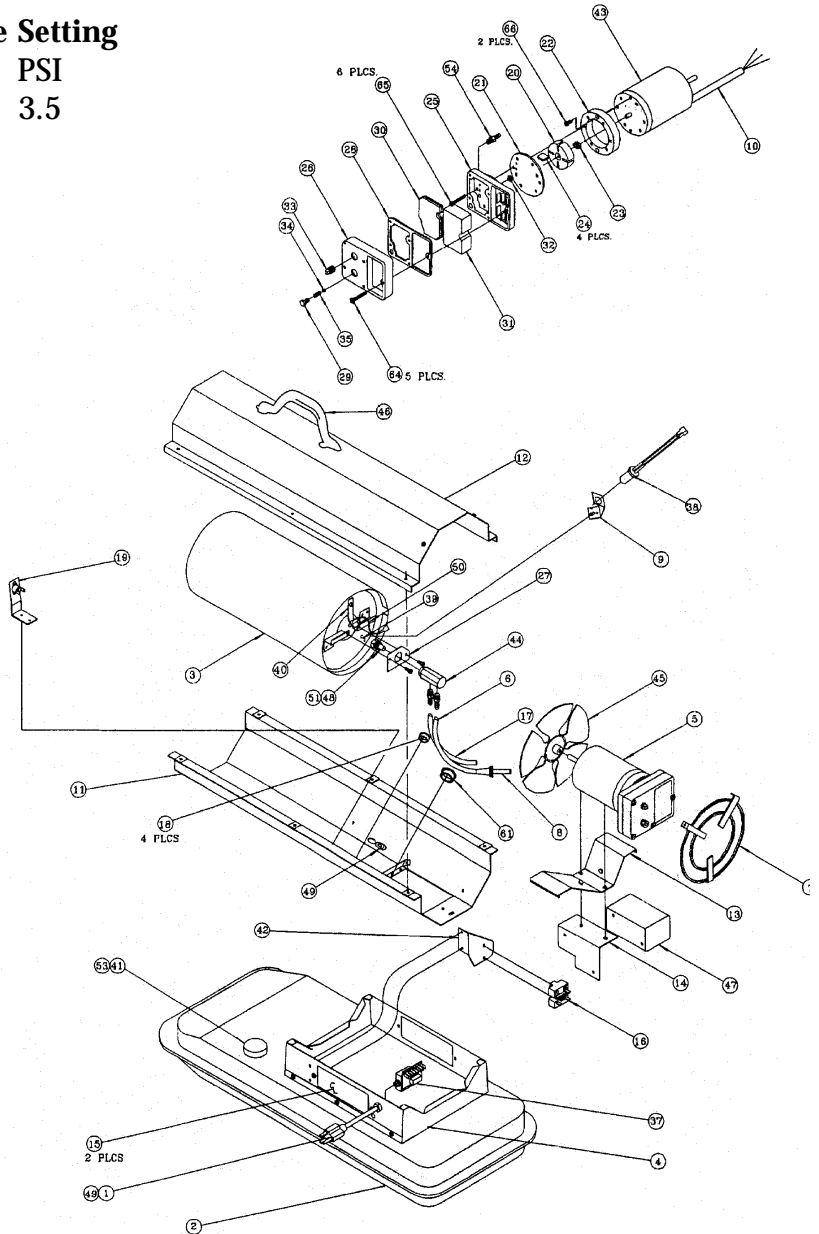
BTU PSI
50 3.5

Old Style Board
7 Terminals (0854)



Key Part No.

Key No.	Part No.	Description
1	1036	Power Cord Assembly
2	1676	Fuel Tank Assembly
3	1679	Radiation Shield Assy.
4	1688	Control Box Assy.
5	1682	Power Pac Assembly
6	1686	fuel Tube Assy.
7	1685	Grille Assembly
8	-	Fuel Filter Assembly
9	4011	Oil Cad Cell Bracket
10	3449	Motor Cord Sleeve
11-1	1802	Bottom Shell
12-1	3701	Top Shell
13	3704	Motor Mounting Brkt.
14	3705	Ignition Mounting Brkt.
15	-	Access Panel
16	-	Start Relay
17	3725	Air Tube
18	6225	Snap Bushing
19	1796	High Limit Control Assembly
20	6831	Air Pump Rotor
21	6832	Backing Plate
22	6833	Air Pump Cylinder
23	6834	Nylon air Pump Insert
24	6835	Air Pump Vane
25	6836	Lower Housing
26	6837	Upper Housing
27	4171	Nozzle Mounting Plate
28	6839	Gasket
29	6842	Adjusting Screw
30	6843	Outlet Filter
31	6844	Inlet Filter
32	6848	O Ring
33	6849	Nylon Pipe Plug
34	6850	Relief Ball, 1/4" Dia.
35	6851	Spring, 24 O.D. x .58
37	6863	Oil Flame Cntrl Assembly
38	6865	Cad Cell Flame Sensor
39	-	Comb. Cntr. Cyl. Assembly
40	3843	Electrode Mtg. Brkt.
41	6993	Oil Fuel Cap
42	-	Start Relay Brkt.
43	7399	Motor, 1/4 HP
44	7790	Nozzle Adapter



Key Part No.

Key No.	Part No.	Description
45	7421	Fan
46	7095	Handle
47	1684	Ignitor Assembly
48	7416	Fuel Air Aspir. Nozzle
49	6223	Strain Relief Bushing
50	1803	Electrode Assembly
51	7429	Extrnl. Retaining Ring
53	3487	Fuel Cap Gasket
54	6847	Hose Barb Fitting
61	7424	Snap Bushing, Nylon
64	6838	Screw, Tapping #9 x 1-1/4"
65	6908	Screw, Machine #10 x 1-1/4"
66	6906	Screw, Tapping #10 x 1/2"

Enerco Oil 50,000 BTU

75-175,000 BTU Forced Air Enerco Oil Fired Heater 2003 - 2004 Model Year

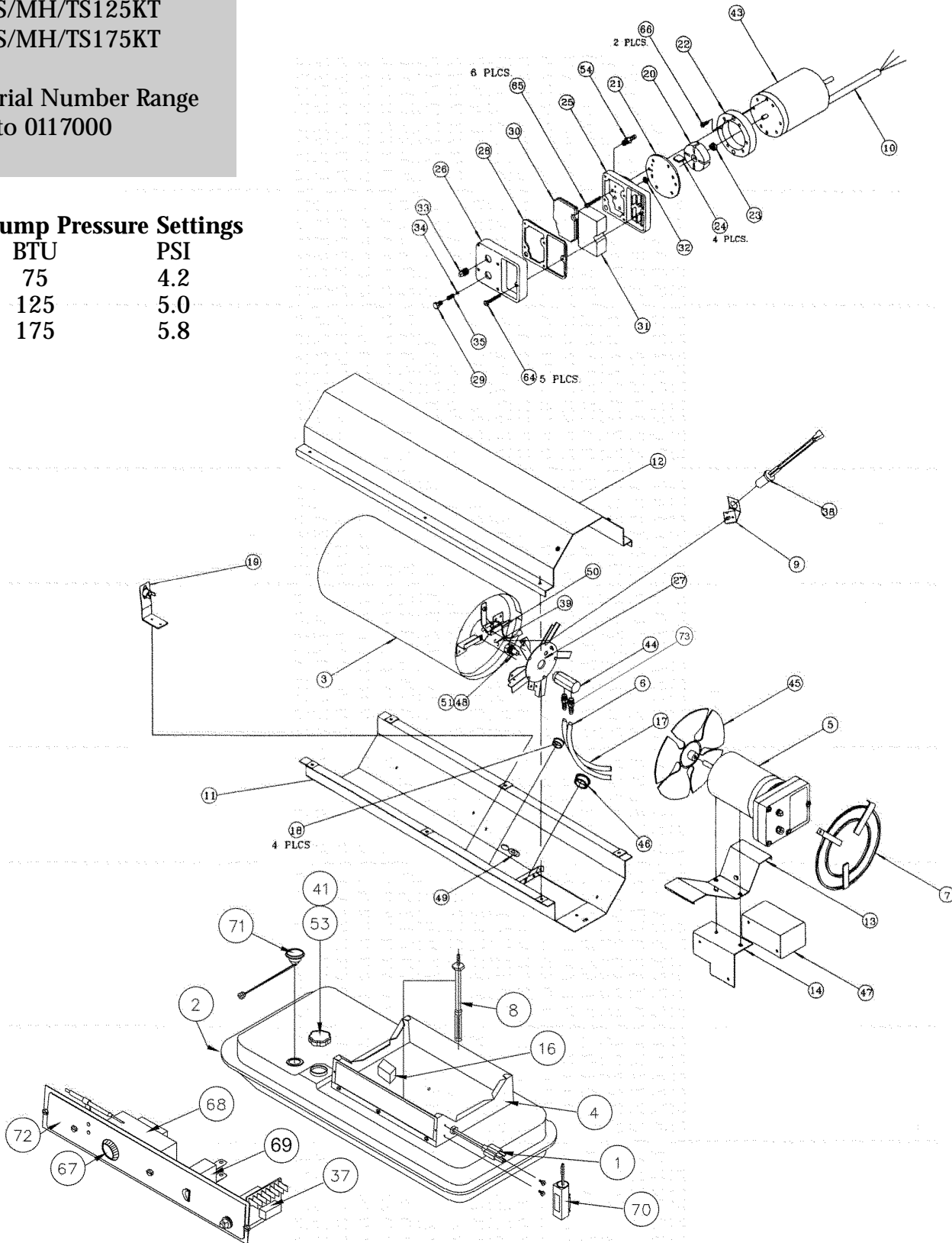
Model Numbers

HS/MH/TS75KT
HS/MH/TS125KT
HS/MH/TS175KT

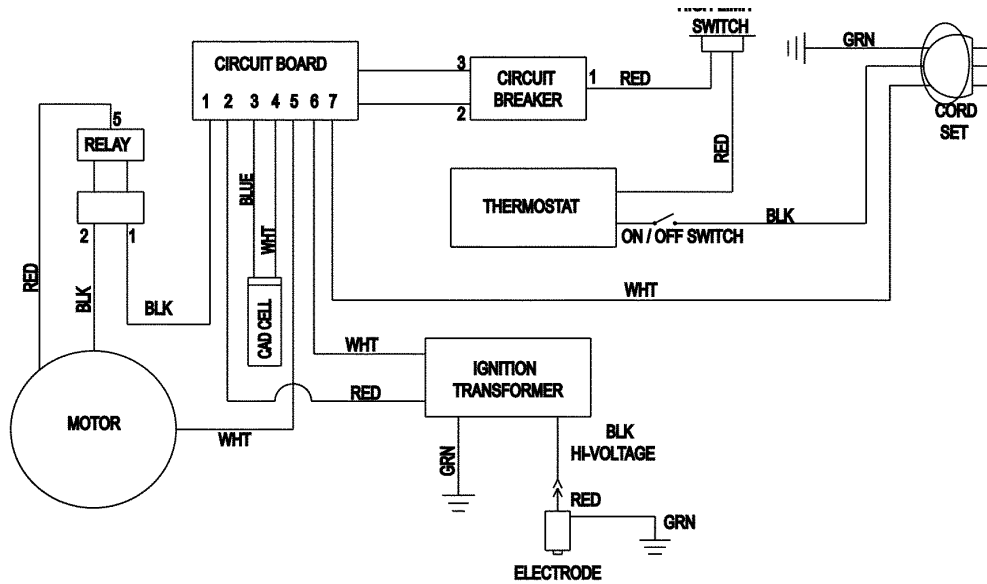
Serial Number Range
0 to 0117000

Pump Pressure Settings

BTU	PSI
75	4.2
125	5.0
175	5.8



75-175,000 BTU Forced Air Enerco Oil Fired Heater 2003 - 2004 Model Year



Key No.	75KT Part No.	125KT Part No.	175KT Part No.	Description
1	1036	1036	1036	Power Cord
2	2213	2214	2214	Fuel Tank Assembly
3	2215	2216	1783	Radiation Shield Ass'y
4	2217	2218	2219	Control Box Ass'y
5	2058	2059	2059	Power Pac Ass'y
6	4343	4346	4346	Fuel Tube
7	8734	1771	1768	Grille Assembly
8	8779	8780	8780	Fuel Filter Assy
9	4011	4011	4011	Oil Cad Cell Bracket
10	3449	3449	3449	Motor Cord Sleeve
11-1	2224	1805	3846	Bottom Shell
12-1	2226	3845	3847	Top Shell
13	4332	4333	4334	Motor Mounting Bracket
14	3705	3818	3705	Ignition Mounting Brkt
16	8735	8735	8735	Start Capacitor
17	4344	4345	4345	Air Tube
18	6225	6225	6225	Snap Bushing
19	1796	1797	1798	High Limit Control
20	6831	6831	6831	Air Pump Rotor
21	6832	6832	6832	Backing Plate
22	6833	6833	6833	Air Pump Cylinder
23	6834	6834	6834	Nylon Air Pump Insert
24	6835	6835	6835	Air Pump Vane (4 ea.)
25	6836	6836	6836	Lower Housing
26	6837	6837	6837	Upper Housing
27	2257	2257	2257	Burner
28	6839	6839	6839	Gasket
29	6842	6842	6842	Adjusting Screw
30	6843	6843	6843	Outlet Filter
31	6844	6844	6844	Inlet Filter
32	6848	6848	6848	O Ring
33	6849	6849	6849	Nylon Pipe Plug
34	6850	6850	6850	Relief Ball, 1/4" Dia.
35	6851	6851	6851	Spring, 24 O.D. x .58
37	6863	6863	6863	Oil Flame Control Assembly
38	6865	6865	6865	Cad Cell Flame Sensor
39	2232	2233	2234	Comb. Chamber Cyl. Ass'y

Key No.	75KT Part No.	125KT Part No.	175KT Part No.	Description
41	8736	8736	8736	Oil Fuel Cap
43	8737	8738	8738	Motor, 1/4 HP
44	8739	8739	8739	Nozzle Adapter
45	8740	6865	6866	Fan
46	---	6227	6227	Snap Bushing
47	2138	2138	2138	Ignitor Assembly
48	8741	8742	8743	Fuel Air Aspir. Nozzle
49	6223	6223	6223	Strain Relief Bushing
50	2235	2235	2235	Electrode Assembly
51	7429	7429	7429	Extrnl. Retaining Ring
53	3487	3487	3487	Fuel Cap Gasket
54	8744	8744	8744	Hose Barb Adapter
*	7094	---	---	Clip Hanle Mtg.
*	7095	---	---	Handle
*	1683	1683	1683	Lead Wire Ass'y Green
*	1040	1040	1040	Lead Wire Ass'y Black
*	---	---	6225	Snap Busing Nylon
*	8745	6862	6862	Fuel Filter Bushing
64	6838	6838	6838	Screw, Tapping #9 x 1-1/4"
65	6908	6908	6908	Screw, Machine #10 x 1-1/4"
66	6906	6906	6906	Screw, Machine #10 x 1/2"
67	1942	1942	1942	Thermostat Knob
*	3441	3441	3441	Bracket Thermostat Mtg.
68	1734	1734	1734	Thermostat Assembly
*	6070	6070	6070	Clamp Loop
69	8785	8785	8785	ON/OFF Switch
70	8782	8781	8781	Pressure Guage
71	8778	8778	8778	Fuel Guage
72	4341	4342	4342	Access Panel
73	8783	8783	8783	Hose Barb Adaptor
*	M8682	M8683	M8683	Logo, Mr. Heater

* Not shown on exploded view

50-175,000 BTU Forced Air Enerco Oil Fired Heater 2004-2005 Model Year

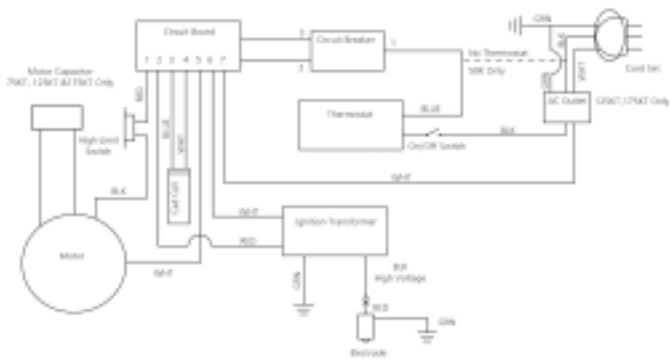
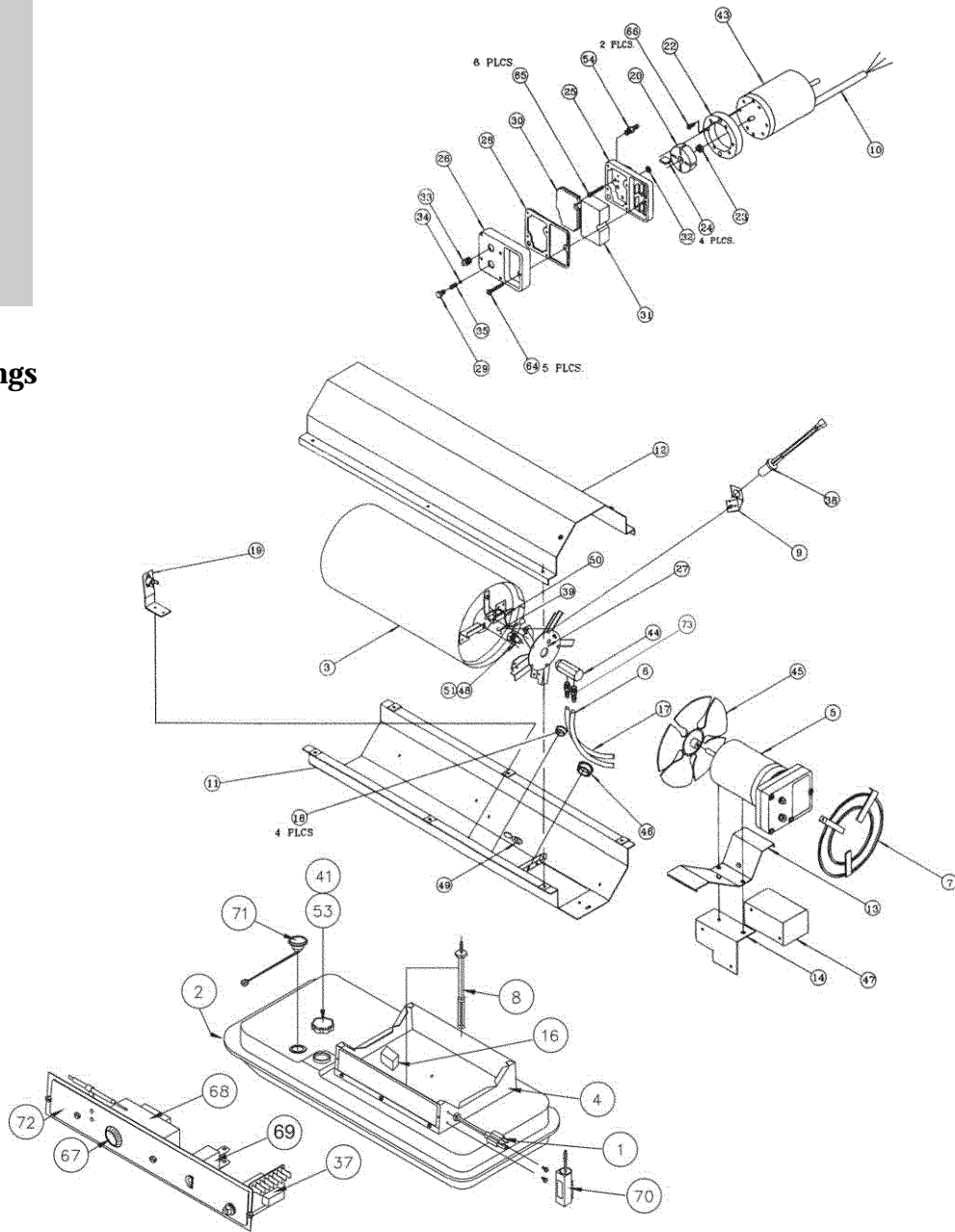
Model Numbers

HS/MH/TS50KT
 HS/MH/TS75KT
 HS/MH/TS125KT
 HS/MH/TS175KT

Serial Number Range
 0117001 to 0148811

Pump Pressure Settings

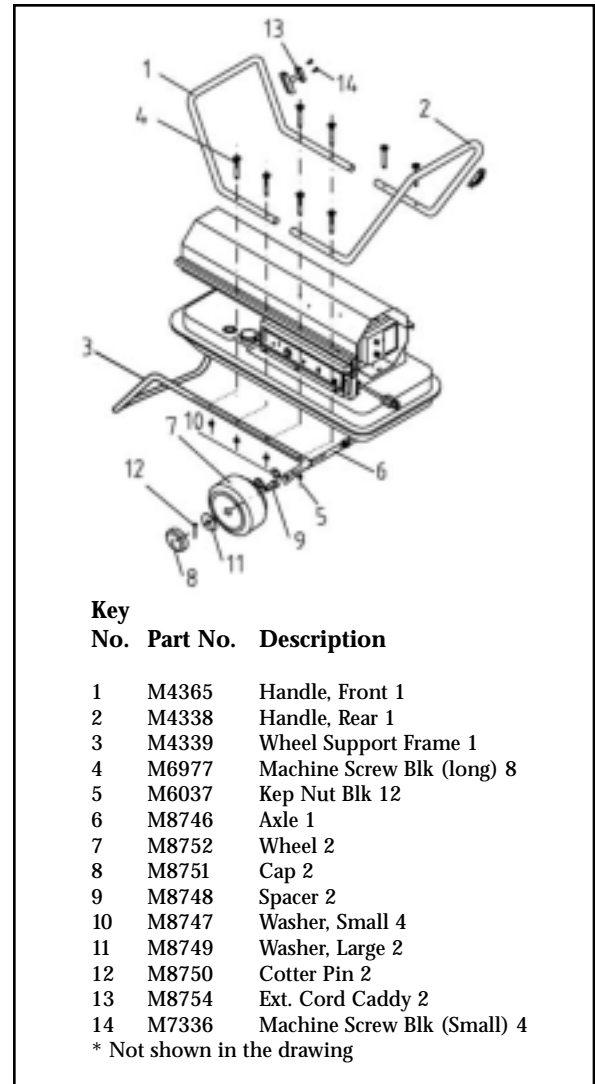
BTU	PSI
50	3.5
75	4.2
125	5.0
175	5.8



50-175,000 BTU Forced Air Enerco Oil Fired Heater

2004-2005 Model Year

Key No.	50K Part No.	75KT Part No.	125KT Part No.	175KT Part No.	Description
1	M1036	M1036	M1036	M1036	Power Cord
2	M1676	M2213	M2214	M2214	Fuel Tank Assembly
3	M1679	M2215	M2216	M1783	Radiation Shield Ass'y
4	M1688	M2217	M2218	M2219	Control Box Ass'y
5	M1682	M2258	M2259	M2259	Power Pac Ass'y
6	M1686	M4343	M4346	M4346	Fuel Tube
7	M1685	M8734	M1771	M1768	Grille Assembly
8	---	M8779	M8780	M8780	Fuel Filter Ass'y
9	M4011	M4011	M4011	M4011	Oil Cad Cell Bracket
10	M3449	M3449	M3449	M3449	Motor Cord Sleeve
11	M1050	M1075	M1125	M1175	Bottom Shell
12	M2050	M2075	M2125	M2175	Top Shell
13	M3704	4332	M4333	M4334	Motor Mounting Bracket
14	M3705	M3705	M3818	M3705	Ignition Mounting Brkt.
16	---	M8788	M8735	M8735	Start Capacitor
17	M3725	M3725	M4345	M4345	Air Tube
18	M6225	M6225	M6225	M6225	Snap Bushing
19	M1796	M1796	M1797	M1798	High Limit Control
20	M6831	M6831	M6831	M6831	Air Pump Rotor
22	M6833	M6833	M6833	M6833	Air Pump Cylinder
23	M6834	M6834	M6834	M6834	Nylon Air Pump Insert
24	M6835	M6835	M6835	M6835	Air Pump Vane (4 ea.)
25	M3250	M3250	M3250	M3250	Outlet Housing
26	M3255	M3255	M3255	M3255	Inlet Housing
27	---	---	M2257	M2257	Burner
28	M3260	M3260	M3260	M3260	Gasket
29	M3265	M3265	M3265	M3265	Adjusting Screw
30	M3270	M3270	M3270	M3270	Outlet Filter
31	M3275	M3275	M3275	M3275	Inlet Filter
32	---	---	---	---	---
33	M6849	M6849	M6849	M6849	Nylon Pipe Plug
34	M6850	M6850	M6850	M6850	Ball, Pressure adj.
35	M6851	M6851	M6851	M6851	Spring, Pressure adj.
37	M6863	M6863	M6863	M6863	Oil Flame Control Ass'y
38	M6865	M6865	M6865	M6865	Cad Cell Flame Sensor
39	---	M2232	M2233	M2234	Comb. Chamber Cyl. Ass'y
41	M6933	M8736	M8736	M8736	Oil Fuel Cap
43	M7339	M8737	M8738	M8738	Motor
44	M7790	M7790	M8739	M8739	Nozzle Adapter
45	M7421	M8740	M6885	M6866	Fan
46	---	---	M6227	M6227	Snap Bushing
47	M1684	M2138	M2138	M2138	Igniter Assembly
48	M7416	M8715	M8714	M8710	Fuel Air Aspir. Nozzle
49	M6223	M6223	M6223	M6223	Strain Relief Bushing
50	M1803	M1803	M2235	M2235	Electrode Assembly
51	M7429	M7429	M7429	M7429	Extrnl. Retaining Ring
53	M3487	M3487	M3487	M3487	Fuel Cap Gasket
54	M6847	M6847	M8744	M8744	Hose Barb Adapter
64	M6838	M6838	M6838	M6838	Screw, Tapping #9 x 1-1/4"
65	M6908	M6908	M6908	M6908	Screw, Machine #10 x 1-1/4"
66	M6906	M6906	M6906	M6906	Screw, Machine #10 x 1/2"
67	---	M1942	M1942	M1942	Thermostat Knob
68	---	M1734	M1734	M1734	Thermostat Assembly
69	---	M8785	M8785	M8785	ON/OFF Switch
70	---	M8782	M8781	M8781	Pressure Gauge
71	---	M8791	M8778	M8778	Fuel Gauge
72	M3707	M4341	M4342	M4342	Access Panel
73	---	---	M8783	M8783	Hose Barb Adaptor
*	M3843	---	---	---	Electrode Mtg. Brkt.
*	---	---	---	---	AC Recepticle
*	M7094	M7094	---	---	Clip Handle Mtg.
*	M7095	M7095	---	---	Handle
*	M1683	M1683	M1683	M1683	Lead Wire Ass'y Green
*	---	M1040	M1040	M1040	Lead Wire Ass'y Black
*	M7424	---	---	M6225	Snap Busing Nylon
*	---	M8745	M6862	M6862	Fuel Filter Bushing
*	---	M3441	M3441	M3441	Bracket Thermostat Mtg.
*	---	M6070	6070	6070	Clamp Loop
*	---	M8682	M8683	M8683	Logo, Mr. Heater
*	---	---	M8790	M8790	Adapter, T-hose barb
*	M4171	M4171	---	---	Nozzle mtg. plate



50-210,000 BTU Forced Air Enerco Oil Fired Heater 2005 - 2006 Model Year

Model Numbers

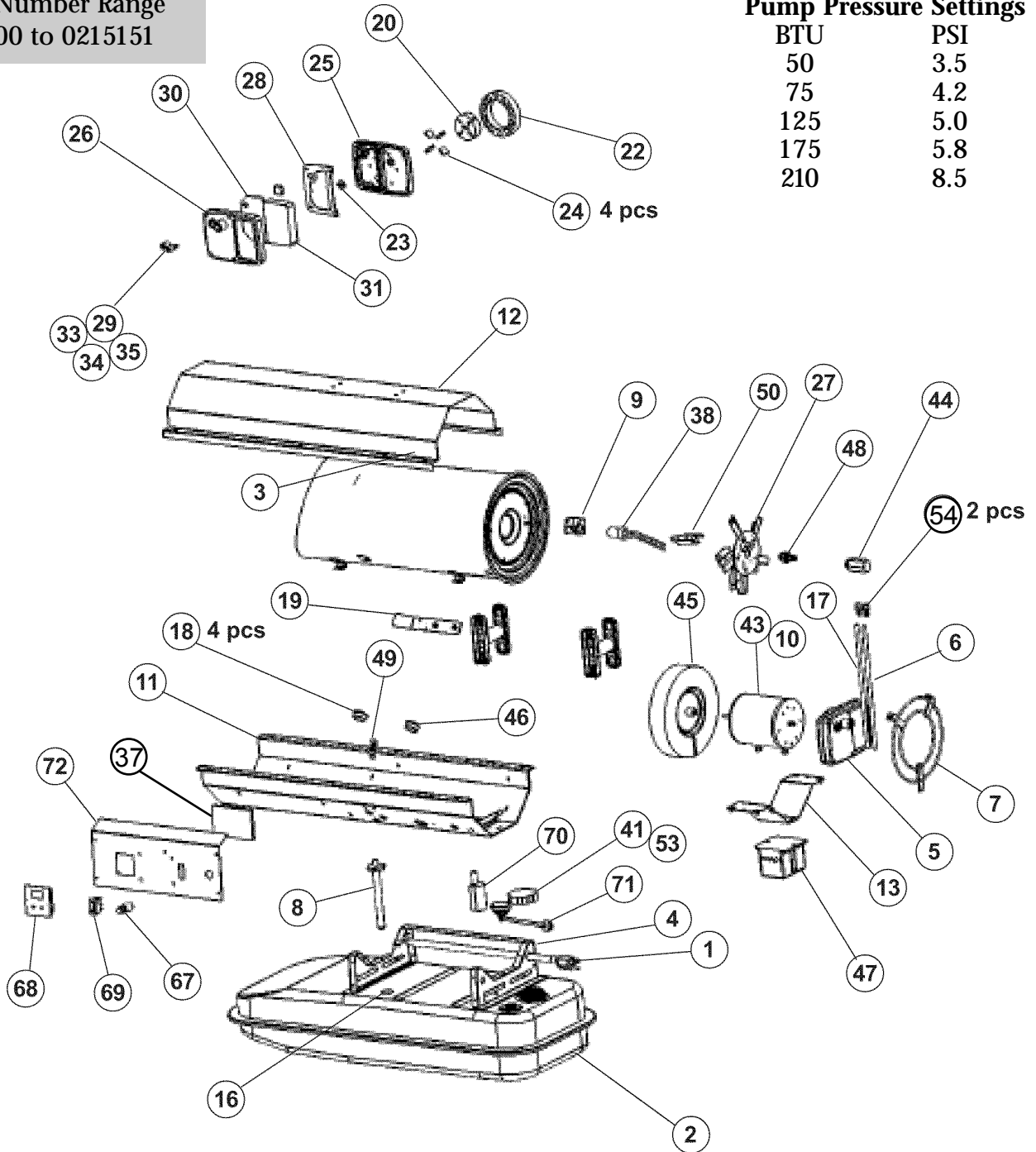
- HS/MH/TS50K
- HS/MH/TS75KT
- HS/MH/TS125KT
- HS/MH/TS175KT
- HS/MH/TS210KT

Serial Number Range

0149000 to 0215151

Pump Pressure Settings

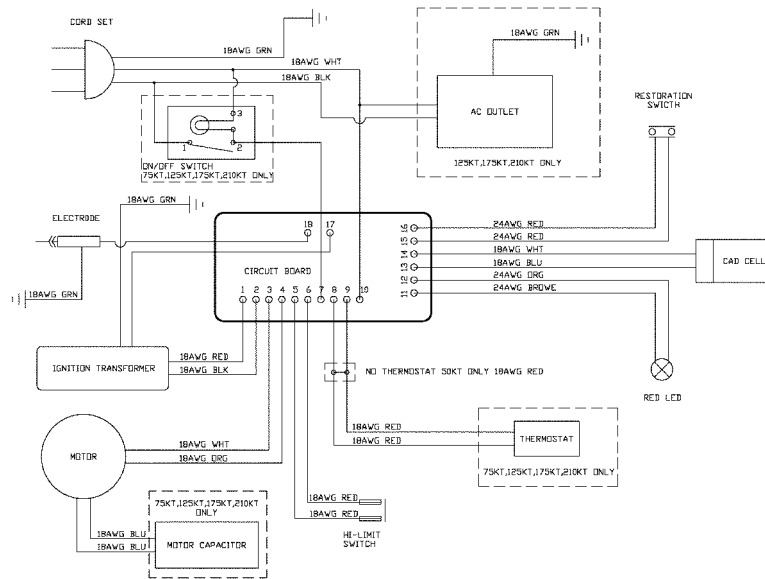
BTU	PSI
50	3.5
75	4.2
125	5.0
175	5.8
210	8.5



50-210,000 BTU Enerco Oil Fired Heater

2005 - 2006 Model Year

Enerco Oil 50-210,000 BTU



Key No.	50K Part No.	75KT Part No.	125KT Part No.	175KT Part No.	210KT Part No.	Description	Key No.	50K Part No.	75KT Part No.	125KT Part No.	175KT Part No.	210KT Part No.	Description
1	21036	21036	21036	21036	21036	Power Cord	41	26993	28736	28736	28736	28736	Oil Fuel Cap
2	21676	22213	22214	22214	22214	Fuel Tank Assembly	43	27339	28737	28738	28738	28738	Motor
3	21679	22215	22216	21783	22099	RadiationShield Ass'y	44	27790	27790	28739	28739	28739	Nozzle Adapter
4	21688	22217	22218	22219	22218	Control Box Ass'y	45	27421	28740	26885	26866	22108	Fan
5	21682	22258	22259	22259	22259	Power Pac Ass'y	46	---	---	26227	26227	26227	Snap Bushing
6	21686	24343	24346	24346	24346	Fuel Tube	47	22142	22142	22142	22142	22142	Igniter Assembly
7	21685	28734	21771	21768	21771	Grille Assembly	48	27416	28741	28742	28743	22109	Fuel Air Aspir. Nozzle
8	---	28779	28780	28780	28780	Fuel Filter Ass'y	49	26223	26223	26223	26223	26223	Strain Relief Bushing
9	24011	24011	24011	24011	24011	Oil Cad Cell Bracket	50	22143	22143	22144	22144	22144	Electrode Assembly
10	23449	23449	23449	23449	23449	Motor Cord Sleeve	51	27429	27429	27429	27429	27429	Extrnl. Retaining Ring
11	21050	21075	21125	21175	22127	Bottom Shell	53	22145	22145	22145	22145	22145	Fuel Cap Gasket
12	22050	22075	22125	22175	22102	Top Shell	54	26847	26847	28744	28744	28744	Hose Barb Adapter
13	23704	24332	24333	24334	24333	Motor Mounting Brkt	*	27094	27094	---	---	---	Clip Hanle Mtg.
14	---	22103	22103	22103	22103	AC Receptacle	*	27095	27095	---	---	---	Handle
16	---	28788	28735	28735	28735	Start Capacitor	*	21683	21683	21683	21683	21683	Lead Wire Ass'y Green
17	23725	23725	24345	24345	24345	Air Tube	*	---	21040	21040	21040	21040	Lead Wire Ass'y Black
18	26225	26225	26225	26225	26225	Snap Bushing	*	---	28745	26862	26862	26862	Fuel Filter Bushing
19	21796	21796	21797	21798	22105	High Limit Control	*	---	22146	22146	22146	22146	Bracket Thermostat Mtg.
20	26831	26831	26831	26831	26831	Air Pump Rotor	*	---	---	28790	28790	28790	Adapter,T-hose barb
21	---	22104	22104	22104	22104	AC Receptacle Cover	*	---	26070	26070	26070	26070	Clamp Loop
22	26833	26833	26833	26833	26833	Air Pump Cylinder	*	24171	24171	---	---	---	Nozzle mtg. plate
23	26834	26834	26834	26834	26834	Nylon Air Pump Insert	64	26838	26838	26838	26838	26838	Screw, Tapping #9 x1-1/4"
24	26835	26835	26835	26835	26835	Air Pump Vane(4 ea.)	65	26908	26908	26908	26908	26908	Screw,Machine#10x1-1/4"
25	22106	22106	22106	22106	22106	Outlet Housing	66	26906	26906	26906	26906	26906	Screw, Machine#10 x 1/2"
26	23255	23255	23255	23255	23255	Inlet Housing	67	---	21942	21942	21942	21942	Thermostat Knob
27	---	---	22257	22257	22257	Burner Head Ass'y	68	---	21734	21734	21734	21734	Thermostat Assembly
28	23260	23260	23260	23260	23260	Gasket	69	---	28785	28785	28785	28785	ON/OFF Switch
29	23265	23265	23265	23265	23265	Adjusting Screw	70	---	28782	28781	28781	28781	Pressure Gauge
30	23270	23270	23270	23270	23270	Outlet Filter	71	---	28791	28778	28778	28778	Fuel Gauge
31	23275	23275	23275	23275	23275	Inlet Filter	72	22147	22148	22149	22149	22149	Control Panel
32	---	---	---	---	---	---	73	---	---	28783	28783	28783	Hose Barb Adaptor
33	26849	26849	26849	26849	26849	Nylon Pipe Plug	*	---	28682	28683	28683	28683	Logo, Mr. Heater
34	26850	26850	26850	26850	26850	Ball., Pressure adj.	* Not shown on exploded view						
35	26851	26851	26851	26851	26851	Spring, Pressure adj.							
37	22141	22141	22141	22141	22141	Oil Flame Control Ass'y							
38	26865	26865	26865	26865	26865	Cad Cell Flame Sensor							
39	---	22232	22233	22234	22107	Comb.Chamber Cyl.Ass'y							

50-210,000 BTU Forced Air Enerco Oil Fired Heater 2006 - 2007 Model Year

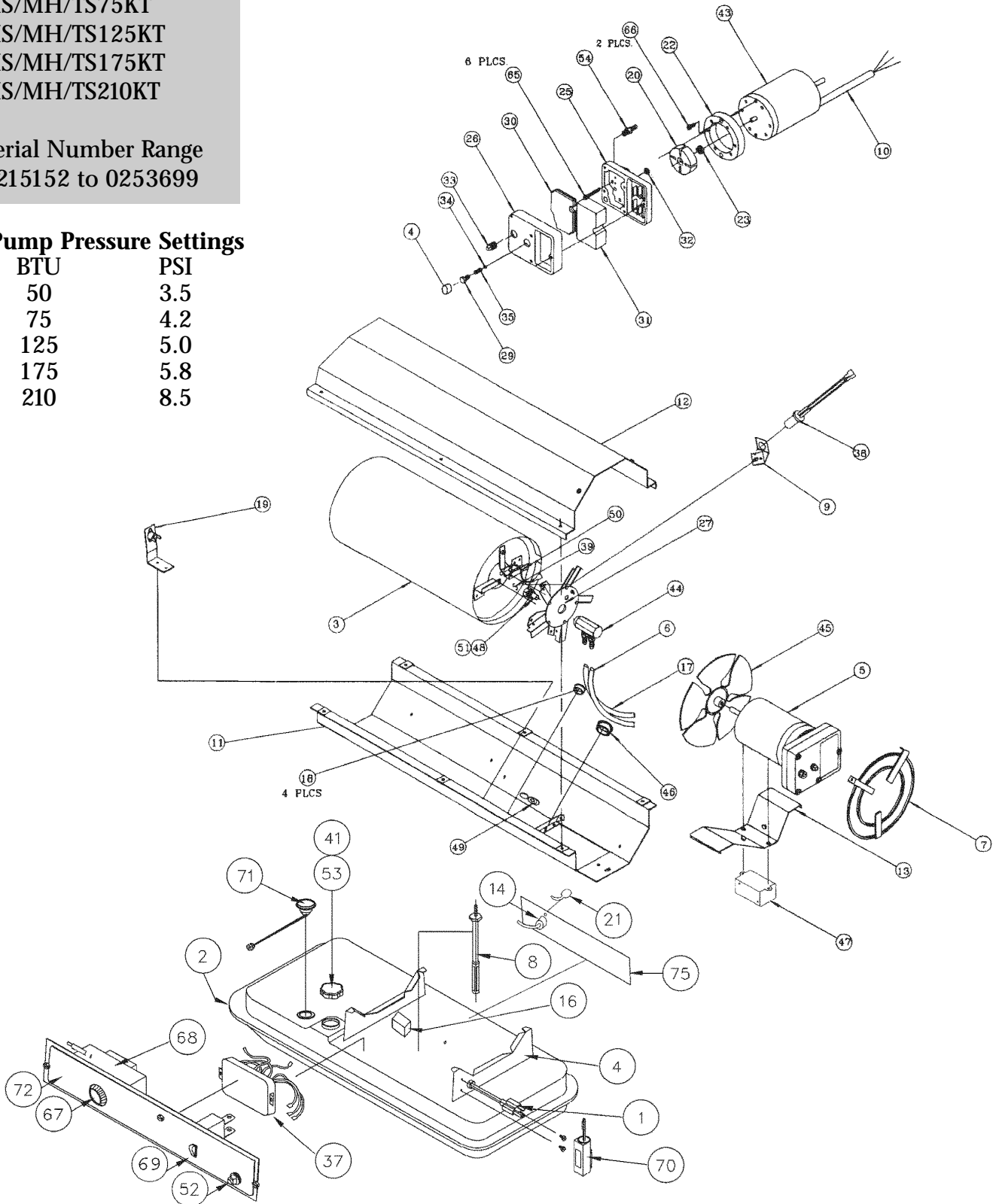
Model Numbers

- HS/MH/TS50K
- HS/MH/TS75KT
- HS/MH/TS125KT
- HS/MH/TS175KT
- HS/MH/TS210KT

Serial Number Range
0215152 to 0253699

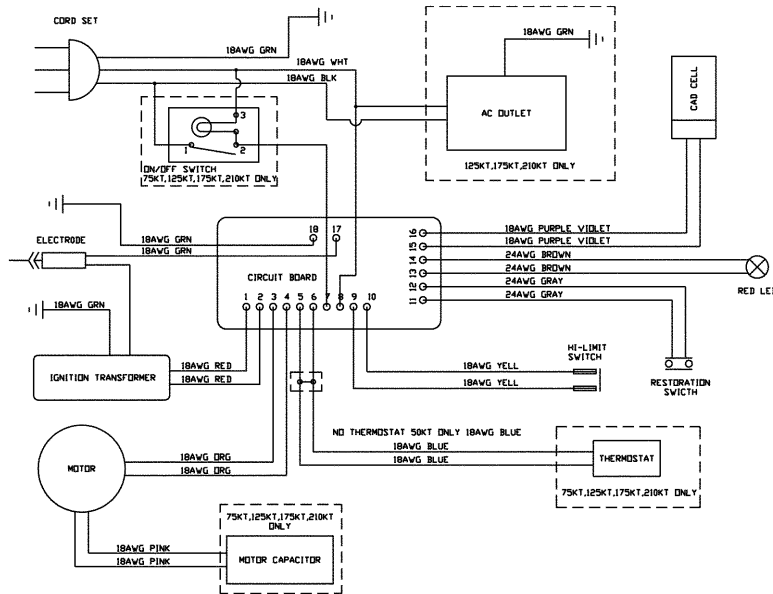
Pump Pressure Settings

BTU	PSI
50	3.5
75	4.2
125	5.0
175	5.8
210	8.5



50-210,000 BTU Forced Air Enerco Oil Fired Heater

2006 - 2007 Model Year



Key No.	50K Part No.	75KT Part No.	125KT Part No.	175KT Part No.	210KT Part No.	Description	Key No.	50K Part No.	75KT Part No.	125KT Part No.	175KT Part No.	210KT Part No.	Description
1	21036	21036	21036	21036	21036	Power Cord	43	27339	28737	28738	28738	28738	Motor
2	21676	22213	22214	22214	22214	Fuel Tank Assembly	44	27790	27790	28739	28739	28739	Nozzle Adapter
3	21679	22215	22216	21783	22099	RadiationShield Ass'y	45	27421	28740	26885	26866	22108	Fan
4	26904	26904	26904	26904	26904	Pump Adj. Screw Cap	46	---	---	26227	26227	26227	Snap Bushing
5	21682	22258	22259	22259	22259	Power Pac Ass'y	47	22142	22142	22142	22142	22142	Igniter Assembly
6	21686	24343	24346	24346	24346	Fuel Tube	48	27416	28741	28742	28743	22109	Fuel Air Aspir. Nozzle
7	21685	28734	21771	21768	21771	Grille Assembly	49	26223	26223	26223	26223	26223	Strain Relief Bushing
8	28779	28779	28780	28780	28780	Fuel Filter	50	22143	22143	22144	22144	22144	Electrode Assembly
9	24011	24011	24011	24011	24011	Oil Cad Cell Bracket	51	27429	27429	27429	27429	27429	Extrnl. Retaining Ring
10	23449	23449	23449	23449	23449	Motor Cord Sleeve	52	26886	26886	26886	26886	26886	Reset Button
11	21050	21075	21125	21175	22127	Bottom Shell	53	26910	26910	26910	26910	26910	Fuel Cap Gasket
12	22050	22075	22125	22175	22102	Top Shell	54	26847	26847	28744	28744	28744	Hose Barb Adapter
13	23704	24332	24333	24334	24333	Motor Mounting Brkt	*	27094	27094	---	---	---	Clip Hanle Mtg.
14	26898	26898	26898	26898	26898	Receptacle, 110V	*	27095	27095	---	---	---	Handle
16	---	28788	28735	28735	28735	Start Capacitor	*	28745	28745	---	---	---	Fuel Line Bushing
17	23725	23725	24345	24345	24345	Air Tube	*	---	22146	22146	22146	22146	Bracket Thermostat Mtg.
18	26225	26225	26225	26225	26225	Snap Bushing	*	---	26070	26070	26070	26070	Clamp Loop
19	21794	21794	26901	26902	22105	High Limit Control	*	24171	24171	---	---	---	Nozzle mtg. plate
20	26831	26831	26831	26831	26831	Air Pump Rotor w/ Vanes	*	26905	26905	26905	26905	26905	Flame Control Mtg. Brk.
21	---	22104	22104	22104	22104	AC Receptacle Cover	67	---	21942	21942	21942	21942	Thermostat Knob
22	26833	26833	26833	26833	26833	Air Pump Cylinder	68	---	21734	21734	21734	21734	Thermostat Assembly
23	26834	26834	26834	26834	26834	Nylon Air Pump Insert	69	---	28785	28785	28785	28785	ON/OFF Switch
24	26899	26899	26899	26899	26899	Receptacle Cover	70	---	28782	28781	28781	28781	Pressure Gauge
25	22106	22106	22106	22106	22106	Outlet Housing	71	---	28791	28778	28778	28778	Fuel Gauge
26	23255	23255	23255	23255	23255	Inlet Housing	72	22147	22148	22149	22149	22149	Control Panel
27	---	---	22257	22257	22257	Burner Head Ass'y	*	---	28682	28683	28683	28683	Logo, Mr. Heater
29	23265	23265	23265	23265	23265	Adjusting Screw	75	26887	26887	26888	26888	26888	Control Panel Back
30	23270	23270	23270	23270	23270	Outlet Filter							
31	20234	20234	20234	20234	20234	Inlet Filter							
33	26849	26849	26849	26849	26849	Nylon Pipe Plug							
34	26850	26850	26850	26850	26850	Ball, Pressure adj.							
35	26851	26851	26851	26851	26851	Spring, Pressure adj.							
37	22221	22221	22221	22221	22221	Flame Control Ass'y							
38	26903	26903	26903	26903	26903	Cad Cell Flame Sensor							
39	---	22232	22233	22234	22107	Comb.Chamber Cyl.Ass'y							
41	26909	26909	26909	26909	26909	Fuel Cap							

50-210,000 BTU Forced Air Enerco Oil Fired Heater 2007 - 2008 Model Year

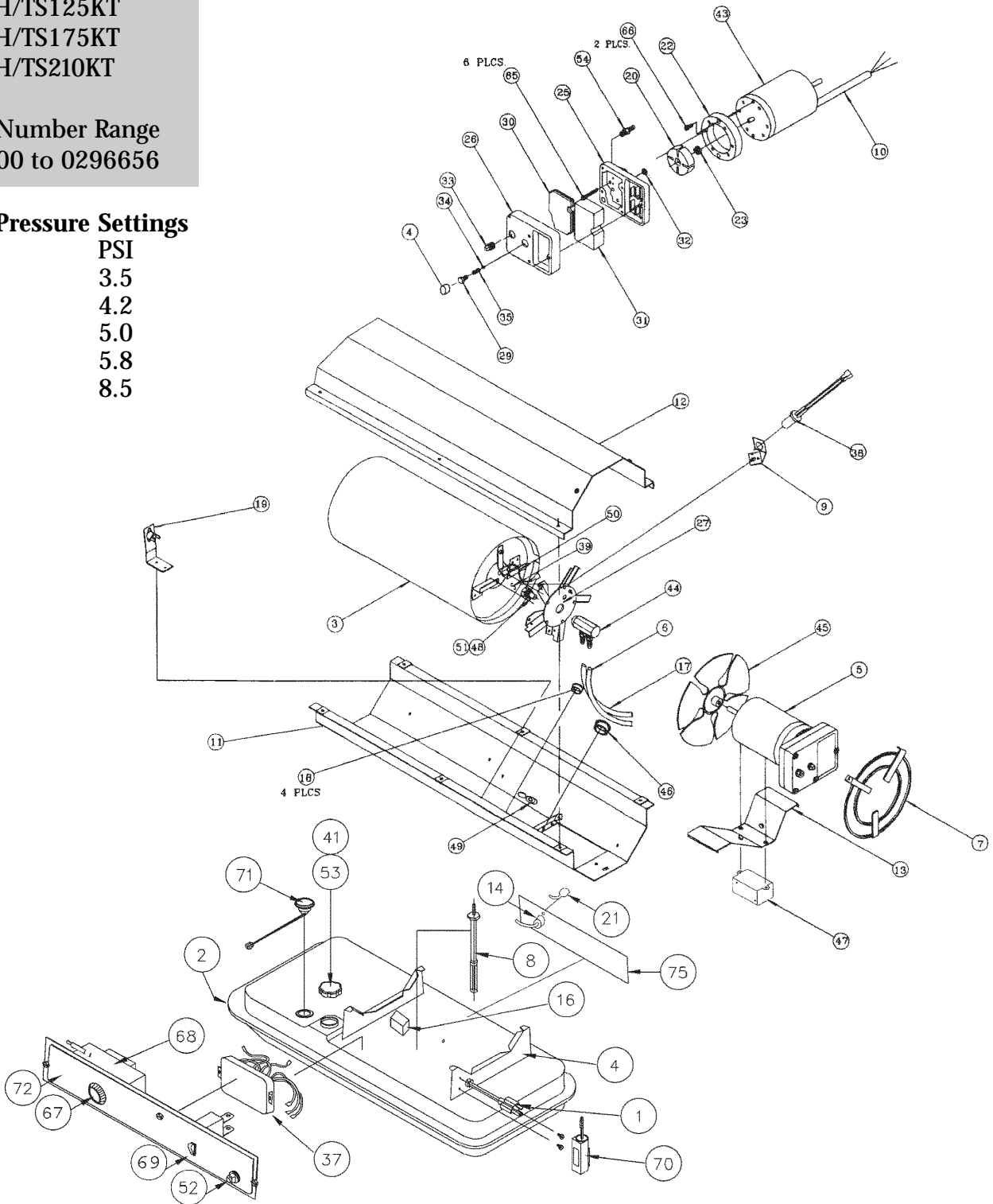
Model Numbers

- HS/MH/TS50K
- HS/MH/TS75KT
- HS/MH/TS125KT
- HS/MH/TS175KT
- HS/MH/TS210KT

Serial Number Range
0253700 to 0296656

Pump Pressure Settings

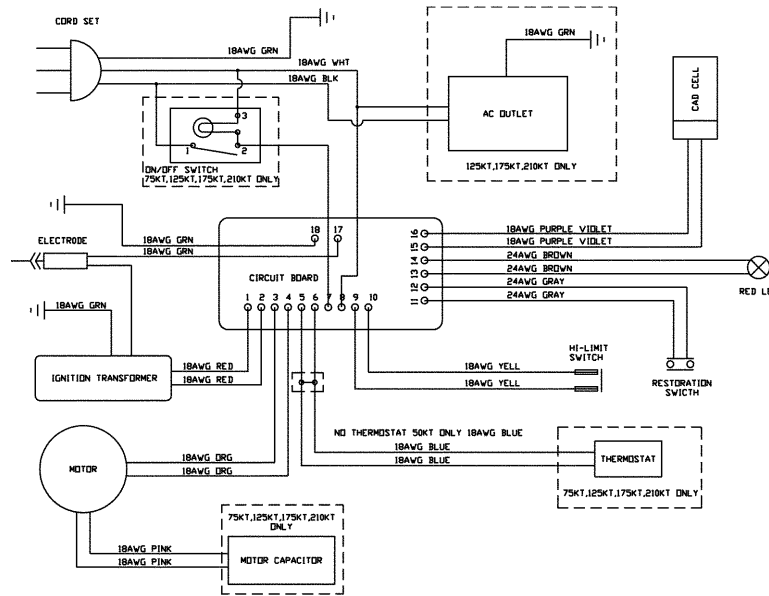
BTU	PSI
50	3.5
75	4.2
125	5.0
175	5.8
210	8.5



50-210,000 BTU Forced Air Enerco Oil Fired Heater

2007 - 2008 Model Year

Enerco Oil 50-210,000 BTU



Key No.	50K Part No.	75KT Part No.	125KT Part No.	175KT Part No.	210KT Part No.	Description	Key No.	50K Part No.	75KT Part No.	125KT Part No.	175KT Part No.	210KT Part No.	Description	
1	21036	21036	21036	21036	21036	Power Cord	41	26909	26909	26909	26909	26909	Fuel Cap	
2	21676	22213	22214	22214	22214	Fuel Tank Assembly	43	27339	28737	28738	28738	28738	Motor	
3	21679	22215	22216	21783	22099	RadiationShield Ass'y	44	27790	27790	28739	28739	28739	Nozzle Adapter	
4	26904	26904	26904	26904	26904	Pump Adj. Screw Cap	45	27421	28740	26885	26866	22108	Fan	
5	21682	22258	22259	22259	22259	Power Pac Ass'y	46	---	---	26227	26227	26227	Snap Bushing	
6	21686	24343	24346	24346	24346	Fuel Tube	47	22142	22142	22142	22142	22142	Igniter Assembly	
7	21685	28734	21771	21768	21771	Grille Assembly	48	27416	28741	28742	28743	22109	Fuel Air Aspir. Nozzle	
8	28779	28779	28780	28780	28780	Fuel Filter	49	26223	26223	26223	26223	26223	Strain Relief Bushing	
9	24011	24011	24011	24011	24011	Oil Cad Cell Bracket	50	22143	22143	22144	22144	22144	Electrode Assembly	
10	23449	23449	23449	23449	23449	Motor Cord Sleeve	51	27429	27429	27429	27429	27429	Extrnl. Retaining Ring	
11	21050	21075	21125	21175	22127	Bottom Shell	52	26886	26886	26886	26886	26886	Reset Button	
12	22050	22075	22125	22175	22102	Top Shell	53	26910	26910	26910	26910	26910	Fuel Cap Gasket	
13	23704	24332	24333	24334	24333	Motor Mounting Brkt	54	26847	26847	28744	28744	28744	Hose Barb Adapter	
14	26898	26898	26898	26898	26898	Receptacle, 110V	*	27094	27094	---	---	---	Clip Hanle Mtg.	
16	---	28788	28735	28735	28735	Start Capacitor	*	27095	27095	---	---	---	Handle	
17	23725	23725	24345	24345	24345	Air Tube	*	28745	28745	---	---	---	Fuel Line Bushing	
18	26225	26225	26225	26225	26225	Snap Bushing	*	---	22146	22146	22146	22146	Bracket Thermostat Mtg.	
19	21794	21794	26901	26902	22105	High Limit Control	*	---	26070	26070	26070	26070	Clamp Loop	
20	26831	26831	26831	26831	26831	Air Pump Rotor w/ Vanes	*	24171	24171	---	---	---	Nozzle mtg. plate	
21	---	22104	22104	22104	22104	AC Receptacle Cover	*	26905	26905	26905	26905	26905	Flame Control Mtg. Brk.	
22	26833	26833	26833	26833	26833	Air Pump Cylinder	67	---	21942	21942	21942	21942	Thermostat Knob	
23	26834	26834	26834	26834	26834	Nylon Air Pump Insert	68	---	21734	21734	21734	21734	Thermostat Assembly	
24	26899	26899	26899	26899	26899	Receptacle Cover	69	---	28785	28785	28785	28785	ON/OFF Switch	
25	22106	22106	22106	22106	22106	Outlet Housing	70	---	28782	28781	28781	28781	Pressure Gauge	
26	23255	23255	23255	23255	23255	Inlet Housing	71	---	28791	28778	28778	28778	Fuel Gauge	
27	---	---	22257	22257	22257	Burner Head Ass'y	72	22147	22148	22149	22149	22149	Control Panel	
29	23265	23265	23265	23265	23265	Adjusting Screw	*	---	28682	28683	28683	28683	28683	Logo, Mr. Heater
30	23270	23270	23270	23270	23270	Outlet Filter	75	26887	26887	26888	26888	26888	Control Panel Back	
31	20234	20234	20234	20234	20234	Inlet Filter								
33	26849	26849	26849	26849	26849	Nylon Pipe Plug								
34	26850	26850	26850	26850	26850	Ball., Pressure adj.								
35	26851	26851	26851	26851	26851	Spring, Pressure adj.								
37	22221	22221	22221	22221	22221	Flame Control Ass'y								
38	26903	26903	26903	26903	26903	Cad Cell Flame Sensor								
39	---	22232	22233	22234	22107	Comb.Chamber Cyl.Ass'y								

50-210,000 BTU Forced Air Enerco Oil Fired Heater 2008 - 2009 Model Year

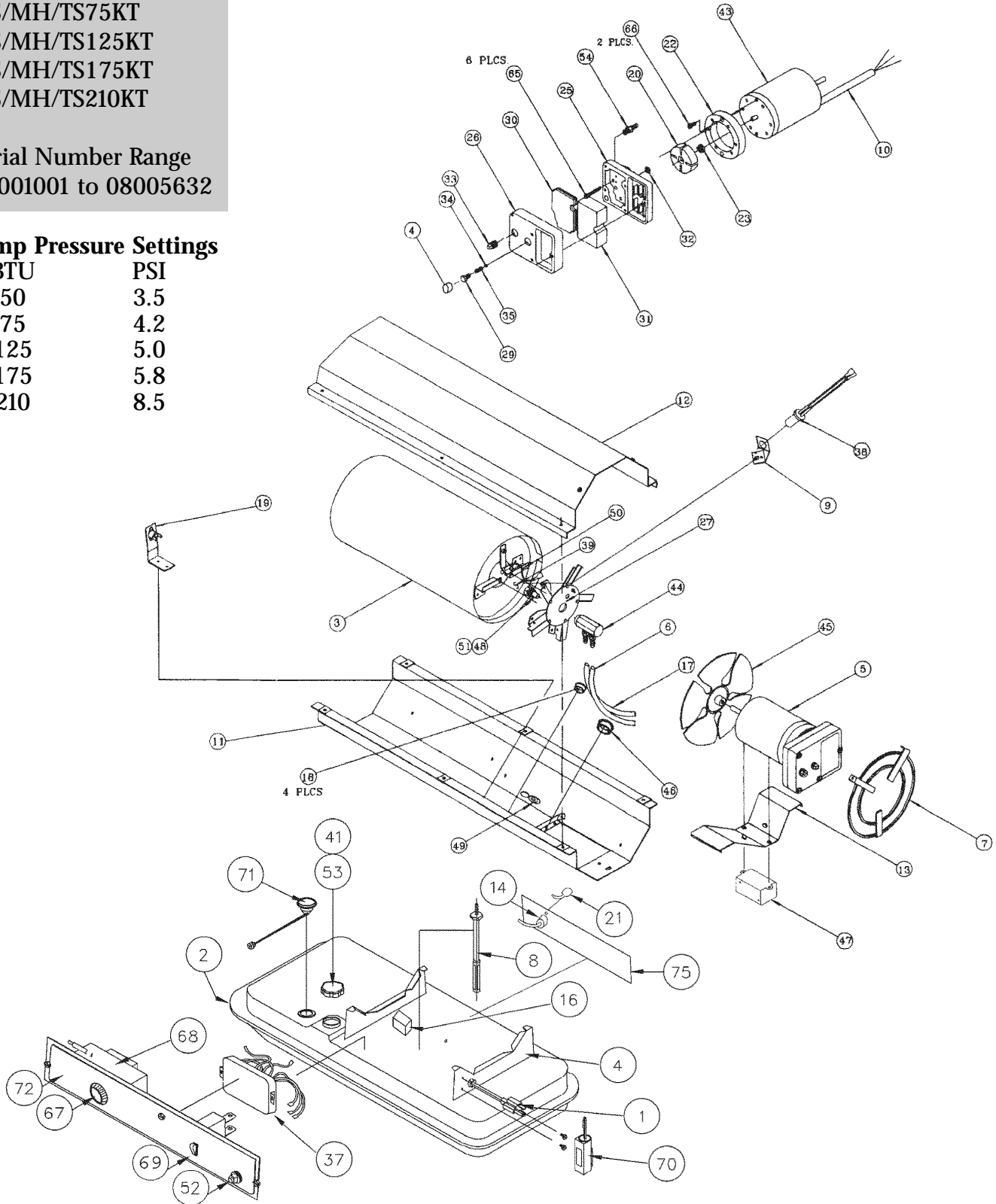
Model Numbers

- HS/MH/TS50K
- HS/MH/TS75KT
- HS/MH/TS125KT
- HS/MH/TS175KT
- HS/MH/TS210KT

Serial Number Range
08001001 to 08005632

Pump Pressure Settings

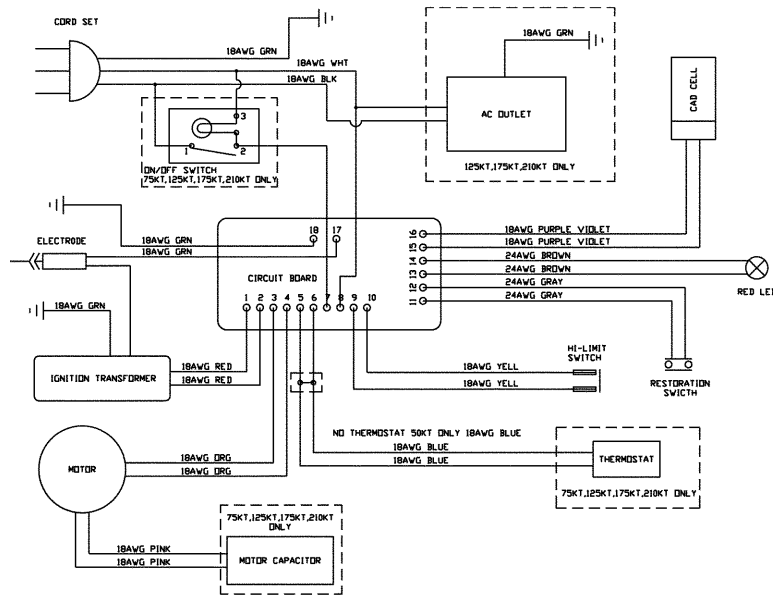
BTU	PSI
50	3.5
75	4.2
125	5.0
175	5.8
210	8.5



50-210,000 BTU Forced Air Enerco Oil Fired Heater

2008 - 2009 Model Year

Enerco Oil 50-210,000 BTU



Key No.	50K Part No.	75KT Part No.	125KT Part No.	175KT Part No.	210KT Part No.	Description
1	21036	21036	21036	21036	21036	Power Cord
2	21676	22213	22214	22214	22214	Fuel Tank Assembly
3	21679	22215	22216	21783	22099	RadiationShield Ass'y
4	26904	26904	26904	26904	26904	Pump Adj. Screw Cap
5	21682	22258	22259	22259	22259	Power Pac Ass'y
6	21686	24343	24346	24346	24346	Fuel Tube
7	21685	28734	21771	21768	21771	Grille Assembly
8	28779	28779	28780	28780	28780	Fuel Filter
9	24011	24011	24011	24011	24011	Oil Cad Cell Bracket
10	23449	23449	23449	23449	23449	Motor Cord Sleeve
11	21050	21075	21125	21175	22127	Bottom Shell
12	22050	22075	22125	22175	22102	Top Shell
13	23704	24332	24333	24334	24333	Motor Mounting Brkt
14	26898	26898	26898	26898	26898	Receptacle, 110V
16	---	28788	28735	28735	28735	Start Capacitor
17	23725	23725	24345	24345	24345	Air Tube
18	26225	26225	26225	26225	26225	Snap Bushing
19	21794	21794	26901	26902	22105	High Limit Control
20	26831	26831	26831	26831	26831	Air Pump Rotor w/ Vanes
21	---	22104	22104	22104	22104	AC Receptacle Cover
22	26833	26833	26833	26833	26833	Air Pump Cylinder
23	26834	26834	26834	26834	26834	Nylon Air Pump Insert
24	26899	26899	26899	26899	26899	Receptacle Cover
25	22106	22106	22106	22106	22106	Outlet Housing
26	23255	23255	23255	23255	23255	Inlet Housing
27	---	---	22257	22257	22257	Burner Head Ass'y
29	23265	23265	23265	23265	23265	Adjusting Screw
30	23270	23270	23270	23270	23270	Outlet Filter
31	20234	20234	20234	20234	20234	Inlet Filter
33	26849	26849	26849	26849	26849	Nylon Pipe Plug
34	26850	26850	26850	26850	26850	Ball, Pressure adj.
35	26851	26851	26851	26851	26851	Spring, Pressure adj.
37	22221	22221	22221	22221	22221	Flame Control Ass'y
38	26903	26903	26903	26903	26903	Cad Cell Flame Sensor
39	---	22232	22233	22234	22107	Comb. Chamber Cyl. Ass'y

Key No.	50K Part No.	75KT Part No.	125KT Part No.	175KT Part No.	210KT Part No.	Description
41	26909	26909	26909	26909	26909	Fuel Cap
43	27339	28737	28738	28738	28738	Motor
44	27790	27790	28739	28739	28739	Nozzle Adapter
45	27421	28740	26885	26866	22108	Fan
46	---	---	26227	26227	26227	Snap Bushing
47	22142	22142	22142	22142	22142	Igniter Assembly
48	27416	28741	28742	28743	22109	Fuel Air Aspir. Nozzle
49	26223	26223	26223	26223	26223	Strain Relief Bushing
50	22143	22143	22144	22144	22144	Electrode Assembly
51	27429	27429	27429	27429	27429	Extrnl. Retaining Ring
52	26886	26886	26886	26886	26886	Reset Button
53	26910	26910	26910	26910	26910	Fuel Cap Gasket
54	26847	26847	28744	28744	28744	Hose Barb Adapter
*	27094	27094	---	---	---	Clip Hanle Mtg.
*	27095	27095	---	---	---	Handle
*	28745	28745	---	---	---	Fuel Line Bushing
*	---	22146	22146	22146	22146	Bracket Thermostat Mtg.
*	---	26070	26070	26070	26070	Clamp Loop
*	24171	24171	---	---	---	Nozzle mtg. plate
*	26905	26905	26905	26905	26905	Flame Control Mtg. Brk.
67	---	21942	21942	21942	21942	Thermostat Knob
68	---	21734	21734	21734	21734	Thermostat Assembly
69	---	28785	28785	28785	28785	ON/OFF Switch
70	---	28782	28781	28781	28781	Pressure Gauge
71	---	28791	28778	28778	28778	Fuel Gauge
72	22147	22148	22149	22149	22149	Control Panel
*	---	28682	28683	28683	28683	Logo, Mr. Heater
75	26887	26887	26888	26888	26888	Control Panel Back

50-210,000 BTU Forced Air Enerco Oil Fired Heater 2009 - 2010 Model Year

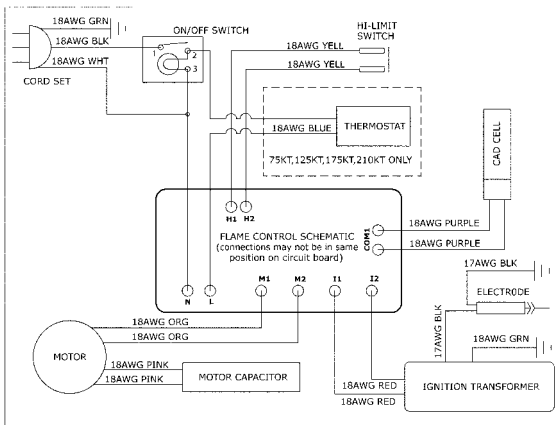
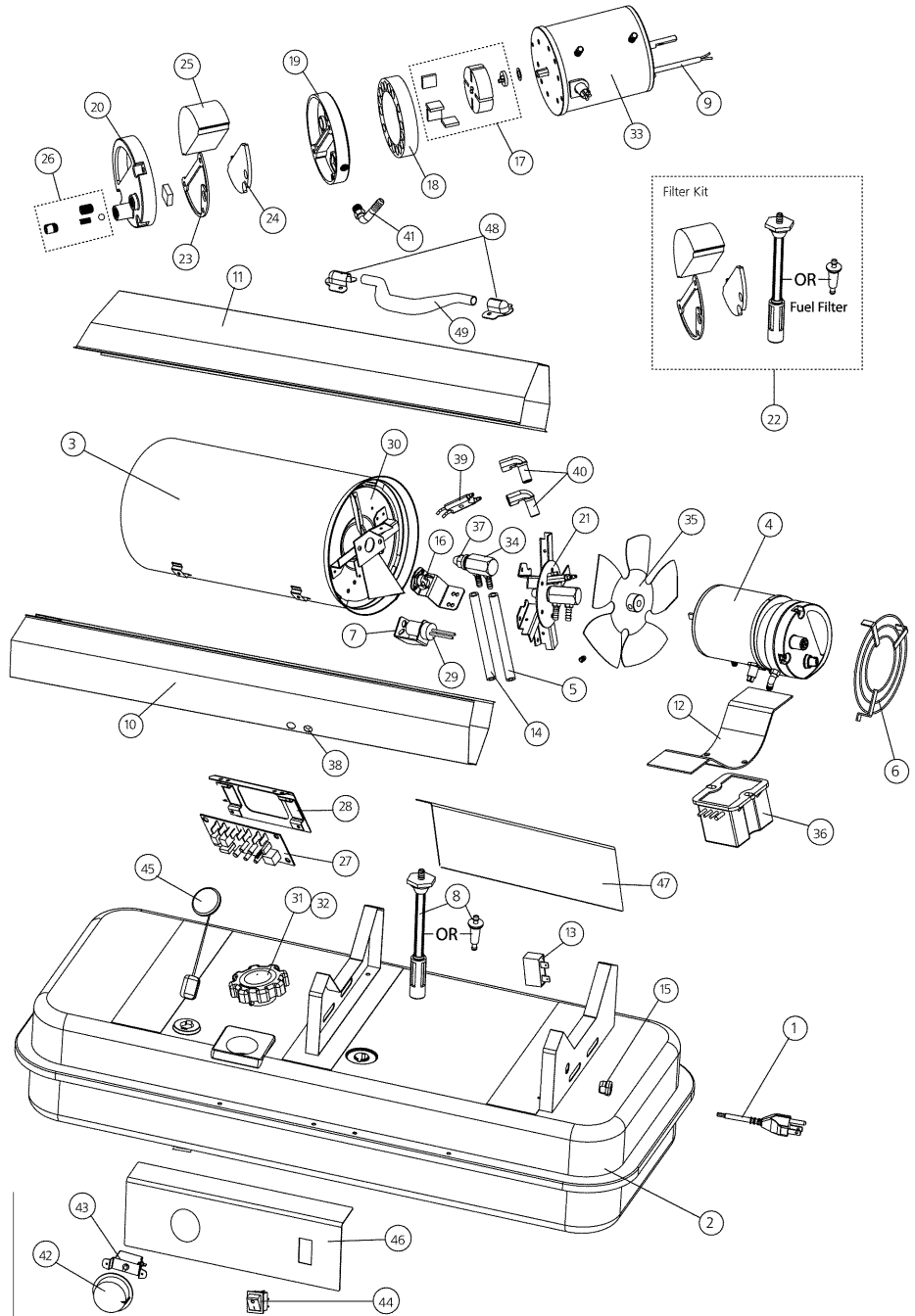
Model Numbers

HS50K, HS75KT,
HS125KT, HS175KT,
HS210KT

Serial Number Range
09001001 to present

Pump Pressure Settings

BTU	PSI
50	3.5
75	4.2
125	5.5
175	5.8
210	8.5



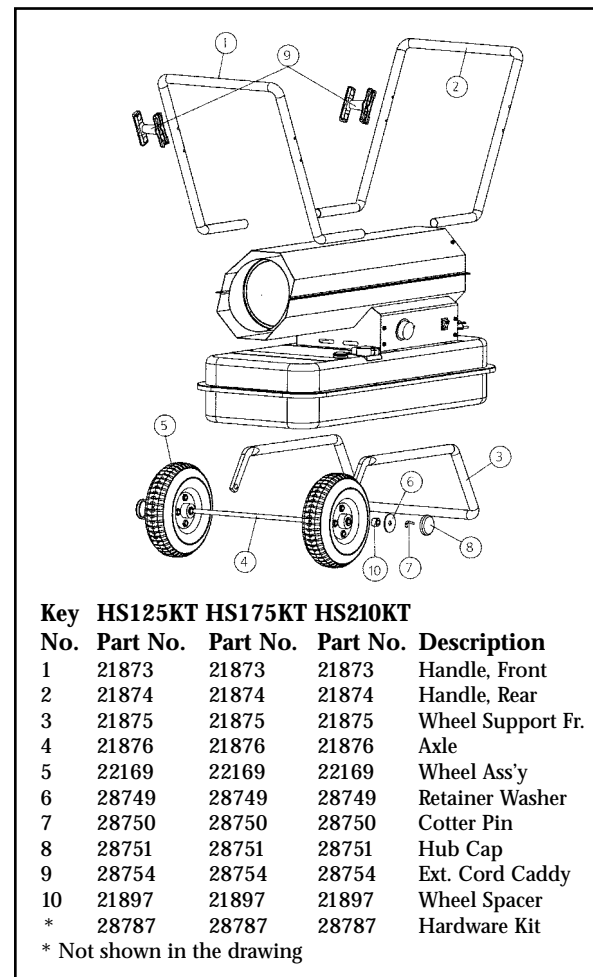
50-210,000 BTU Forced Air Enerco Oil Fired Heater

2009 - 2010 Model Year

Enerco Oil 50-210,000 BTU

Key No.	HS50K Part No.	HS75KT Part No.	HS125KT Part No.	HS175KT Part No.	HS210KT Part No.	Description
1	21036	21036	21036	21036	21036	Power Cord
2	21676	22213	22214	22214	22214	Fuel Tank Assembly
3	****	22215	22216	21783	22099	Radiation Shield Ass'y
4	21807	21808	21809	21809	21809	Power Pac Ass'y
5	21686	24343	24346	24346	24346	Fuel Tube
6	21685	28734	21771	21768	21771	Grille Assembly
7	24011	24011	24011	24011	24011	Oil cad cell Bracket
8	28779	28779	28780	28780	28780	Fuel Filter
9	23449	23449	23449	23449	23449	Motor Cord Sleeve
10	21050	21075	21125	21175	22127	Bottom Shell
11	22050	22075	22125	22175	22102	Top Shell
12	23704	24332	24333	22334	24333	Motor Mounting Brkt
13	****	28788	28735	28735	28735	Start Capacitor
14	23725	23725	24345	24345	24345	Air Tube
15	26225	26225	26225	26225	26225	Snap Bushing
16	21794	21794	26901	26902	22105	High Limit Control Kit, Rotor
17	F226831	F226831	F226831	F226831	F226831	- Air Pump Rotor w/Vanes - Nylon Air Pump Insert Air Pump Cylinder Outlet Housing Inlet Housing Burner Head Ass'y
18	26833	26833	26833	26833	26833	Kit, Filter
19	21810	21810	21810	21810	21810	Gasket, Outlet Filter
20	21812	21812	21812	21812	21812	Outlet Filter
21	****	****	22257	22257	22257	Inlet Filter
22	F21887	F21887	F21887	F21887	F21887	Kit, Pump Adjustment
23	21813	21813	21813	21813	21813	- Nylon Pipe Plug
24	21814	21814	21814	21814	21814	- Pump Adj. Screw Cap
25	21815	21815	21815	21815	21815	- Ball. Pressure adj. - Spring, Pressure adj.
26	F266842	F266842	F266842	F266842	F266842	Flame Control Ass'y Flame Control Bracket Cad Cell Flame Sensor Comb.Chamber Cyl. Ass'y Fuel Cap Fuel Cap Gasket
27	21866	21866	21866	21866	21866	Motor
28	21816	21816	21816	21816	21816	Nozzle Adapter
29	26903	26903	26903	26903	26903	Fan
30	21679	22232	22233	22234	22107	Igniter Assembly
31	26909	26909	26909	26909	26909	Fuel Air Aspir. Nozzle
32	26910	26910	26910	26910	26910	Strain Relief Bushing
33	27339	21817	21818	21818	21818	Electrode Assembly
34	27790	27790	28739	28739	28739	Electrode Insulated Cover
35	27421	28740	26885	26886	22108	Hose Barb Adapter
36	22142	22142	22142	22142	22142	Thermostat Knob
37	27416	28741	28742	28743	22109	Thermostat Assembly
38	26223	26223	26223	26223	26223	ON/OFF Switch
39	21819	21819	21819	21819	21819	Fuel Gauge
40	21820	21820	21820	21820	21820	Control Panel
41	21821	21821	21821	21821	21821	Control Panel Back
42	****	21823	21823	21823	21823	Clip Hanle Mtg.
43	****	21734	21734	21734	21734	Handle
44	28785	28785	28785	28785	28785	Nozzle mtg. plate
45	****	28791	28778	28778	28778	Snap Bushing
46	21829	21889	21825	21825	21825	Nozzle Extrnl. Retaining Ring
47	26887	26887	26888	26888	26888	Fuel Line Bushing
48	27094	27094	****	****	****	Bracket Thermostat Mtg.
49	27095	27095	****	****	****	Clamp Loop
*	24171	24171	****	****	****	
*			26227	26227	26227	
*	27429	27429	27429	27429	27429	
*	28745	28745	****	****	****	
*	****	22146	22146	22146	22146	
*	****	26070	26070	26070	26070	

* Not shown in the drawing



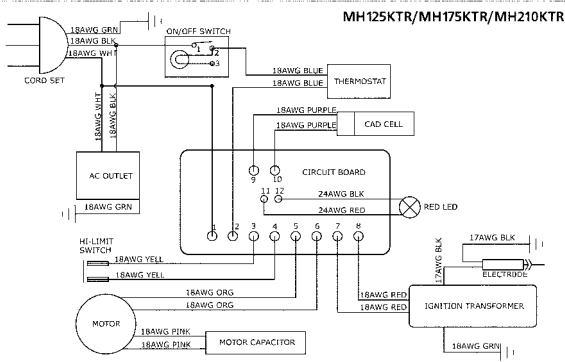
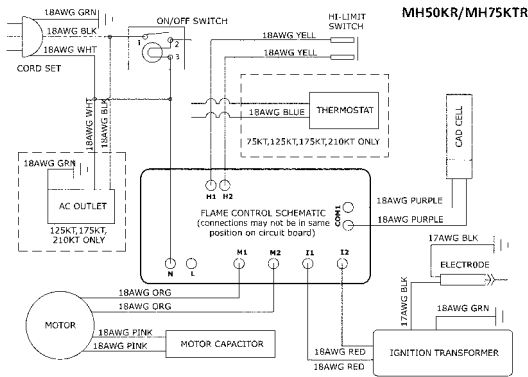
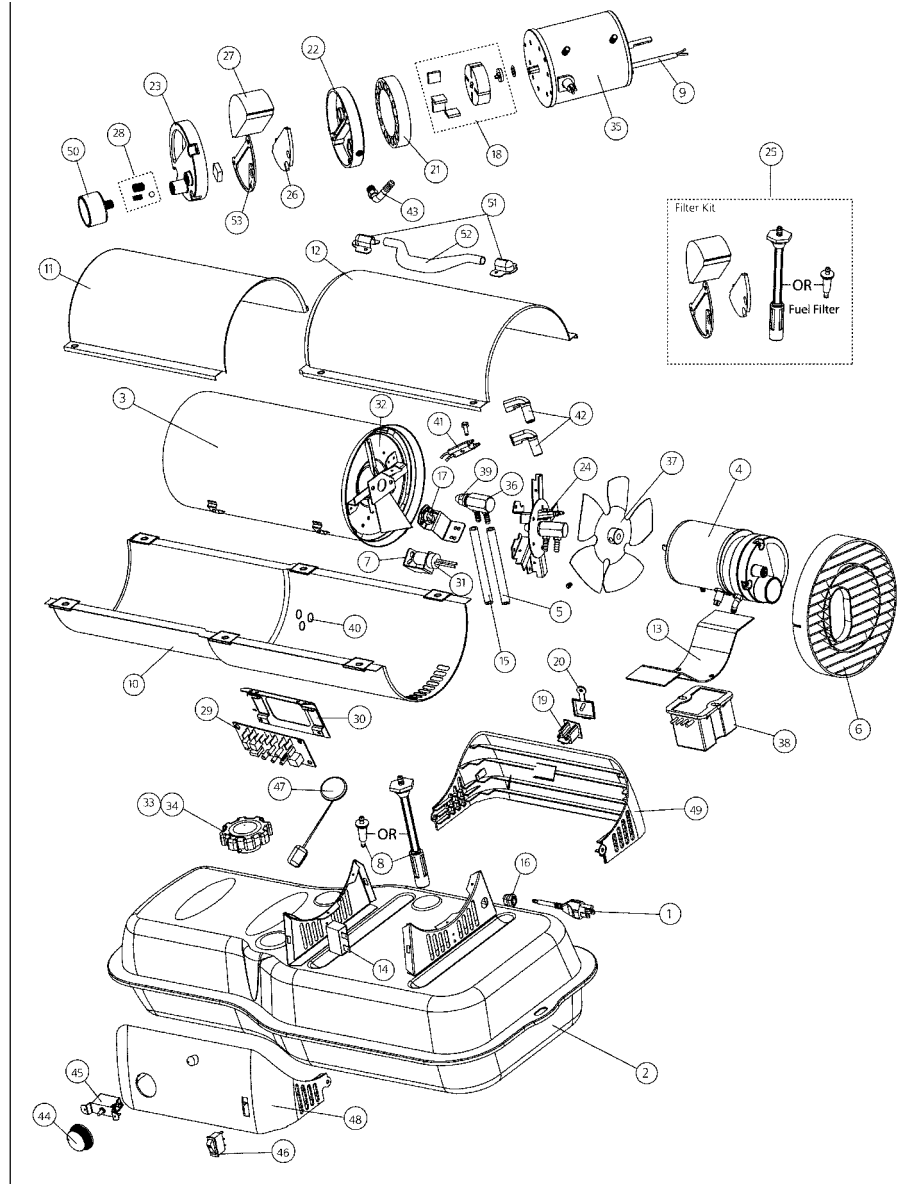
50-210,000 BTU Forced Air Mr. Heater Oil Fired Heater 2009-2010 Model Year

Model Numbers
MH50KR, MH75KTR,
MH125KTR, MH175KTR,
MH210KTR

Serial Number Range
09001001 to present

Pump Pressure Settings

BTU	PSI
50	3.5
75	4.2
125	5.5
175	5.8
210	8.5



50-210,000 BTU Forced Air Mr. Heater Oil Fired Heater 2009-2010 Model Year

Enerco Oil 50-210,000 BTU

Key No.	MH50KR Part No.	MH75KTR Part No.	MH125KTR Part No.	MH175KTR Part No.	MH210KTR Part No.	Description
1	21036	21036	21036	21036	21036	Power Cord
2	21832	21833	21915	21834	21834	Fuel Tank Assembly
3	****	21883	21884	21885	21886	RadiationShield Ass'y
4	21807	21808	21809	21809	21809	Power Pac Ass'y
5	21686	24343	24346	24346	24346	Fuel Tube
6	21835	21836	21837	21837	21837	Grille Assembly
7	24011	24011	24011	24011	24011	Oil cad cell Bracket
8	28779	28779	28780	28780	28780	Fuel Filter
9	23449	23449	23449	23449	23449	Motor Cord Sleeve
10	21839	21840	21841	21842	21843	Bottom Shell
11	21844	21846	21848	21850	21852	Top Shell, Burner
12	21854	21856	21858	21860	21862	Top Shell, Insp. Cover
13	21864	21864	21865	21865	21865	Motor Mounting Brkt
14	****	28788	28735	28735	28735	Start Capacitor
15	23725	23725	24345	24345	24345	Air Tube
16	26225	26225	26225	26225	26225	Snap Bushing
17	21794	21794	26901	26902	22105	High Limit Control
18	F226831	F226831	F226831	F226831	F226831	Kit, Rotor
19	****	26898	26898	26898	26898	Receptacle, 110V
20	****	22104	22104	22104	22104	AC Receptacle Cover
21	26833	26833	26833	26833	26833	Air Pump Cylinder
22	21810	21810	21810	21810	21810	Outlet Housing
23	21812	21812	21812	21812	21812	Inlet Housing
24	****	****	22257	22257	22257	Burner Head Ass'y
25	F221887	F221887	F221887	F221887	F221887	Kit, Filter
26	21814	21814	21814	21814	21814	Outlet Filter
27	21815	21815	21815	21815	21815	Inlet Filter
28	F266842	F266842	F266842	F266842	F266842	Kit, Pump Adjustment
29	21866	21866	21867	21867	21867	Flame Control Ass'y
30	21816	21816	21816	21816	21816	Flame Control Bracket
31	26903	26903	26903	26903	26903	Cad Cell Flame Sensor
32	21882	21868	21869	21870	21871	Comb.Chamber Cyl.Ass'y
33	26909	26909	26909	26909	26909	Fuel Cap
34	26910	26910	26910	26910	26910	Fuel Cap Gasket
35	27339	21817	21818	21818	21818	Motor
36	27790	27790	28739	28739	28739	Nozzle Adapter
37	27421	28740	26885	26866	22108	Fan
38	22142	22142	22142	22142	22142	Igniter Assembly
39	27416	28741	28742	28743	22109	Fuel Air Aspir. Nozzle
40	26223	26223	26223	26223	26223	Strain Relief Bushing
41	21819	21819	21819	21819	21819	Electrode Assembly
42	21820	21820	21820	21820	21820	Electrode Insulated Cover
43	21821	21821	21821	21821	21821	Hose Barb Adapter
44	****	21822	21822	21822	21822	Thermostat Knob
45	****	21734	21734	21734	21734	Thermostat Assembly
46	28785	28785	28785	28785	28785	ON/OFF Switch
47	****	28791	28778	28778	28778	Fuel Gauge
48	21830	21888	21826	21826	21826	Control Panel
49	21892	21892	21893	21893	21893	Control Panel Back
50	28786	28786	28786	28786	28786	Pressure Gauge, Round
51	27094	27094	****	****	****	Clip Handle Mtg.
52	27095	27095	****	****	****	Handle
53	21813	21813	21813	21813	21813	Gasket, Outlet Filter
*	24171	24171	****	****	****	Nozzle mtg. plate
*			26227	26227	26227	Snap Bushing
*	27429	27429	27429	27429	27429	Nozzle Ext. Retaining Ring
*	28745	28745	****	****	****	Fuel Line Bushing
*	****	22146	22146	22146	22146	Bracket Thermostat Mtg.
*	****	26070	26070	26070	26070	Clamp Loop

* Not shown in the drawing

Handle and wheel assembly for MH125KTR, MH175KTR & MH210KTR only.

Key No.	MH125KTR Part No.	MH175KTR Part No.	MH210KTR Part No.	Description
1	22169	22169	22169	Wheel Assembly, 10"
2	22172	22172	22172	Upper Handle w/Spring Clips
*	22173	22173	22173	Lower Handle, Right
3	22174	22174	22174	Lower Handle, Left
*	22176	22176	22176	Leg Support, Right
4	22177	22177	22177	Leg Support, Left
5	22178	22178	22178	Support Leg
6	22179	22179	22179	Front Handle w/Axle
7	28749	28749	28749	Retainer Washer
8	28750	28750	28750	Cotter Pin
9	28751	28751	28751	Hub Cap
10	28754	28754	28754	Ext. Cord Caddy
11	21897	21897	21897	Wheel Spacer
*	28787	28787	28787	Hardware Package

L.B. White Oil Fired Heaters

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater. If your model number does not appear in the breakdowns, please call one of our technicians for assistance.

Brand Names Include:
Tradesman

If you need technical assistance, feel free to call **PHP at 1-800-362-6951** or e-mail us at **techservice@phpdistribution.com**. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service.

BTU and Description	Ignition Type	Fuel Type	Page No.
70,000 BTU	Hot Surface (HSI)	Kerosene	43
165,000 BTU	Hot Surface (HSI)	Kerosene	44
45-75,000 BTU	Solid State	Kerosene	45
125-170,000 BTU	Solid State	Kerosene	46
210,000 BTU	Solid State	Kerosene	47
Quick Parts Reference			48

70,000 BTU Forced Air L.B. White Oil Fired Heater

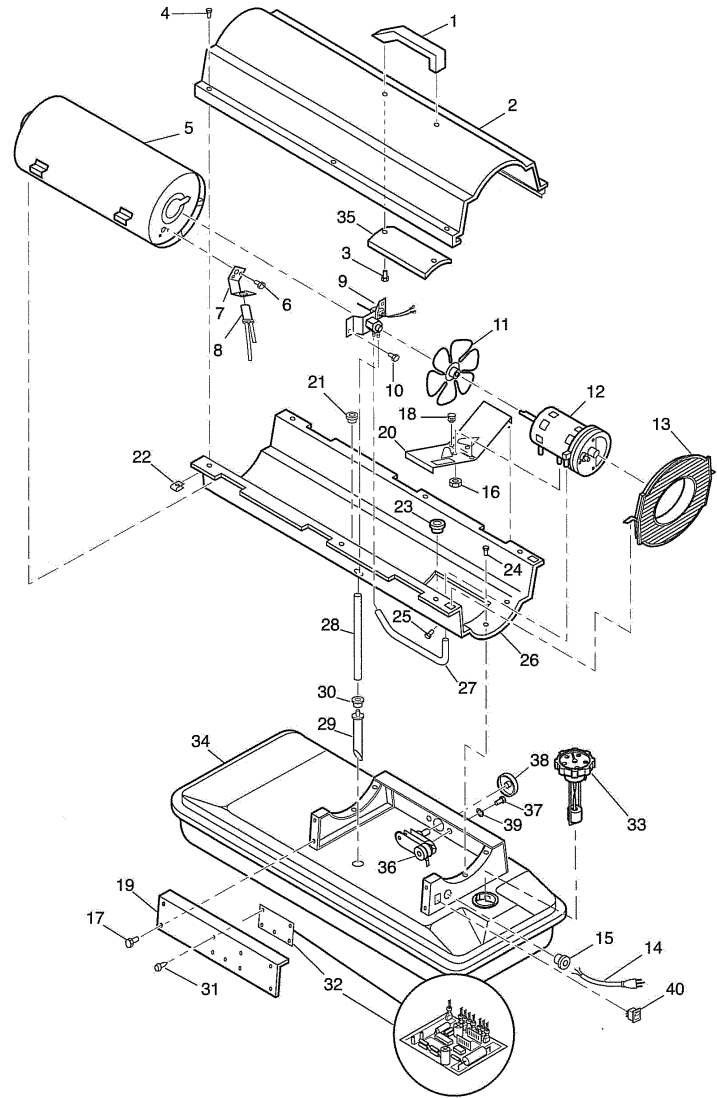
Model Numbers

CP070CK

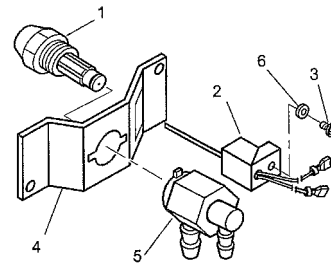
Pump Pressure Setting

4.7 PSI

Key No.	Part No.	Description
1	130-20783	Handle
2	130-22958	Upper Shell (service part will be black)
3	130-20807	Screw, #10-16 x 3/4"
4	130-20805	Screw, #10-16 x 1-1/2"
5	130-24786	Combustion Chamber
6	130-20808	Screw, #6-32 x 3/8"
7	130-22960	Photocell Bracket
8	120-21925	Photocell Assembly
9	See below	Burner Head Assembly
10	130-20806	Screw, #10-16 x 3/8"
11	130-22964	Fan
12	See page 48	Motor and Pump Assembly
13	130-20929	Fan Guard
14	120-24783	Power Cord
15	130-20947	Strain Relief Bushing
16	130-20818	Hex Lock Nut, 1/4-20
17	130-20806	Screw, #10-16 x 3/8"
18	130-20924	Rubber Bumper
19	130-22968	Side Cover
20	130-20864	Motor Bracket
21	130-22969	Bushing
22	130-20936	Clip Nut
23	130-20932	Bushing
24	130-20806	Screw, #10-16 x 3/8"
25	130-20810	Screw, #8-32 x 3/8"
26	130-22970	Lower Shell (service part will be black)
27	130-22971	Rubber Airline
28	130-20949	Fuel Line
29	130-20950	Fuel Filter with bushing
30	130-20933	Rubber Bushing
31	130-21920	PCB Support
32	120-21919	Ignition Control Assembly
33	130-24778	Fuel Cap with Gauge (includes gasket)
34	130-24779	Fuel Tank Kit
35	130-22973	Shell Heat Shield
36	130-24130	Thermostat
37	130-24126	Screw, #8-32 x 7/8"
38	130-24131	Thermostat Knob
39	130-24129	Lock Washer, Ext #8
40	120-24782	Lighted On/Off Switch



Burner Head Assembly



Key No.	Part No.	Description
1	130-22961	Nozzle Assembly CP070CK
	130-21926	Nozzle Assembly CP165DK
2	120-21933	Ignitor Kit
3	130-21928	Screw
4	130-21917	Nozzle Adapter Bracket
5	130-22962	Nozzle Adapter
6	130-22963	Washer

L.B. White Oil 70,000 BTU

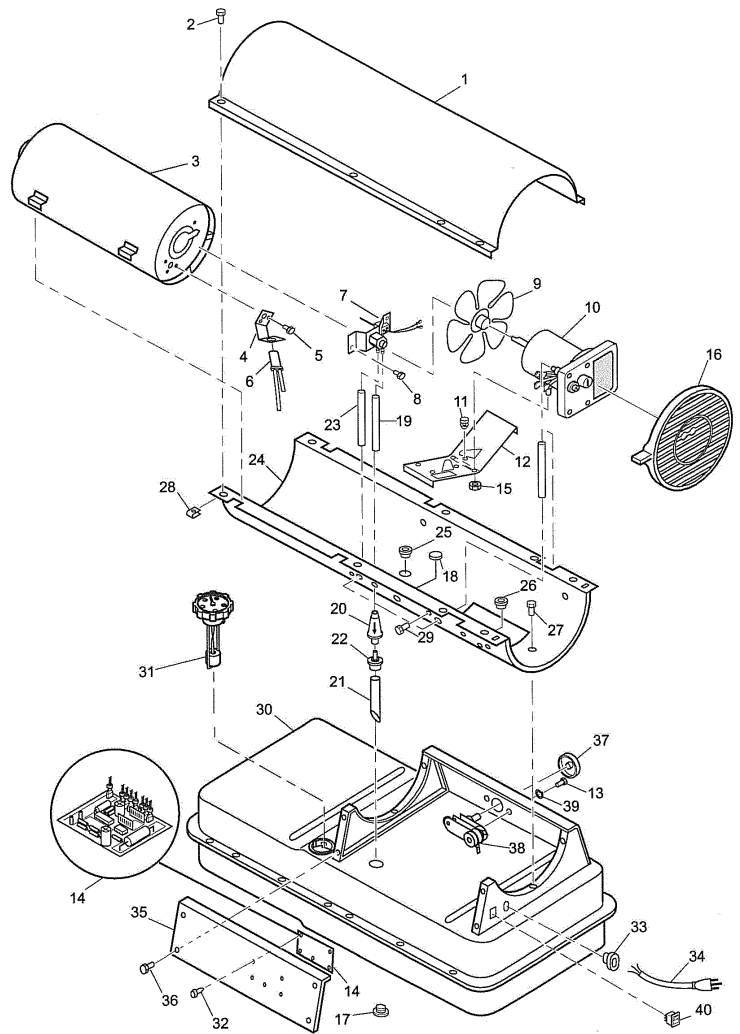
165,000 BTU Forced Air L.B. White Oil Fired Heater

Model Numbers
CP165DK

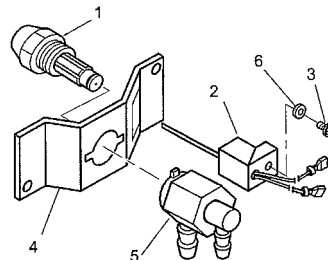
Pump Pressure Setting
5.6 PSI

L.B. White Oil 165,000 BTU

Key No.	Part No.	Description
1	130-24121	Upper Shell (service part will be black)
2	130-20805	Screw, #10-16 x 1-1/2"
3	130-24786	Combustion Chamber
4	130-24127	Photocell Bracket
5	130-20808	Screw, #6-32 x 3/8"
6	130-21935	Photocell Assembly
7	See below	Burner Head Assembly
8	130-20806	Screw, #10-16 x 3/8"
9	130-24120	Fan
10	See page 48	Motor and Pump Assembly
11	130-20924	Rubber Bumper
12	130-20863	Motor Mounting Bracket
13	130-24126	Screw, #8-32 x 7/8"
14	120-21919	Ignition Control Assembly
15	130-20818	Hex Lock Nut, 1/4-20
16	130-25140	Fan Guard
17	130-20945	Drain Plug (includes "o" rings)
18	130-24125	Button Plug
19	130-21939	Fuel Line
20	130-20953	Fuel Filter
21	130-20954	Fuel Line Tube
22	130-20933	Rubber Bushing
23	130-20955	Airline
24	130-24122	Lower Shell
25	130-24128	Bushing
26	130-20935	Bushing
27	130-20806	Screw, #10-16 x 3/8"
28	130-20936	Clip Nut
29	130-20810	Screw, #8-32 x 3/8"
30	130-24781	Fuel Tank Kit
31	130-24780	Fuel Cap with Gauge
32	130-21920	PCB Support
33	130-20947	Strain Relief Bushing
34	120-24783	Power Cord
35	130-21937	Side Cover
36	130-20806	Screw, #10-16 x 3/8"
37	130-24131	Thermostat Knob
38	130-24130	Thermostat
39	130-24129	Lock Washer, Ext #8
40	120-24782	Lighted On/Off Switch



Burner Head Assembly



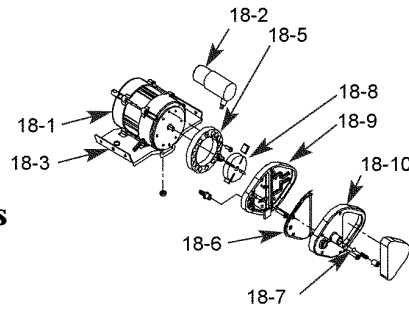
Key No.	Part No.	Description
1	130-22961	Nozzle Assembly CP070CK
	130-21926	Nozzle Assembly CP165DK
2	120-21933	Ignitor Kit
3	130-21928	Screw
4	130-21917	Nozzle Adapter Bracket
5	130-22962	Nozzle Adapter
6	130-22963	Washer

45-75,000 BTU Forced Air L.B. White Oil Fired Heater

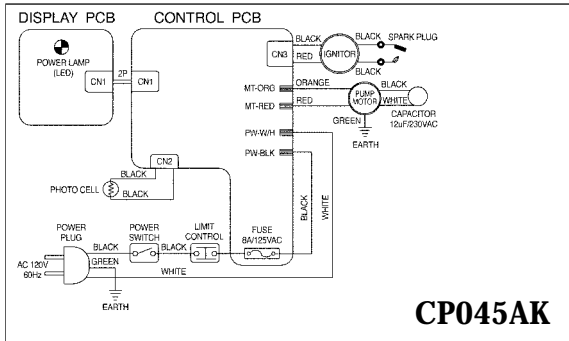
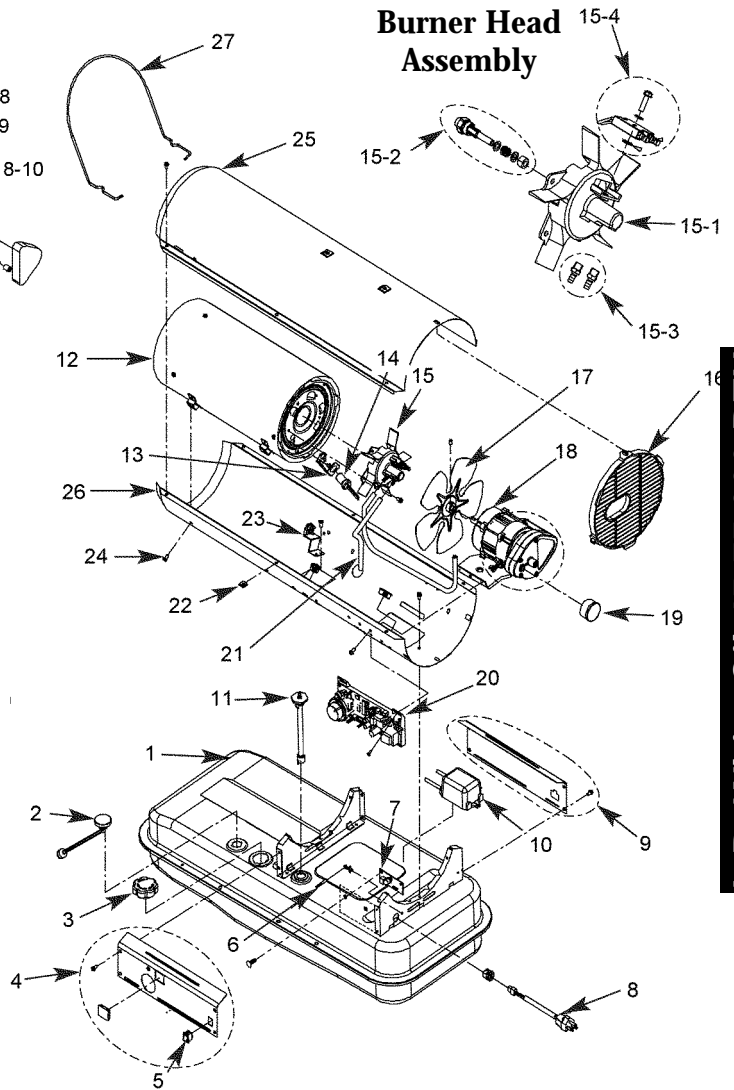
Model Number
CP045AK
CP075AK

Pump Pressure Settings

BTU	PSI
45	2.8
75	3.8

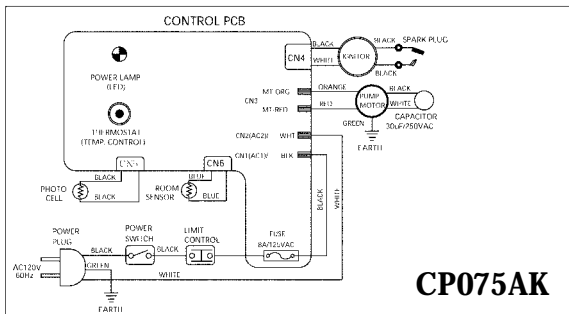


Motor & Pump Assembly



CP045AK

Figure 17 - Wiring Diagram Model CP045AK



CP075AK

Figure 18 - Wiring Diagram Model CP075AK

Key No.	Description	CP045AK Part No.	CP075AK Part No.	Key No.	Description	CP045AK Part No.	CP075AK Part No.
1	Fuel Tank Assembly	572143	572144	18-1	Motor	-----572208-----	
2	Fuel Gauge	-----572150-----		18-2	Capacitor	-----572214-----	
3	Fuel Cap	-----572157-----		18-3	Motor Support	-----572218-----	
4	Panel Right Side Assembly	572253	572256	18-5	Pump Body	-----572223-----	
5	Power Switch	-----572251-----		18-6	Filter Kit*	-----572227-----	
6	Thermostat Wire	-----	572149	18-7	Pump Adjustment Kit***	-----572230-----	
7	Display P.C.B. Assembly	572162	-----	18-8	Rotor Kit**	-----572225-----	
8	Power Cord	-----572159-----		18-9	Pump Cover	-----572228-----	
9	Panel Left Side Assembly	572254	572257	18-10	Filter Cover	-----572229-----	
10	Ignition Transformer	-----572243-----		19	Pressure Gauge	-----572231-----	
11	Fuel Filter	-----572154-----		20	Main P.C.B. Assembly	572238	572239
12	Combustion Chamber	572177	572178	21	Air/Fuel Lines -	-----572169-----	
13	Photocell Bracket	572184	572185	22	Clip Nut (6-Pack)	-----572284-----	
14	Photocell Assembly	-----572186-----		23	Temperature Limit Assembly	-----572173-----	
15	Burner Head Assembly	See Above		24	Screw (12-Pack)	-----572282-----	
15-1	Burner Head	-----572188-----		25	Upper Shell	-----572255-----	
15-2	Nozzle Assembly	572192	572193	26	Lower Shell	-----572163-----	
15-3	Air/Fuel Line Fittings	-----572280-----		27	Front Guard	-----572270-----	
15-4	Spark Plug Assembly	-----572200-----			Hardware Kit	-----572285-----	
16	Fan Guard	-----572265-----			Pump/Filter Cover Screws (10-Pack)	-----572283-----	
17	Fan Assembly	572232	572233				
18	Motor and Pump Assembly	-----572204-----					

L.B. White Oil 45-75,000 BTU

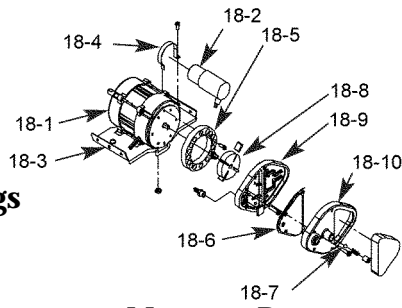
125-170,000 BTU Forced Air L.B. White Oil Fired Heater

Model Number

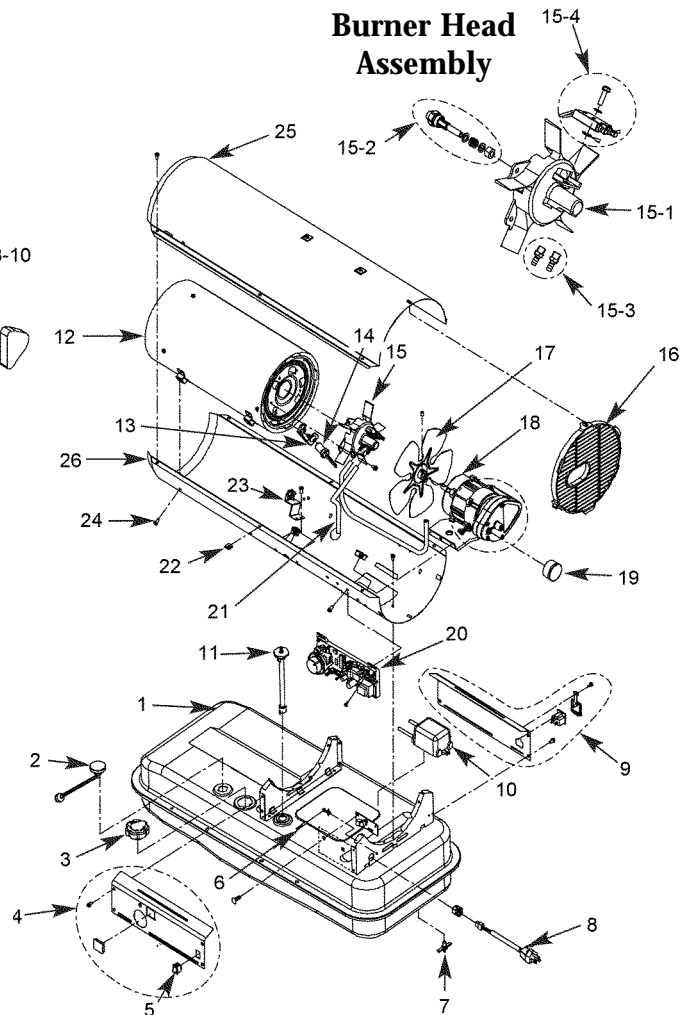
CP125AK
CP170AK

Pump Pressure Settings

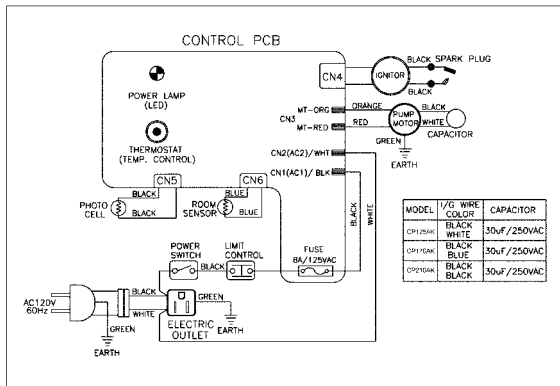
BTU	PSI
125	5.5
170	6.5



Motor & Pump Assembly



Burner Head Assembly



Key No.	Description	CP125AK Part No.	CP170AK Part No.
1	Fuel Tank Assembly	572145	572146
2	Fuel Gauge	-----572151-----	-----572151-----
3	Fuel Cap	-----572157-----	-----572157-----
4	Panel Right Side Assembly	572258	572261
5	Power Switch	-----572251-----	-----572251-----
6	Thermostat Wire	-----572149-----	-----572149-----
7	Drain Plug	-----572176-----	-----572176-----
8	Power Cord	-----572160-----	-----572160-----
9	Panel Left Side Assembly	572259	572262
10	Ignition Transformer	572243	572235
11	Fuel Filter	-----572155-----	-----572155-----
12	Combustion Chamber	572179	572180
13	Photocell Bracket	-----572185-----	-----572185-----
14	Photocell Assembly	-----572186-----	-----572186-----
15	Burner Head Assembly	See Above	See Above
15-1	Burner Head	572189	572190
15-2	Nozzle Assembly	572194	572195
15-3	Air/Fuel Line Fittings	-----572278-----	-----572278-----
15-4	Spark Plug Assembly	-----572201-----	-----572201-----
16	Fan Guard	-----572266-----	-----572266-----
17	Fan Assembly	572234	572235
18	Motor and Pump Assembly	572205	572206

Key No.	Description	CP125AK Part No.	CP170AK Part No.
18-1	Motor	572209	572210
18-2	Capacitor	-----572215-----	-----572215-----
18-3	Motor Support	-----572219-----	-----572219-----
18-4	Capacitor Band	-----572248-----	-----572248-----
18-5	Pump Body	-----572223-----	-----572223-----
18-6	Filter Kit*	-----572227-----	-----572227-----
18-7	Pump Adjustment Kit	-----572230-----	-----572230-----
18-8	Rotor Kit	-----572225-----	-----572225-----
18-9	Pump Cover	-----572228-----	-----572228-----
18-10	Filter Cover	-----572229-----	-----572229-----
19	Pressure Gauge	-----572231-----	-----572231-----
20	Main P.C.B. Assembly	-----572240-----	-----572240-----
21	Air/Fuel Lines	572170	572171
22	Clip Nut (6-Pack)	-----572284-----	-----572284-----
23	Temperature Limit Assembly	-----572174-----	-----572174-----
24	Screw (12-Pack)	-----572282-----	-----572282-----
25	Upper Shell	572260	572263
26	Lower Shell	572164	572165
	Hardware Kit	-----572285-----	-----572285-----
	Pump/Filter Cover Screws (10-Pack)	-----572283-----	-----572283-----

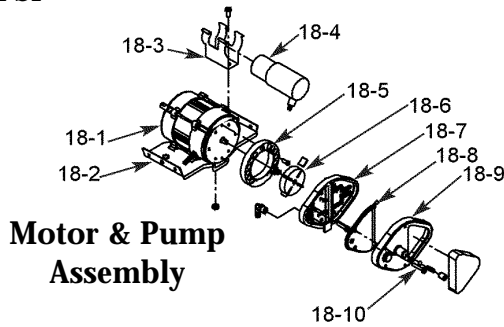
Key No.	Description	CP125AK Part No.	CP170AK Part No.
1	Fuel Tank Assembly	572145	572146
2	Fuel Gauge	-----572151-----	-----572151-----
3	Fuel Cap	-----572157-----	-----572157-----
4	Panel Right Side Assembly	572258	572261
5	Power Switch	-----572251-----	-----572251-----
6	Thermostat Wire	-----572149-----	-----572149-----
7	Drain Plug	-----572176-----	-----572176-----
8	Power Cord	-----572160-----	-----572160-----
9	Panel Left Side Assembly	572259	572262
10	Ignition Transformer	572243	572235
11	Fuel Filter	-----572155-----	-----572155-----
12	Combustion Chamber	572179	572180
13	Photocell Bracket	-----572185-----	-----572185-----
14	Photocell Assembly	-----572186-----	-----572186-----
15	Burner Head Assembly	See Above	See Above
15-1	Burner Head	572189	572190
15-2	Nozzle Assembly	572194	572195
15-3	Air/Fuel Line Fittings	-----572278-----	-----572278-----
15-4	Spark Plug Assembly	-----572201-----	-----572201-----
16	Fan Guard	-----572266-----	-----572266-----
17	Fan Assembly	572234	572235
18	Motor and Pump Assembly	572205	572206
18-1	Motor	572209	572210
18-2	Capacitor	-----572215-----	-----572215-----
18-3	Motor Support	-----572219-----	-----572219-----
18-4	Capacitor Band	-----572248-----	-----572248-----
18-5	Pump Body	-----572223-----	-----572223-----
18-6	Filter Kit*	-----572227-----	-----572227-----
18-7	Pump Adjustment Kit	-----572230-----	-----572230-----
18-8	Rotor Kit	-----572225-----	-----572225-----
18-9	Pump Cover	-----572228-----	-----572228-----
18-10	Filter Cover	-----572229-----	-----572229-----
19	Pressure Gauge	-----572231-----	-----572231-----
20	Main P.C.B. Assembly	-----572240-----	-----572240-----
21	Air/Fuel Lines	572170	572171
22	Clip Nut (6-Pack)	-----572284-----	-----572284-----
23	Temperature Limit Assembly	-----572174-----	-----572174-----
24	Screw (12-Pack)	-----572282-----	-----572282-----
25	Upper Shell	572260	572263
26	Lower Shell	572164	572165
	Hardware Kit	-----572285-----	-----572285-----
	Pump/Filter Cover Screws (10-Pack)	-----572283-----	-----572283-----

210,000 BTU Forced Air L.B. White Oil Fired Heater

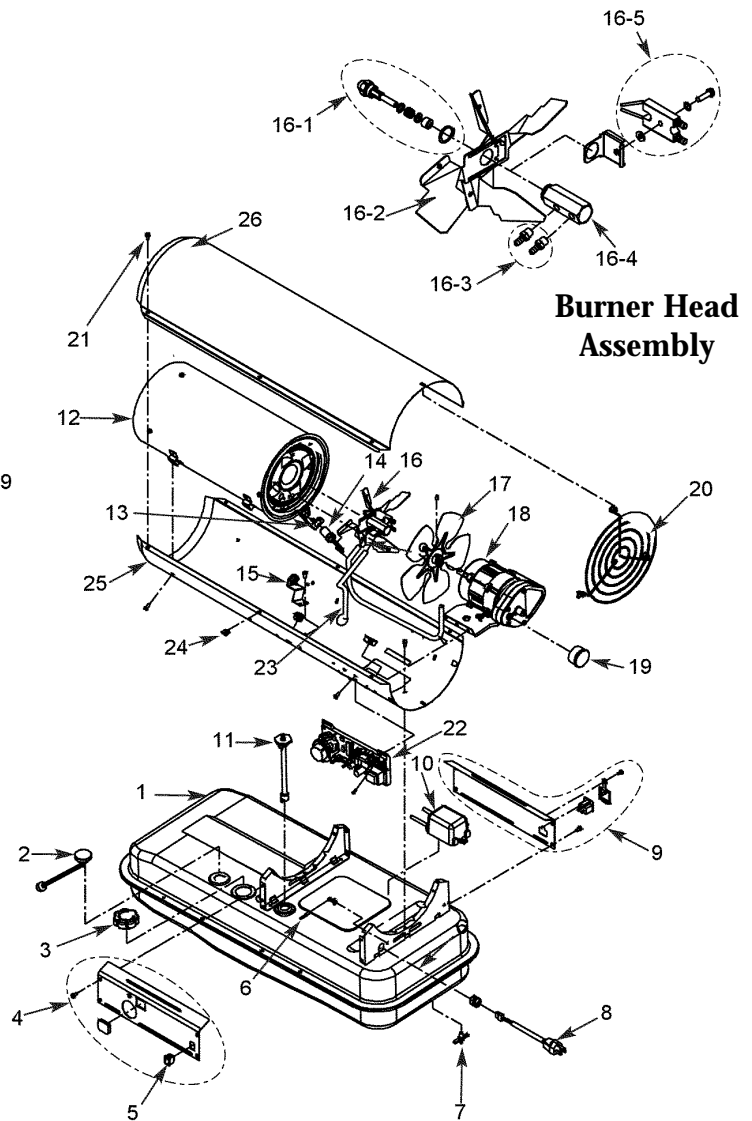
Model Number

CP210AK

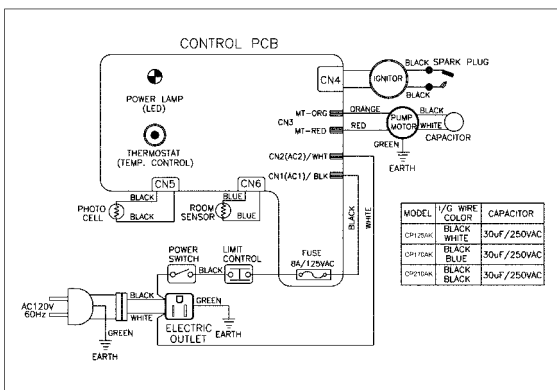
Pump Pressure Settings
8.5 PSI



Motor & Pump Assembly



Burner Head Assembly



Key No.	Description	Part No.
1	Fuel Tank Assembly	572146
2	Fuel Gauge	572151
3	Fuel Cap	572157
4	Panel Right Side Assembly	572264
5	Power Switch	572251
6	Thermostat Wire	572149
7	Drain Plug	572176
8	Power Cord	572160
9	Panel Left Side Assembly	572262
10	Ignition Transformer	572246
11	Fuel Filter Assembly	572155
12	Combustion Chamber	572181
13	Photocell Bracket	572185
14	Photocell Assembly	572186
15	Temperature Limit Assembly	572175
16	Burner Assembly	See above
16-1	Nozzle Assembly	572196
16-2	Bracket Burner	572191
16-3	Air/Fuel Line Adapters	572279
16-4	Nozzle Adapter	572199
16-5	Spark Plug Assembly	572202
17	Fan Assembly	572235

Key No.	Description	Part No.
18	Motor and Pump Assembly	572207 - See above
18-1	Motor	572211
18-2	Motor Support	572220
18-3	Capacitor Holder	572249
18-4	Capacitor	572215
18-5	Pump Body	572224
18-6	Rotor Kit	572226
18-7	Pump Cover	572228
18-8	Filter Kit	572227
18-9	Filter Cover	572229
18-10	Pump Adjustment Kit	572230
19	Pressure Gauge	572231
20	Fan Guard	572267
21	Screw (12-Pack)	572282
22	Main P.C.B. Assembly	572240
23	Air/Fuel Lines	572172
24	Clip Nut (6-Pack)	572284
25	Lower Shell	572166
26	Upper Shell	572263
	Hardware Kit	572285
	Pump/Filter Cover Screws (10-Pack)	572283

L.B. White Oil 210,000 BTU

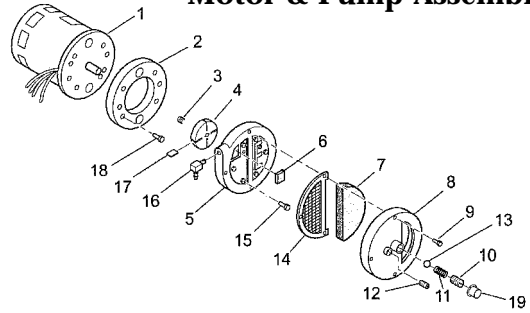
L.B. WHITE LOW PRESSURE OIL

Model	Motor	Control Board	Transformer	Fan	Capacitor	Electrode	Air Filer Kit	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
CP045AK	572208	572238	572243	572232	572214	572200	572227	572192	572186	572225	572154	572143
CP075AK	572208	572239	572243	572233	572214	572200	572227	572913	572186	572225	572154	572144
CP075CK	22965	21919	NA	22964	NA	21933	20903	22961	21925	20900	20950	24779
CP125AK	572209	572240	572243	572234	572215	572201	572227	572194	572186	572225	572155	572145
CP165DK	22965	21919	NA	24120	NA	21933	20901	21926	21925	20900	20953	24781
CP170AK	572210	572240	572235	572235	572215	572201	572227	572195	572186	572225	572155	572146
CP210AK	572211	572240	572246	572235	572215	572202	572227	572196	572186	572226	572155	572146

L.B. WHITE HIGH PRESSURE OIL

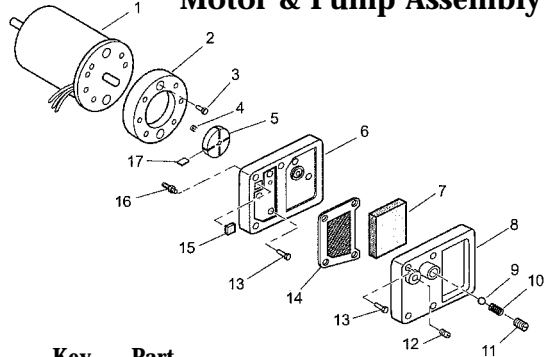
Model	Motor	Control Board	Transformer	Fan	Capacitor	Electrode	Fuel Pump	Solenoid	Nozzle	Photo Cell	Fan Switch	Fuel Filter
CP400AK	572212	572241	572299	572236	572216	572201	572306	572308	572197	572187	572297	572312
CP650AK	572213	572242	572300	572237	572217	572203	572307	572308	572198	572187	572298	572312

**CP070DK
Motor & Pump Assembly**



Key No.	Part No.	Description
1	120-22965	Motor
2	130-20857	Pump Body
3	130-20858	Insert
4	130-20859	Rotor
5	130-20876	Pump End Cover
6	130-20981	Lint Filter
7	130-20878	Intake Filter
8	130-20881	Filter End Cover
9	130-20813	Screw, #10-32 x 1"
10	130-20917	Adjusting Screw
11	130-20916	Pressure Relief Spring
12	130-20918	Plug
13	130-20915	Steel Ball, 1/4" Diameter
14	130-20919	Output Filter
15	130-20813	Screw, #10-32 x 1"
16	130-22966	Nylon Elbow, 90°
17	130-20860	Blade
18	130-20814	Screw, #10-32 x 5/8"
19	130-22967	Plastic Cap

**CP165DK
Motor & Pump Assembly**



Key No.	Part No.	Description
1	120-22965	Motor
2	130-20857	Pump Body
3	130-20814	Screw, #10-32 x 5/8"
4	130-20858	Rotor Insert
5	130-20859	Pump Rotor
6	130-20877	Pump End Cover
7	130-20879	Intake Filter
8	130-20882	Filter End Cover
9	130-20915	Steel Ball, 1/4" Dia.
10	130-20916	Relief Spring
11	130-20917	Adjusting Screw
12	130-20918	Plug
13	130-20813	Screw, #10-32 x 1"
14	130-20920	Output Filter
15	130-20880	Lint Filter
16	130-20832	Barb Fitting
17	130-20860	Blade

Desa Oil Fired Heaters

As a general definition, heaters with a transformer, spark plug, and a reset button are referred to as **Solid State**. Heaters that have a glowbar and a PC board are referred to as **Hot Surface Ignition (HSI)** heaters.

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater. If your model number does not appear in the breakdowns, please refer to the Quick Reference Parts Guide for common replacement parts.

If you need technical assistance, feel free to call **1-800-362-6951 ext2**. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service.

Desa Name Brands Include:

Amoco
 Cenex
 Co-op
 Dart
 Dayton
 Desa
 Handy Master
 Homelite
 John Deere
 Knipco
 Koehring
 L.B. White
 Master
 Queen Bee
 Reddy
 Remington
 Sears
 TSC

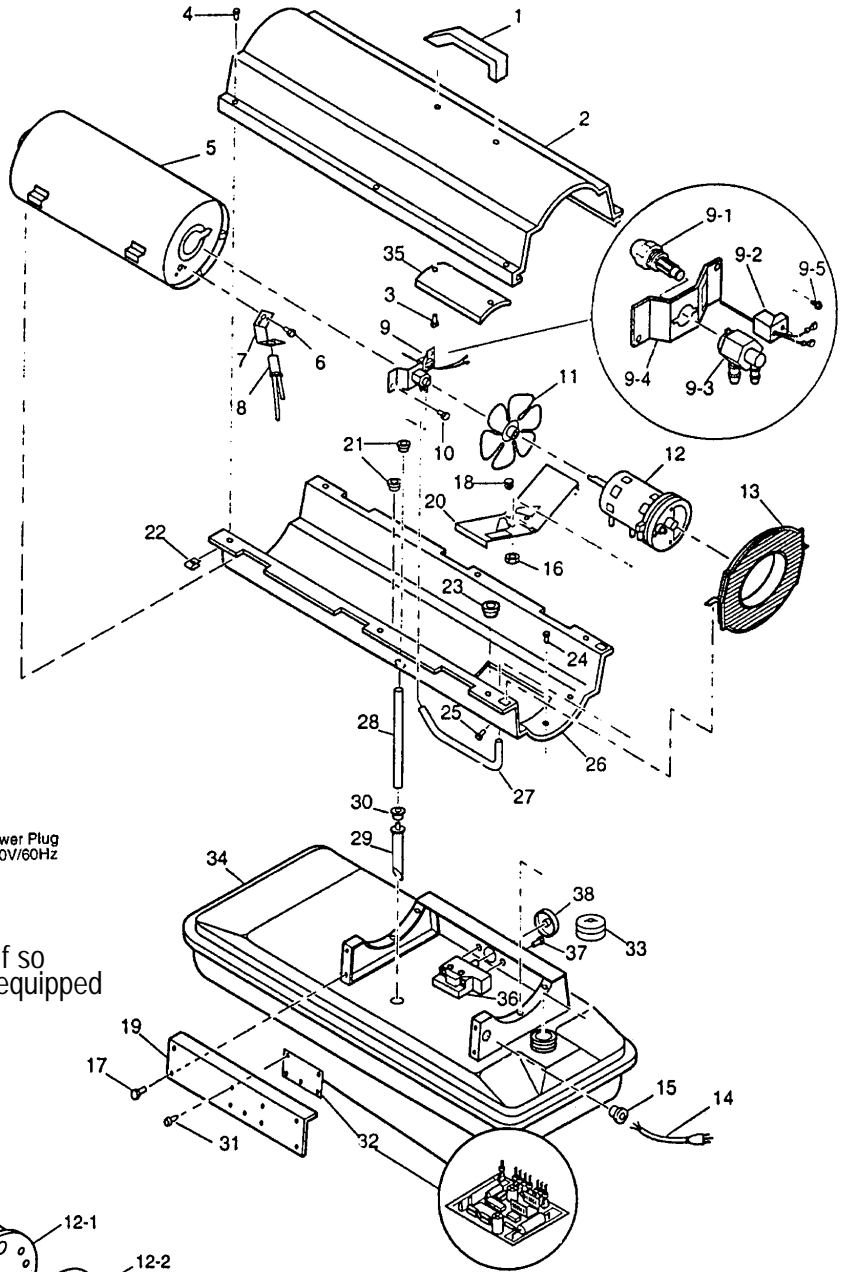
HEATER INDEX

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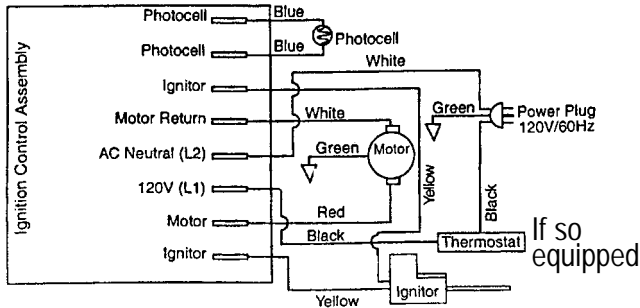
35,000-70,000 BTU Forced Air Desa Oil Fired Heater (Hot Surface Ignition)

Model Numbers

Reddy	Remington	Master
R35D	REM35B	B50H
R35E	REM35C	B55T
R40	REM40	B60
R40T	REM50C	B70D
R55A	REM55A	B70DT
R55B	REM55B	
R55BT	REM55BT	
R60	REM60	
RM60		
R70D		
R70DT		

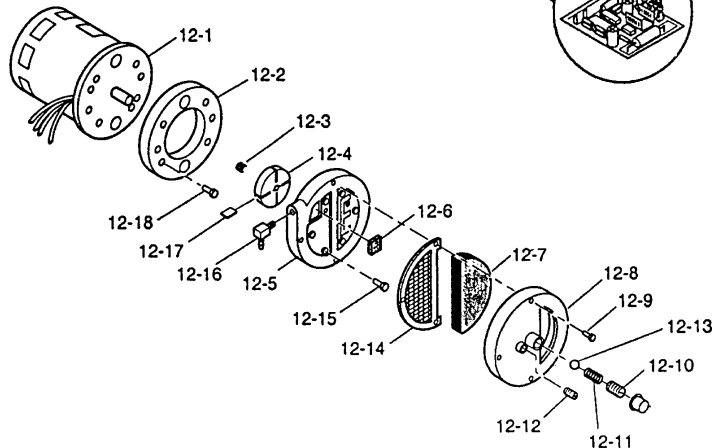


WIRING DIAGRAM WITH THERMOSTAT



Pump Pressure Settings

BTU	PSI
35	3.0
40	3.0
50	3.6
55	3.6
60	3.6
70	4.7



Desa 35-70,000 BTU HSI

35,000-70,000 BTU Forced Air Desa Oil Fired Heater

Key No.	Part Number	Description	Key No.	Part Number	Description
1	M51104-01	Handle	17	107992-01	Screw, #10-16 x 3/8"
2	098511-67	Upper Shell (Available in black only)	18	M50631	Rubber Bumper
3	M11084-29	Screw, #10-16 x 3/4"	19	097461-03AA	Side Cover-All Pre-2001 Models
4	100647-01	Screw, #10-16 x 1/2"		097461-09	Side Cover-2001 Models-Present
5	098512-47	Combustion Chamber (35,000 BTU's)	20	101205-01	Motor Bracket
	098512-58	Combustion Chamber (40,000 BTU's)	21	M30865-02	Bushing-All Pre-2001 Models
	098512-39	Combustion Chamber (50,000 BTU's)		M50104-06	Bushing-2001 Models-Present
	098512-50	Combustion Chamber (55-60,000 BTU's)	22	M11271-8	Clip Nut
	098512-51	Combustion Chamber (70,000 BTU's)	23	M50104-02	Bushing
6	M10908-2	Screw, #6-32 x 3/8"	24	M11084-26	Screw, #10-16 x 3/8"
7	103154-03	Photocell Bracket	25	M10908-14	Screw, #8-32 x 3/8"
8	M16656-24	Photocell Assembly	26	098511-234	Lower Shell (Available in black only)
9	BURNER HEAD ASSEMBLY		27	M29652-04	Rubber Airline (R35D, R35E, R55A, REM35B, REM50C, REM55A,B50H)
9-1	HA3006	Nozzle (35-40,000)		M50814-06	Rubber Airline (All Others)
	HA3021	Nozzle (50-55,000)	28	M29652-05	Fuel Line (All 35,000 BTU's)
	HA3024	Nozzle (R55BT, 60,000)		079973-01	Fuel Line (All Others)
	HA3026	Nozzle (70,000)	29	M50876-04	Fuel Filter w/Bushing (All 35,40,000)
9-2	HA1000	Ignitor Kit/Glowbar		M50876-02	Fuel Filter w/Bushing (All 50,000)
9-3	079980-01	Nozzle Adapter (35,50,55,000)		M50876-05	Fuel Filter w/Bushing (All 55-70,000)
	104056-01	Nozzle Adapter (40,60,70,000)	30	M10990-3	Rubber Bushing
9-4	102336-02	Nozzle Adapter Bracket(Rem 55BT only)	31	102349-01	PCB Support
	102336-01	Nozzle Adapter Bracket(All others)	32	104068-02	Ignition Control Assy
9-5	M11084-42	Screw,#10-20 x 3/4" (35,50,55,000)	33	097702-01	Fuel Cap with Gasket
	104023-01	Screw/Washer Assembly (40,60,70,000)	34	108088-01	Fuel Tank (35,40,000)
10	M11084-26	Screw, #10-16 x 3/8"		108088-02	Fuel Tank (50,000)
11	Fan			108088-03	Fuel Tank (55,000-70,000)
	M30884	(R35D,R35E,R55A,REM35B,REM50C, REM55A,B50H)	35	M51108-01	Shell, Heat Shield
	103684-01	B70DT & R70DT and All Remaining Non 70,000 BTU Models	36	097657-03	Thermostat (All 70,000 BTU Units)
	M29678	All Other 70,000 BTU Models	37	104458-01	Thermostat (All 55,000 BTU Units)
12	MOTOR & PUMP ASSEMBLY			M10908-01	Screw, #6-32 x 1/4" (All 70,000 BTU Units)
12-1	102001-01	All Non 70,000 BTU Models		M12461-18	Screw, #6-32 x 1/4"(All Other Units)
	102001-21	All 70,000 BTU Models	38	104905-01	Thermostat Knob (All 70,000 BTU Units)
12-2	079975-02	Pump Body Ring (35,40,70,000) 1/2" thick		104460-01	Thermostat Knob (All Other Units)
	079975-03	Pump Body Ring (50,55,60,000) 5/8" thick	PARTS AVAILABLE - NOT SHOWN		
12-3	M22009	Rotor Insert		097204-01	Tradename Decal (R35D)
12-4	M22456-1	Rotor 1/2" (35,40,70,000 BTU)		097764-01	Tradename Decal (REM35B)
	M22456-2	Rotor 5/8" (50,55,60,000 BTU)		097964-02	Tradename Decal (REM50C)
12-5	M29608	Pump End Cover (Metal)		097646-01	Tradename Decal (B50H)
12-6	M29632	Lint Filter		097204-08	Tradename Decal (R55A)
12-7	M29633	Intake Filter (sponge)		097764-05	Tradename Decal (REM55A)
12-8	M29609	Filter End Cover (Plastic)		097204-18	Tradename Decal (R55BT)
12-9	M12461-31	Screw, #10-32 x 1"		097204-03	Tradename Decal (R70D)
12-10	M27694	Adjusting Screw		097646-02	Tradename Decal (B70D, B70DT)
12-11	M10993-1	Pressure Relief Spring		097204-14	Tradename Decal (R70DT)
12-12	M22997	Plug		100621-06	Thermostat Decal (R55BT, R70DT, B70DT)
12-13	M8940	Steel Ball, 1/4" Diameter		103814-01	Wire Tie (groups wires connected to ignition control assembly, all models)
12-14	M29612-01	Output Filter		098493-01	General Information Decal
12-15	M12461-31	Screw, #10-32 x 1" (35,40,50,55,70,000)		099650-01	Wire Clips (secures wires of thermostat, All thermostat models)
	M12461-32	Screw, #10-32 x 1 1/8" (R55BT, 60,000)	OPTIONAL ACCESSORIES		
12-16	M50016	Elbow (35,50,55,000)		HA1210	Remote Thermostat (more accurate)
	103676-01	Elbow (40,R55BT,60,70,000)		PT100HTST	Remote Thermostat (warmer/cooler dial)
12-17	M8643	1/2" Vane-Set of 4 (35,40,70,000)		HA1202	Heavy Duty Wheel & Handle Kit (All Models)
	M8643-2	5/8" Vane-Set of 4 (50,55,60,000)		HA1206	Standard Duty Wheel & Handle Kit (All models)
12-18	FHPF3-5C	Screw, #10-32 x 5/8" (35,40,55,60,000)		HA1180	Air Gauge Kit (All models)
	FHPF3-6C	Screw, #10-32 x 3/4" (50,55,60,000)		HA3014	Filter Kit
13	M51105-01	Fan Guard		HA1170	Ignition Control/Photo Cell Tester
14	098219-31	Power Cord Non-Thermostat Models 6"			
	098219-38	Power Cord Thermostat Models			
15	M11143-1	Strain Relief Bushing			
16	NTC-4C	Hex Lock Nut, 1/4-20			

Desa 35-70,000 BTU HSI

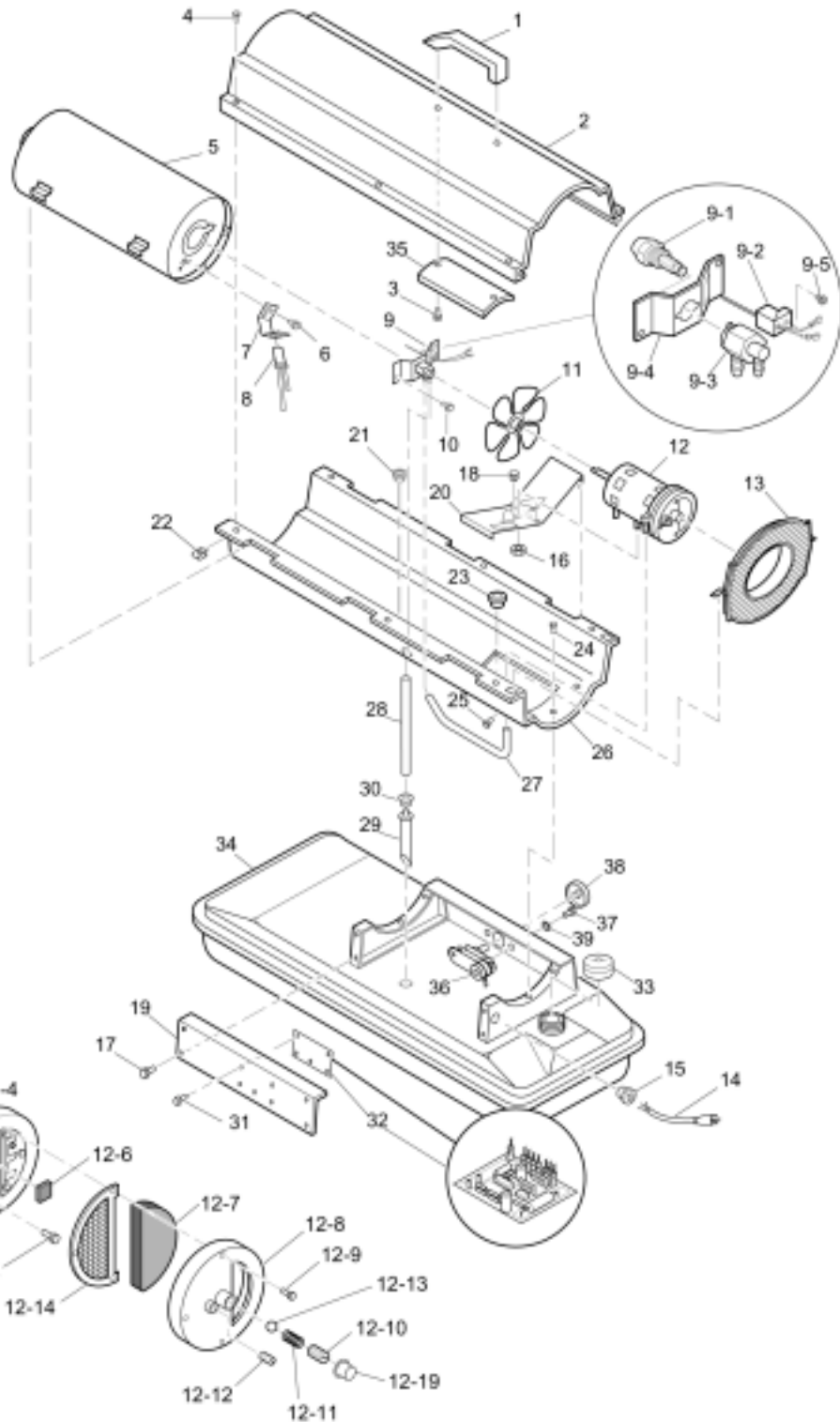
40,000-70,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

Model Numbers

Standard	Thermostat
R40	R40T
REM40	REM40T
R55B	R55BT
R60	R60T
B55B	B55BT
REM60	REM60T
R70D	R70DT
B70D	B70DT
RM60	RM60T

Pump Pressure Settings

BTU	PSI
40	3.0
55	3.6
60	3.6
70	4.7



Desa 40-70,000 BTU HSI

Motor and Pump Assembly

40,000-70,000 BTU Forced Air Desa H.S.I. Oil Fired Heater

Key No.	Part Number	Description
1	M51104-01	Handle
2	098511-67	Upper Shell (Service Part Will Be Black)
3	M11084-29	Screw, #10-16 x 3/4" (qty. 2)
4	M15823-27	Screw, #10-16 x 1 1/2" (qty. 6)
5	098512-58	Combustion Chamber (40)
	098512-50	Combustion Chamber (55/60)
	098512-51	Combustion Chamber (70)
6	M10908-2	Screw, #6-32 x 3/8" (qty. 2)
7	103154-03	Photocell Bracket
8	M16656-24	Photocell Assembly
9	Δ	Burner Head Assembly
9-1	HA3006	Nozzle Assembly (40)
	HA3024	Nozzle Assembly (55/60)
	HA3026	Nozzle Assembly (70)
9-2	102548-03	Ignitor Kit
9-3	104056-01	Nozzle Adapter
9-4	102336-01	Nozzle Adapter Bracket
9-5	M10908-75	Screw, Hex Head, Tapping
9-6	103347-01	Belleville Washer
10	M11084-26	Screw, #10-16 x 3/8" (qty. 2)
11	103684-01	Fan (40/55/60) M29678 Fan (70)
12	Δ	Motor and Pump Assembly
12-1	102001-28	Motor (40/55/60)
	102001-29	Motor (70)
12-2	079975-03	Pump Body (55/60)
	079975-02	Pump Body (40/70)
12-3	M22009**, ***	Insert
12-4	M22456-2**	Rotor (55/60)
	M22456-1***	Rotor (40/70)
12-5	M29608	Pump End Cover
12-6	M29632 +	Lint Filter
12-7	M29633 +	Intake Filter
12-8	M29609	Filter End Cover
12-9	M12461-31	Screw, #10-32 x 1" (qty. 3)
12-10	M27694 ^	Adjusting Screw
12-11	M10993-1 ^	Pressure Relief Spring
12-12	M22997 ^	Plug
12-13	M8940 ^	Steel Ball, 1/4" Diameter
12-14	M29612-01 +	Output Filter
12-15	M12461-32	Screw, #10-32 x 1 1/8" (55/60) (qty. 6)
	M12461-31	Screw, #10-32 x 1" (40/70) (qty. 6)
12-16	103676-01	Nylon Elbow, 90°
12-17	M8643-2**	Blade (55/60) (qty. 4)
	M8643***	Blade (40/70) (qty. 4)
12-18	FHPF3-6C	Screw, #10-32 x 3/4" (55/60) (qty. 2)
	FHPF3-5C	Screw, #10-32 x 5/8" (40/70) (qty. 2)
12-19	105780-01	Plastic Cap
13	M51105-01	Fan Guard
14	098219-38	Power Cord 6"
15	M11143-1	Strain Relief Bushing
16	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)
17	M11084-26	Screw, #10-16 x 3/8" (qty. 8)
18	M50631	Rubber Bumper (qty. 2)
19	097461-16	Side Cover (qty. 2)
20	101205-01	Motor Bracket

Key No.	Part Number	Description
21	M50104-06	Bushing
22	M11271-8	Clip Nut (qty. 6)
23	M50104-02	Bushing
24	M11084-26	Screw, #10-16 x 3/8" (qty. 6)
25	M10908-14	Screw, #8-32 x 3/8"
26	098511-234	Lower Shell (Service Part Will Be Black)
27	M50814-06	Rubber Airline
28	079973-01	Fuel Line
29	M50876-04	Fuel Filter with bushing (40)
	M50876-05	Fuel Filter with bushing (55/60/70)
30	M10990-3	Rubber Bushing
31	102349-01	PCB Support (qty. 5)
32	104068-02	Ignition Control Assembly
33	097702-01	Fuel Cap (Includes Gasket)
	097663-04	Fuel Gauge (Includes Gasket RM60 Only, If Equipped)
34	108088-01	Fuel Tank (40)
	108088-03	Fuel Tank (55/60/70)
	108088-16	Fuel Tank (RM60 Only, if Equipped with Fuel Gauge)
35	M51108-01	Shell Heat-Shield
36	104458-01	Thermostat
37	M12461-18	Screw, #8-32 x 7/8"
38	104460-01	Thermostat Knob
39	WLE-2	Lock Washer, EXT #8

PARTS AVAILABLE - NOT SHOWN

103814-01	Wire Tie (For Ignition Control Assembly)
M9900-170	Wire Assembly (Thermostat to Ignition Control Assembly)

Δ Not available as an assembly

+ Included in Filter Kit (Part No. HA3014)

** Included in Rotor Kit (Part No. HA3005)

^ Included in Pump Adjustment Kit (Part No. HA3020)

*** Included in Rotor Kit (Part No. HA3004)

Desa 40-70,000 BTU HSI

40,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

Model Numbers

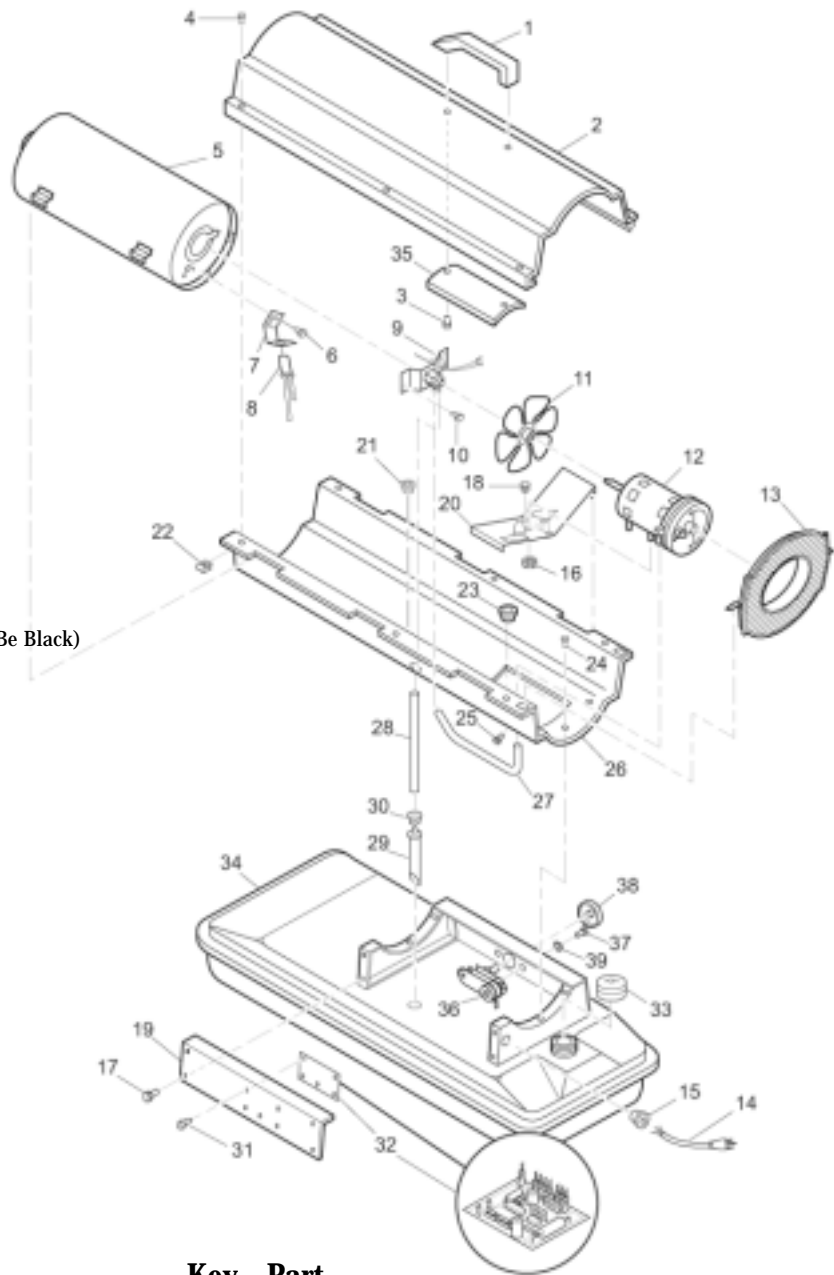
Standard	Thermostat
R40	R40T
REM40	REM40T
PK40	PK40T
UK40	UK40T
TK40	TK40T
N40	N40T

Pump Pressure Setting

BTU	PSI
40	3.0

Key Part No. Number Description

1	M51104-01	Handle
2	098511-67	Upper Shell (Service Part Will Be Black)
3	M11084-29	Screw, #10-16 x 3/4" (qty. 2)
4	M15823-27	Screw, #10-16 x 1 1/2" (qty. 6)
5	098512-58	Combustion Chamber
6	M10908-2	Screw, #6-32 x 3/8" (qty. 2)
7	103154-03	Photocell Bracket
8	M16656-24	Photocell Assembly
9	(See page 41)	Burner Head Assembly
10	M11084-26	Screw, #10-16 x 3/8" (qty. 2)
11	103684-01	Fan
12	(See page 44)	Motor and Pump Assembly
13	M51105-01	Fan Guard
14	098219-38	Power Cord
15	M11143-1	Strain Relief Bushing
16	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)
17	M11084-26	Screw, #10-16 x 3/8" (qty. 8)
18	M50631	Rubber Bumper (qty. 2)
19	097461-16	Side Cover (qty. 2)
20	101205-01	Motor Bracket
21	M50104-06	Bushing
22	M11271-8	Clip Nut (qty. 6)
23	M50104-02	Bushing
24	M11084-26	Screw, #10-16 x 3/8" (qty. 6)
25	M10908-14	Screw, #8-32 x 3/8"
26	098511-234	Lower Shell (Service Part Will Be Black)
27	M50814-06	Rubber Airline
28	079973-01	Fuel Line
29	M50876-04	Fuel Filter with bushing
30	M10990-3	Rubber Bushing
31	102349-01	PCB Support (qty. 5)
32	104068-02	Ignition Control Assembly
33	097702-01	Fuel Cap (Includes Gasket)



Key Part No. Number Description

34	108088-01	Fuel Tank
35	M51108-01	Shell Heat-Shield
36	104458-01	Thermostat
37	M12461-18	Screw, #8-32 x 7/8"
38	104460-01	Thermostat Knob
39	WLE-2	Lock Washer, EXT #8

PARTS AVAILABLE - NOT SHOWN

103814-01	Wire Tie
M9900-170	Wire Assembly

50 - 70,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

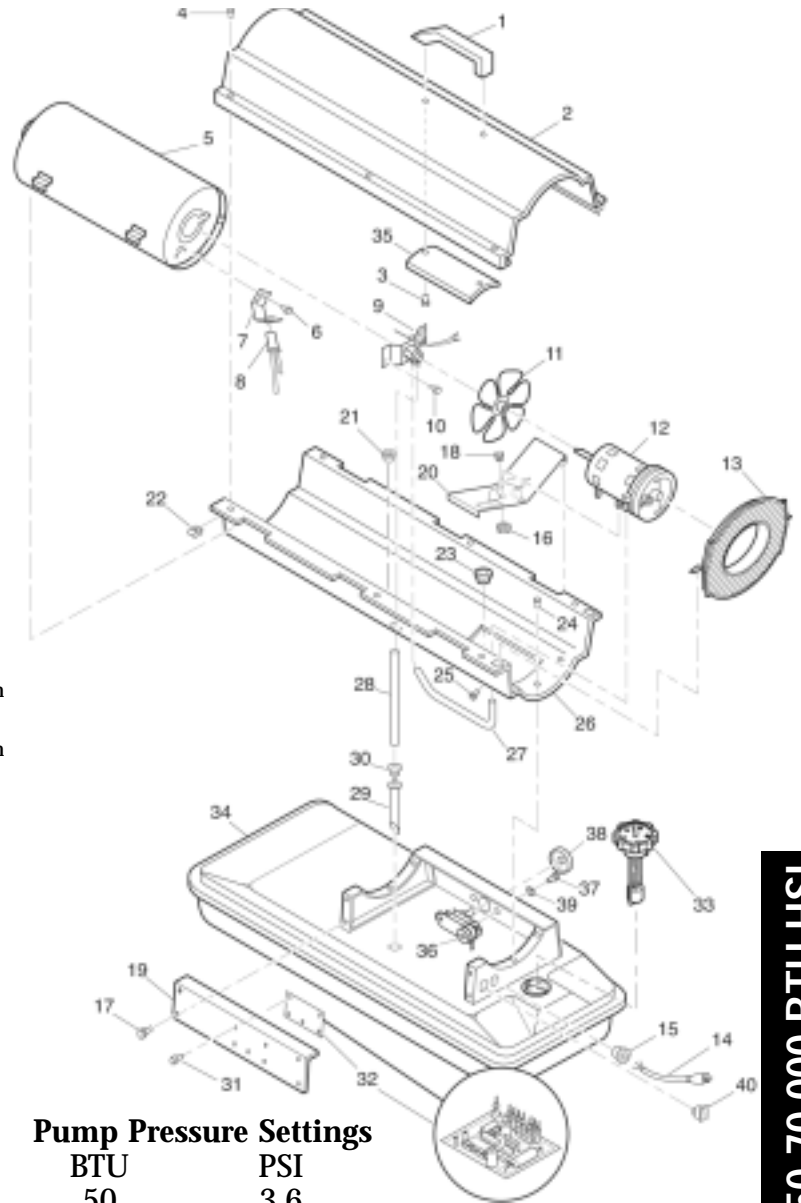
Model Numbers

Standard

R50	PK60	RM60A	B70E
REM50	UK60	PK70	UK70
R55C	R60A	PK55	UK55
TK55	B55C	REM60A	R70E

Thermostat

R50T	PK60T	RM60T	B70ET
REM50T	UK60T	PK70T	UK70T
R55CT	R60AT	PK55T	UK55T
TK55T	B55CT	REM60AT	R70ET



Key Part No.

Key Part No.	Part Number	Description
1	M51104-01	Handle
2	098511-67	Upper Shell (Service Part Will Be Black)
3	M11084-29	Screw, #10-16 x 3/4" (qty. 2)
4	M1582 3-27	Screw, #10-16 x 1 1/2" (qty. 6)
5	098512-50	Combustion Chamber (50/55/60) for use with Ignitor HA1000
	098512-76	Combustion Chamber (50/55/60) for use with Ignitor 102548-08
	098512-51	Combustion Chamber (70)
6	M10908-2	Screw, #6-32 x 3/8" (qty. 2)
7	103154-03	Photocell Bracket
8	M16656-24	Photocell Assembly
9	(See page 41)	Burner Head Assembly
10	M11084-26	Screw, #10-16 x 3/8" (qty. 2)
11	103684-01	Fan (50/55/60)
	M29678	Fan (70)
12	(See page 42)	Motor and Pump Assembly
13	M51105-01	Fan Guard
14	113065-01	Power Cord
15	M11143-1	Strain Relief Bushing
16	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)
17	M11084-26	Screw, #10-16 x 3/8" (qty. 8)
18	M50631	Rubber Bumper (qty. 2)
19	097461-16	Side Cover (qty. 2)
20	101205-01	Motor Bracket
21	M50104-06	Bushing
22	M11271-8	Clip Nut (qty. 2)
23	M50104-02	Bushing
24	M11084-26	Screw, #10-16 x 3/8" (qty. 2)
25	M10908-14	Screw, #8-32 x 3/8"
26	098511-234	Lower Shell (Service Part Will Be Black)
27	M50814-06	Rubber Airline
28	079973-01	Fuel Line
29	M50876-05	Fuel Filter with bushing
30	M10990-3	Rubber Bushing
31	102349-01	PCB Support (qty. 2)
32	104068-02	Ignition Control Assembly
33	097663-04	Fuel Cap w/ Gauge (includes Gasket) (Use with Fuel Tank 108088-16)
	113280-01	Fuel Cap w/ Gauge (includes Gasket) (Use with Fuel Tank 113279-01)

Pump Pressure Settings

BTU	PSI
50	3.6
55	3.6
60	3.6
70	4.7

Key Part No. Part Number Description

34	108088-16	Fuel Tank (Metal Filler Neck)
	113279-01	Fuel Tank (Plastic Filler Neck)
35	M51108-01	Shell Heat-Shield
36	104458-01	Thermostat
37	M12461-18	Screw, #8-32 x 7/8"
38	104460-01	Thermostat Knob
39	WLE-2	Lock Washer, EXT #8
40	113461-01	ON/OFF Switch

PARTS AVAILABLE - NOT SHOWN

103814-01	Wire Tie (For Ignition Control Assembly) 1
M9900-170	Wire Assembly (Thermostat to Ignition Control Assembly)
1079010-46	Wire Assembly (Connects Switch to Thermostat or Ignition)

Desa 50-70,000 BTU HSI

110-165,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

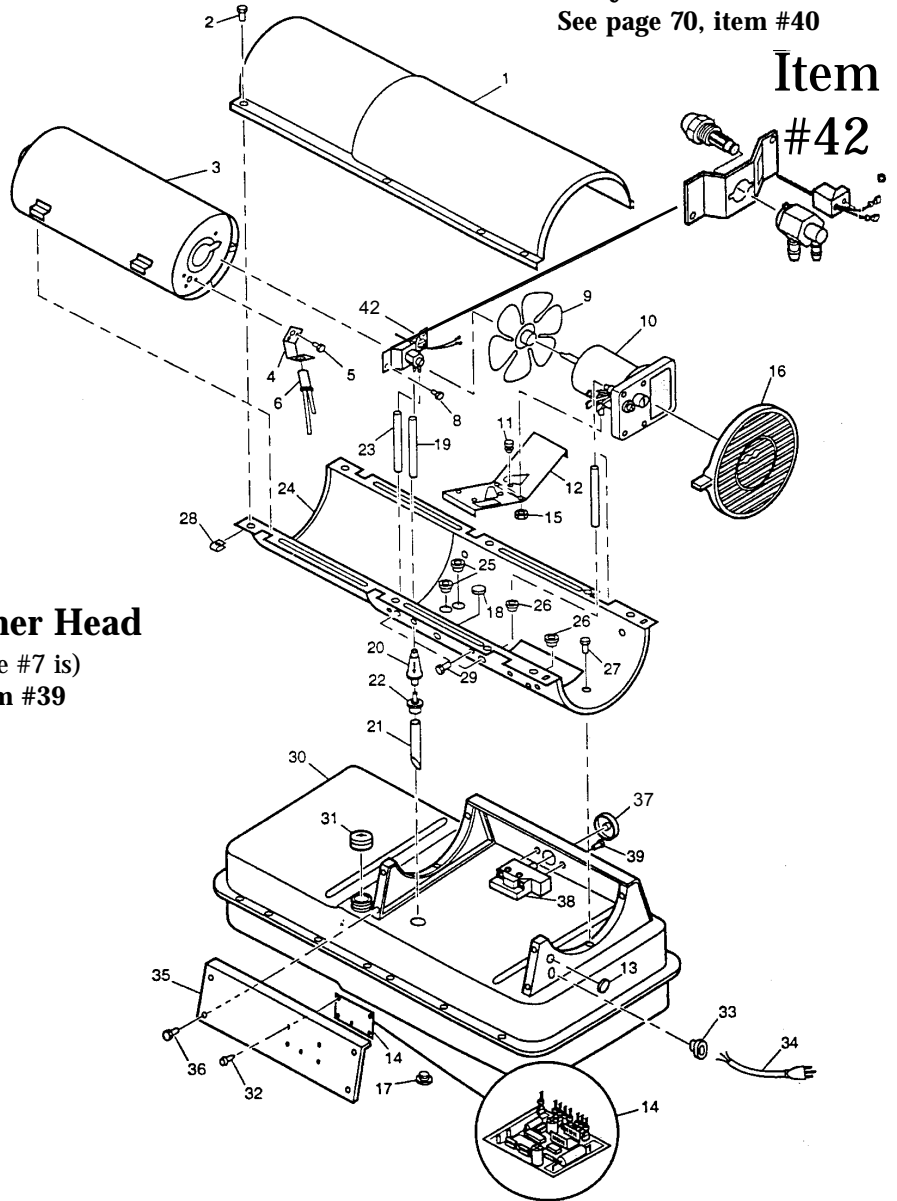
Model Numbers

Reddy	Remington	Master
R110A	REM110A	B110A
R110B	REM110B	B110B
R110BT	REM110BT	B110BT
R115	REM115	B115T
RM115	REM115T	B150H
RM115T	REM150D	B150J
R150E	REM150E	B150JT
R155A	REM155A	B150JT
R155B	REM155B	B155T
RM155		B165AT
R165A	L.B. White	
R165AT	K155	

"New Style" Burner Head

See page 70, item #40

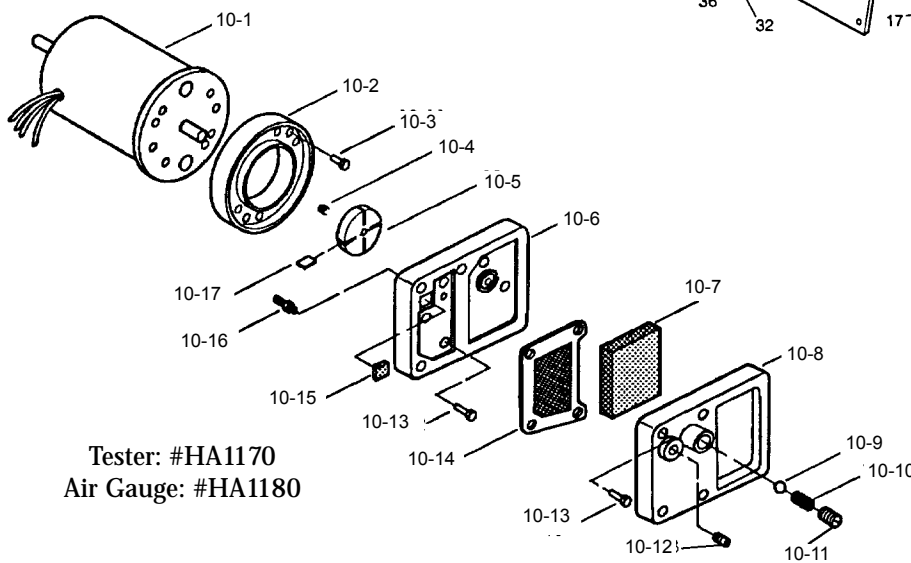
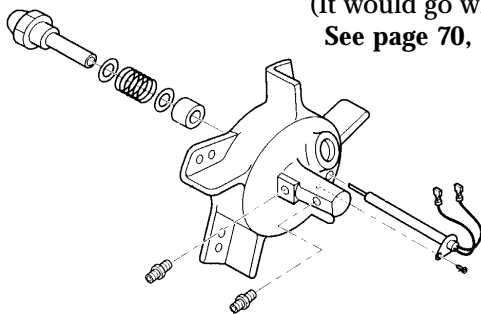
Item #42



Item #41

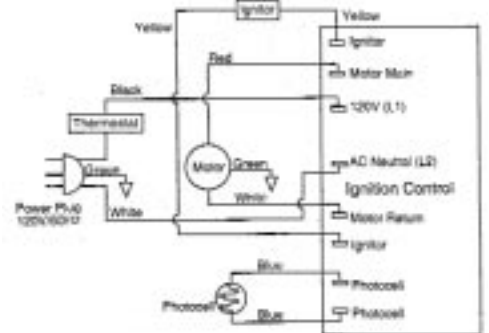
"Old Style" Burner Head

(It would go where #7 is)
See page 70, item #39



Tester: #HA1170
Air Gauge: #HA1180

"New Style" Wiring Diagram



Desa 110-165,000 BTU HSI

110-165,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

Key No.	Part Number	Description
1	098511-66	Upper Shell (Replacement part will be black)
2	100647-01	Screw, #10-16 x 1/2" (qty. 8)
3	Combustion Chambers	
	098512-45	B110, R110A, REM110A
	098512-54	All other 110,000 - 115,000 units
	098512-46	B150H, R150E, REM150D, R155, R155A, REM155A
	098512-59	All other 150,000 - 155,000 units
	098512-60	All 165,000 units
4	Photocell Bracket	
	M16660	B110A, R110A, REM110A
	103971-01	All other 110,000 - 115,000 units
	103154-05	All other 150,000 - 165,000 units
5	M10908-2	Screw, #6-32 x 3/8" (qty. 2)
6	M16656-24	Photocell
8	M11084-27	Screw, #10-16 x 1/2" All "old style" burner head models (qty. 3)
	107992-01	Screw, #10-16 x 3/8" All "new style" burner head models (qty. 2)
9	Fan	
	097293-01	All 110,000 - 115,000 units and B150H, R150E, REM150D, R155, R155A, REM155A
	102042-01	All others
10	MOTOR & PUMP ASSEMBLY	
10-1	Motor	
	097308-06	B110A, R110A, REM110A, B150H, R150E, REM150D, R155, R155A, REM155A
	102001-21	All others
10-2	079975-02	1/2" Pump Body Ring (metal)
10-3	FHPPF3-5C	Screw, #10-32 x 5/8" (qty. 2)
10-4	M22009	Rotor Insert
10-5	M22456-1	1/2" Rotor
10-6	M50545	Metal Pump End Cover
10-7	M12179	Foam Intake Filter
10-8	M16545	Plastic End Cover
10-9	M8940	Steel Ball, 1/4" diameter
10-10	M10993-1	Relief Spring
10-11	M27694	Pressure Adjusting Screw
10-12	M22997	Plug
10-13	M12461-31	Screw, #10-32 x 1" (qty. 10)
10-14	M12244-1	Output Filter
10-15	M11637	Lint Filter
10-16	Barb Fitting	
	M50820-02	Brass
	104096-01	Nylon
	105880-02	Ignition Control Fuse
10-17	M8643	1/2" Blade (Vanes) (Come in set of 4)\
11	M50631	Rubber Bumper (qty. 2)
12	101206-01	Motor Mounting Bracket
13	099213-01	Button Plug
14	Ignition Control Assembly	
	104065-01	B110A, R110A, REM110A, B150H, R150E, REM150A, R155, R155A, REM155A
	104068-02	All others (fuse part# 105880-02)
15	NTC-4C	Hex Lock nut, 1/4-20 (qty 2)
16	M51114-01	Fan Guard
17	M27147	Drain Plug
18	099213-01	Button Plug

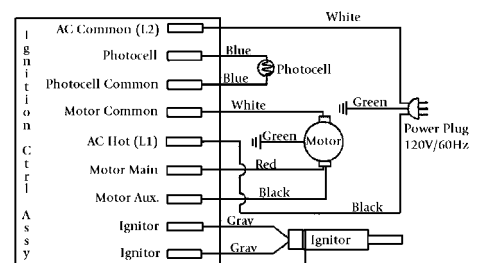
Key No.	Part Number	Description
19	Fuel Line	
	M51345-01	B110A, R110A, REM110A, B150H, R150E, REM150D, R155, R155A, REM155A
	M51345-06	All others
20	M51150-01	Fuel Filter
21	Fuel Line Tube	
	M51151-01	All 110,000 - 115,000 units
	M51151-02	All 150,000 - 165,000 units
22	M10990-3	Rubber Bushing
23	M50814-03	Air Line
24	098511-236	Lower Shell (replacement part will be black)
25	M50104-03	Bushing (qty. 2)
26	M50104-01	Bushing (qty. 2)
27	M11084-27	Screw, #10-16 x 1/2" (qty. 6)
28	M11271-8	Clip Nut (qty. 8)
29	M10908-14	Screw, #8-32 x 3/8" (qty. 1)
30	Fuel Tank	
	108088-04	All 110,000 - 115,000 units
	108088-05	All 150,000 - 165,000 units
31	097702-01	Fuel Cap (includes gasket)
32	102349-01	PC Board Support (qty. 5)
33	M11143-1	Strain Relief Bushing
34	098219-38	Power Cord
35	M51077-09AA	Side Cover
36	M11084-27	Screw, #10-16 x 1/2" -till 2000 (qty. 4)
	M11084-26	Screw, #10-16 x 1/2" -2000 on
37	104905-01	Thermostat knob
38	097657-03	Thermostat
39	M10908-2	Screw, #6-32 x 1/4" (qty. 2)
41	Old Style Burner Assembly - see page 70	
42	New Style Burner Assembly - see page 70	

Pump Pressure Settings

BTU	PSI
110	5.3
115	5.3
150	5.0
155	5.2
165	5.6

Burner Assemblies are on page 70.

"Old Style" Wiring Diagram

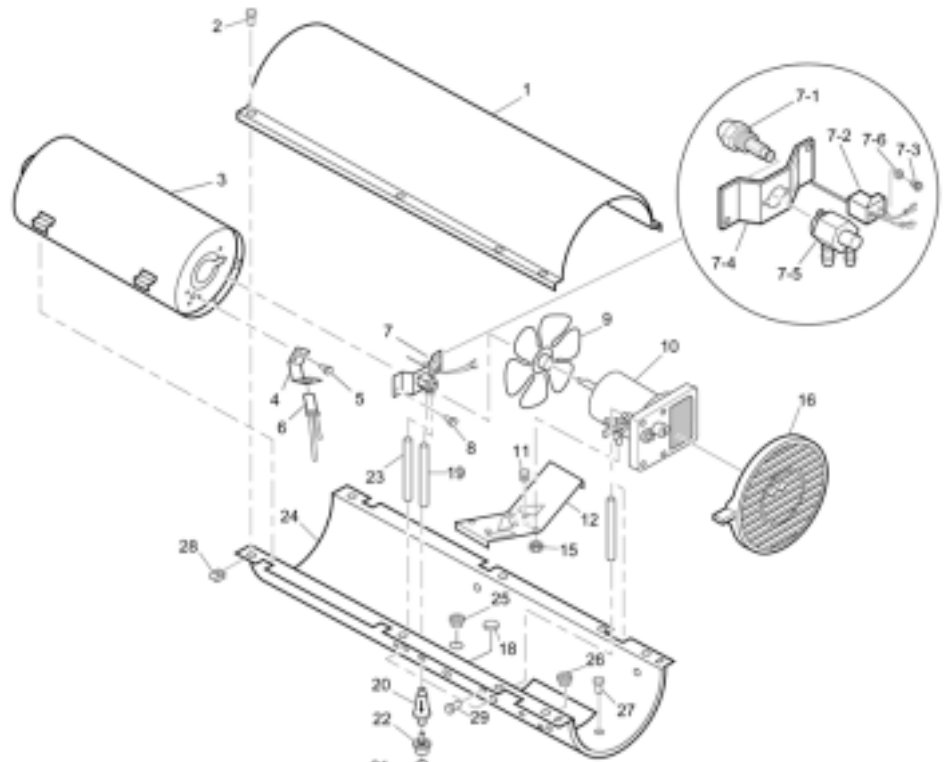


Desa 110-165,000 BTU HSI

110-165,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

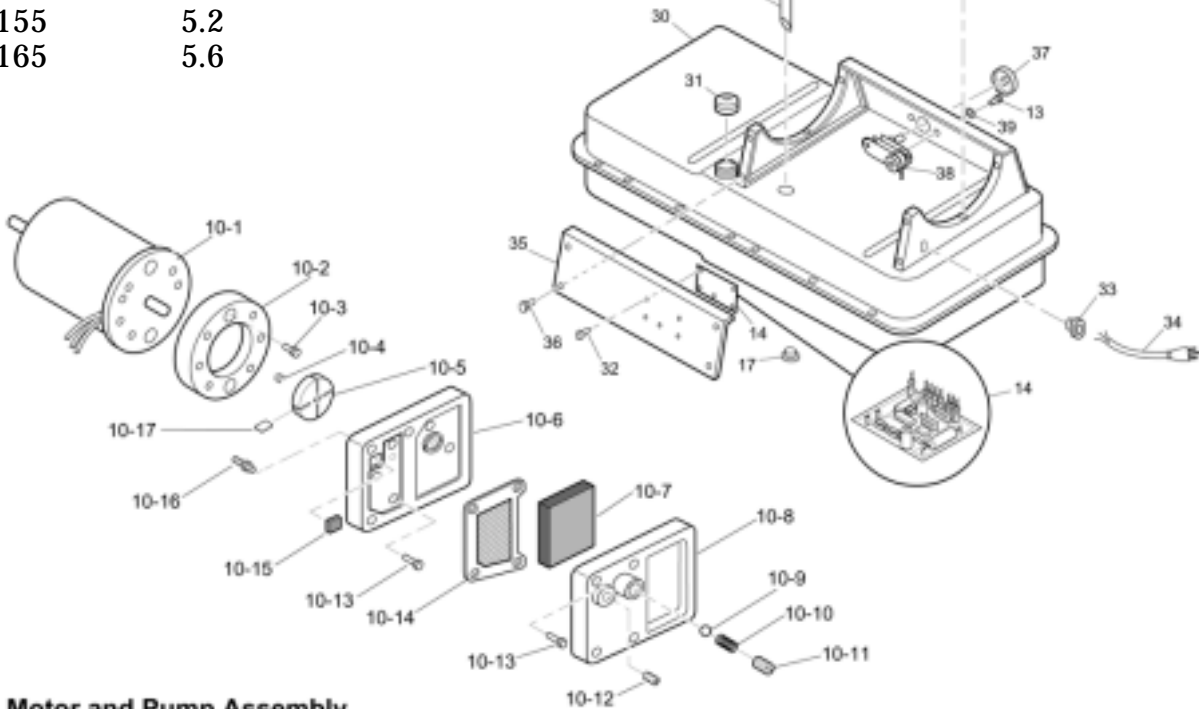
Model Numbers

Standard	Thermostat
R110C	R110CT
R115C	R115CT
B115C	B115CT
REM115C	REM115CT
RM115C	RM115CT
B155C	B155CT
REM155C	REM155CT
R165C	R165CT
RM155C	RM155CT
B165C	B165CT
R155C	R155CT
B110C	B110CT
RM110C	RM110CT
RM165C	RM165CT
REM110C	REM110CT
REM165C	REM165CT
	SB115CT



Pump Pressure Settings

BTU	PSI
110	5.3
115	5.3
155	5.2
165	5.6



Motor and Pump Assembly

Desa 110-165,000 BTU HSI

110-165,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

Key No.	Part Number	Description	Key No.	Part Number	Description
1	098511-292	Upper Shell (Service Part Will Be Black)	20	106896-01	Fuel Filter
2	M15823-27	Screw, #10-16 x 1/2" (qty. 8)	21	M51151-01	Fuel Line Tube (110/115)
3	098512-71	Combustion Chamber (110/115)		M51151-02	Fuel Line Tube (155/165)
	098512-74	Combustion Chamber (155)	22	M10990-3	Rubber Bushing
	098512-75	Combustion Chamber (165)	23	M50814-03	Airline
4	103154-05	Photocell Bracket (110/115)	24	098511-293	Lower Shell (Service Part Will Be Black)
	M16660-02	Photocell Bracket (155/165)	25	M50104-06	Bushing
5	M10908-2	Screw, #6-32 x 3/8" (qty. 2)	26	M50104-01	Bushing
6	M16656-24	Photocell Assembly	27	M11084-26	Screw, #10-16 x 3/8" (qty. 6)
7	Δ	Burner Head Assembly	28	M11271-8	Clip Nut (qty. 8)
7-1	HA3027	Nozzle Assembly (110/115)	29	M10908-14	Screw, #8-32 x 3/8"
	HA3028	Nozzle Assembly (155/165)	30	108088-04	Fuel Tank (110/115)
7-2	102548-03	Ignitor Kit		108088-11	Fuel Tank (RM115CT Only)
7-3	M10908-75	Screw, #6-32 x 7/8"		108088-05	Fuel Tank (155/165)
7-4	102336-01	Nozzle Adapter Bracket	31	097702-01	Fuel Cap (Includes Gasket)
7-5	104054-01	Nozzle Adapter		097663-02	Fuel Gauge (Includes Gasket, RM115CT Only)
7-6	103347-01	Washer			
8	M11084-26	Screw, #10-16 x 3/8" (qty. 2)	32	102349-01	P.C. Board Support (qty. 5)
9	097293-01	Fan (110/115/155)	33	M11143-1	Strain Relief Bushing
	102042-01	Fan (165)	34	098219-38	Power Cord
10	Δ	Motor and Pump Assembly	35	M51077-18	Side Cover (qty. 2)
10-1	102001-30	Motor	36	M11084-26	Screw, #10-16 x 3/8" (qty. 8)
10-2	079975-02	Pump Body	37	104460-01	Thermostat Knob
10-3	FHPF3-5C	Screw, #10-32 x 5/8" (qty. 2)	38	104458-01	Thermostat
10-4	M22009**	Rotor Insert	39	WLE-2	Lock Washer, EXT #8
10-5	M22456-1**	Pump Rotor			
10-6	M50545	Pump End Cover			
10-7	M12179***	Intake Filter			
10-8	M16545	Filter End Cover			
10-9	M8940 ^	Steel Ball, 1/4" Diameter			
10-10	M10993-1 ^	Relief Spring			
10-11	M27694 ^	Adjusting Screw			
10-12	M22997 ^	Plug			
10-13	M12461-31	Screw, #10-32 x 1" (qty. 10)			
10-14	M12244-1***	Output Filter			
10-15	M11637***	Lint Filter			
10-16	104096-01	Fitting, Straight Nylon Barb			
10-17	M8643**	Blade 4			
11	M50631	Rubber Bumper (qty. 2)			
12	101206-01	Motor Mounting Bracket			
13	M12461-18	Screw, #8-32 x 7/8"			
14	104068-02	Ignition Control Assembly			
15	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)			
16	111037-01	Fan Guard			
17	M27417	Drain Plug (Includes "o" Ring)			
18	107878-02	Button Plug			
19	M51345-06	Fuel Line			

PARTS AVAILABLE NOT SHOWN

103814-01	Wire Tie - Groups wires connected to Ignition Control Assembly
M9900-77	Wire (Connects thermostat to Ignition Control Assembly)

Δ Not available as an assembly

** Included in Rotor Kit (Part No. HA3004)

^ Included in Pump Adjustment Kit (Part No. HA3020)

*** Included in Filter Kit (Part No. HA3017)

Desa 110-165,000 BTU HSI

110-165,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

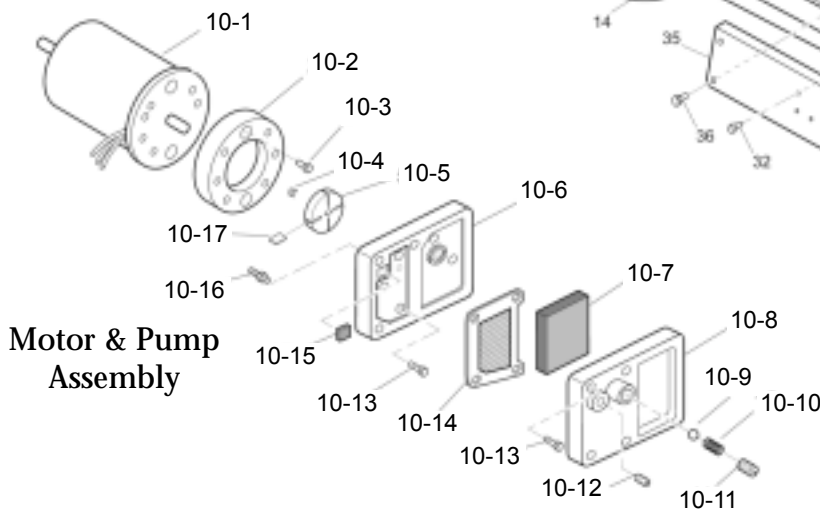
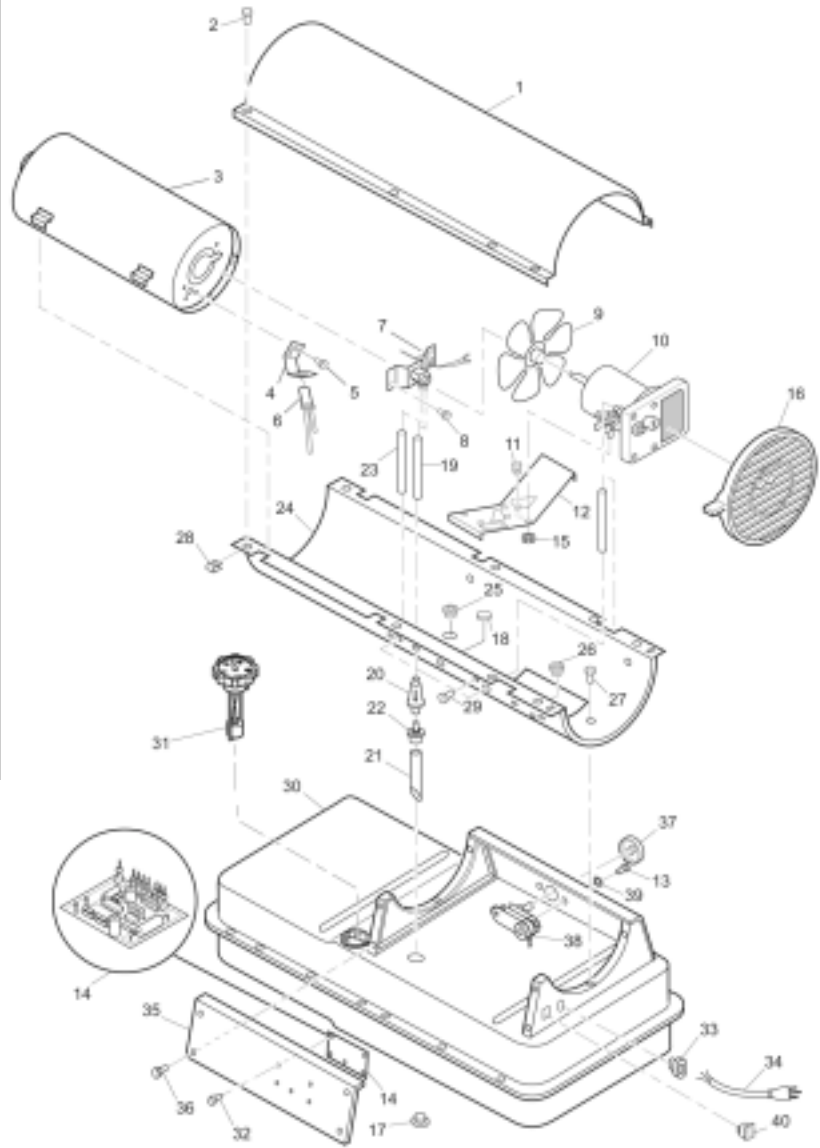
Model Numbers

Standard

PK110	R110D	R115D
B115D	PK115	UK110
TK110	TK115	REM115D
RM115D	B155D	REM155D
R165D	RM155D	PK155
UK155	TK155	B165D
R155D	B110D	RM110D
RM165D	REM110D	REM165D
PK165	UK165	

Thermostat

R110DT	R115DT	B115DT
REM115DT	RM115DT	PK115T
UK110T	TK110T	TK115T
B155DT	REM155DT	R165DT
RM155DT	B165DT	PK155T
UK155T	TK155T	R155DT
B110DT	RM110DT	RM165DT
PK165T	UK165T	TK165T
REM110DT	REM165DT	SB115DT
SB165DT		



Motor & Pump Assembly

Pump Pressure Settings

BTU	PSI
110	5.3
115	5.3
155	5.2
165	5.6

Desa 110-165,000 BTU HSI

110-165,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

Key No.	Part Number	Description
1	098511-292	Upper Shell (Service Part Will Be Black)
2	M15823-27	Screw, #10-16 x 1/2" (qty. 8)
3	098512-71	Combustion Chamber (110/115)
	098512-74	Combustion Chamber (155)
	098512-75	Combustion Chamber (165)
4	103154-05	Photocell Bracket (110/115)
	M16660-02	Photocell Bracket (155/165)
5	M10908-2	Screw, #6-32 x 3/8" (qty. 2)
6	M16656-24	Photocell Assembly
7		(See page 70) Burner Head Assembly
8	M11084-26	Screw, #10-16 x 3/8" (qty. 2)
9	097293-01	Fan (110/115/155)
	102042-01	Fan (165)
10		Motor and Pump Assembly
1	102001-30	Motor
2	079975-02	Pump Body
3	FHPF3-5C	Screw, #10-32 x 5/8" (qty. 2)
4	M22009	Rotor Insert
5	M22456-1	Pump Rotor
6	M50545	Pump End Cover
7	M12179	Intake Filter
8	M16545	Filter End Cover
9	M8940	Steel Ball, 1/4" Diameter
10	M10993-1	Relief Spring
11	M27694	Adjusting Screw
12	M22997	Plug
13	M12461-31	Screw, #10-32 x 1" (qty. 10)
14	M12244-1	Output Filter
15	M11637	Lint Filter
16	104096-01	Fitting, Straight Nylon Barb
17	M8643	Blade (qty. 4)
11	M50631	Rubber Bumper (qty. 2)
12	101206-01	Motor Mounting Bracket
13	M12461-18	Screw, #8-32 x 7/8"
14	104068-02	Ignition Control Assembly
15	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)
16	111037-01	Fan Guard
17	M27417	Drain Plug (Includes "o" Ring)
18	107878-02	Button Plug
19	M51345-06	Fuel Line
20	106896-01	Fuel Filter
21	M51151-01	Fuel Line Tube (110/115)
	M51151-02	Fuel Line Tube (155/165)
22	M10990-3	Rubber Bushing
23	M50814-03	Airline
24	098511-293	Lower Shell (Service Part Will Be Black)
25	M50104-06	Bushing

Key No.	Part Number	Description
26	M50104-01	Bushing
27	M11084-26	Screw, #10-16 x 3/8" (qty. 6)
28	M11271-8	Clip Nut (qty. 8)
29	M10908-14	Screw, #8-32 x 3/8"
30	108088-11	Fuel Tank (Metal Filler Neck) 110/115
	108088-10	Fuel Tank (Metal Filler Neck) 155/165
	113279-02	Fuel Tank (Plastic Filler Neck) 110/115
	113279-03	Fuel Tank (Plastic Filler Neck) 155/165
31	097663-02	Fuel Cap w/ Gauge (includes Gasket) 110/115
		(Use with Fuel Tank 108088-11)
	097663-03	Fuel Cap w/ Gauge (includes Gasket) 155/165
		(Use with Fuel Tank 108088-10)
	113280-02	Fuel Cap w/ Gauge (includes Gasket) 110/115
		(Use with Fuel Tank 113279-02)
	113280-03	Fuel Cap w/ Gauge (includes Gasket) 110/115
		(Use with Fuel Tank 113279-03) 155-165
32	102349-01	P.C. Board Support (qty. 5)
33	M11143-1	Strain Relief Bushing
34	113065-01	Power Cord
35	M51077-18	Side Cover (qty. 2)
36	M11084-26	Screw, #10-16 x 3/8" (qty. 8)
37	104460-01	Thermostat Knob
38	104458-01	Thermostat
39	WLE-2	Lock Washer, EXT #8
40	113461-01	ON/OFF Switch with Light

PARTS AVAILABLE NOT SHOWN

113137-01	Fuel Gasket
103814-01	Wire Tie - Groups
	wires connected to Ignition
	Control Assembly
M9900-77	Wire (Connects thermostat to
	Ignition Control Assembly)
079010-46	Wire (Connects ON/OFF Switch to Ignition
	Control Assembly or Thermostat if Equipped)

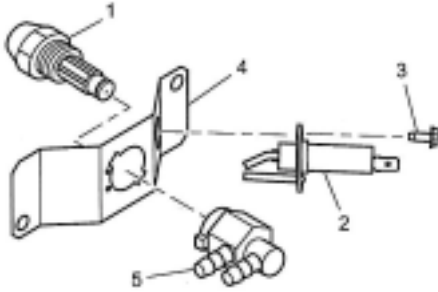
Desa 110-165,000 BTU HSI

110-155,000 BTU Forced Air Desa Oil Fired Heater

Model Numbers

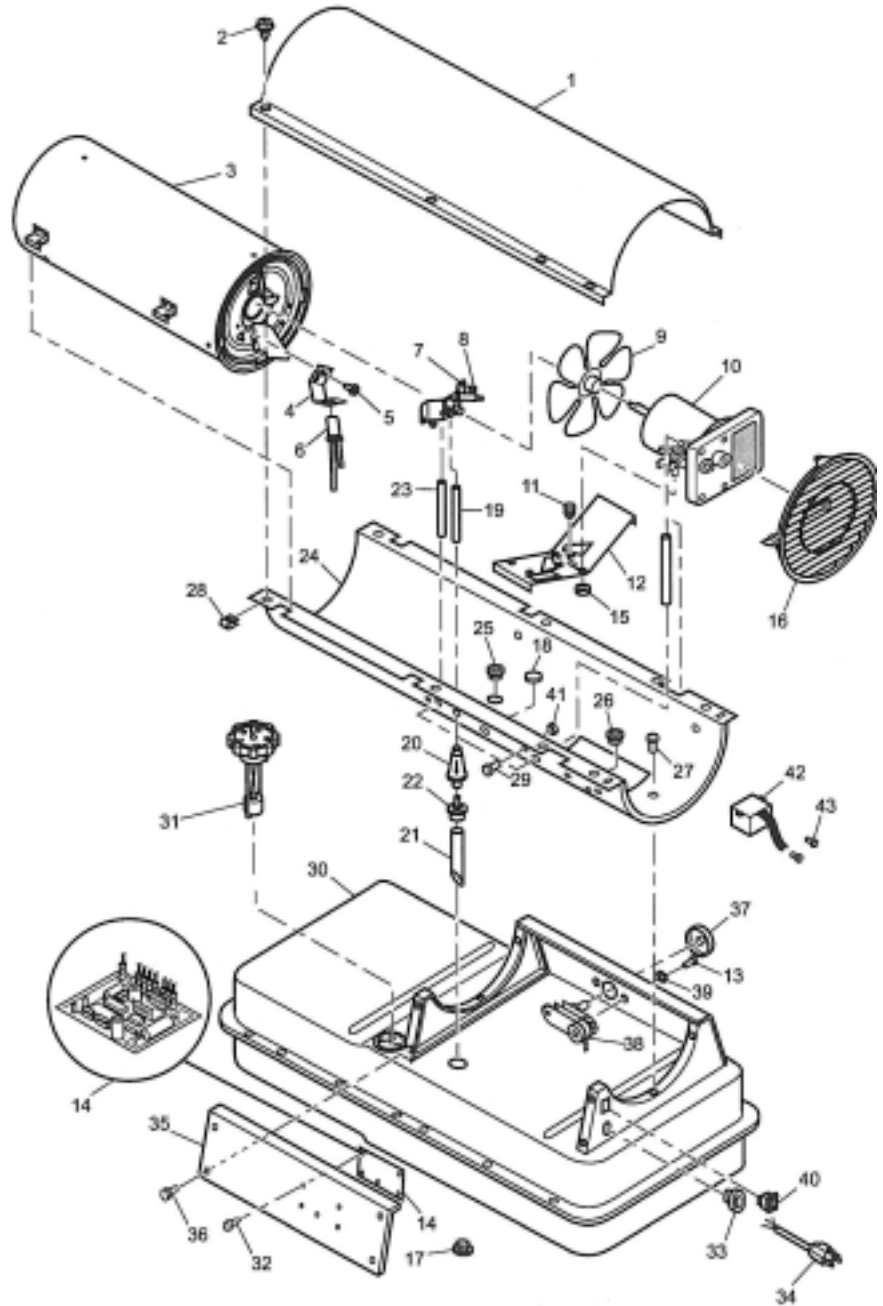
B110DST
B155DST

Nozzle Assembly

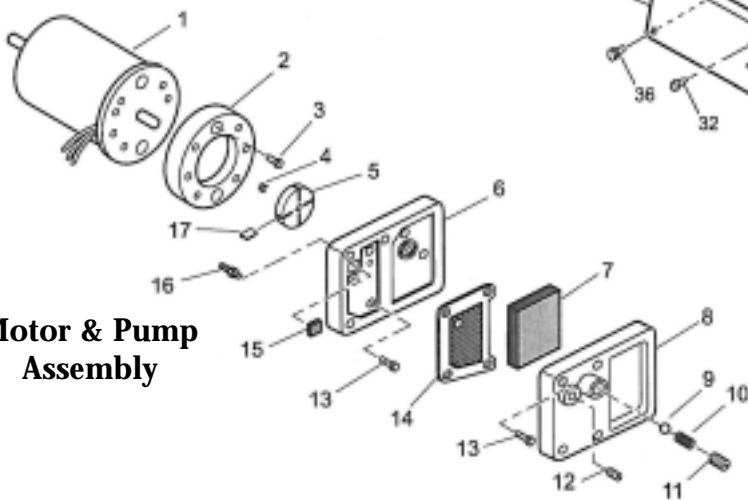


Pump Pressure Settings

BTU	PSI
110	5.1
155	5.1



Motor & Pump Assembly



Desa 110-155,000 BTU HSI

110-155,000 BTU Forced Air Desa Oil Fired Heater

Key No.	Part No.	Description	110K	155K	Qty.
1	098511-292	Upper Shell (Service Part Will Be Black)	•	•	1
2	M15823-27	Screw, #10-16 x 1/2"	•	•	8
3	098512-82	Combustion Chamber			
	098512-83	Combustion Chamber			
4	M16660-02	Photocell Bracket		•	1
	103154-05	Photocell Bracket	•		1
5	M10908-2	Screw, #6-32 x 3/8" 6	•	•	3
6	PP236	Photocell Assembly	•	•	1
7	(See page 62)	Nozzle/Bracket Assembly	•	•	1
8	M11084-26	Screw, #10-16 x 3/8"	•	•	2
9	097293-01	Fan	•		1
	102042-01	Fan		•	1
10	(See page 62)	Motor and Pump Assembly	•	•	1
11	M50631	Rubber Bumper	•	•	2
12	101206-01	Motor Mounting Bracket	•	•	1
13	M12461-18	Screw, #8-32 x 7/8"	•	•	1
14	104068-02	Ignition Control Assembly	•	•	1
15	NTC-4C	Hex Lock Nut, 1/4-20	•	•	2
16	111037-01	Fan Guard	•	•	1
17	M27417	Drain Plug (Includes "o" Ring)	•	•	1
18	107878-02	Button Plug	•	•	1
19	M51345-06	Fuel Line	•	•	1
20	106896-01	Fuel Filter	•	•	1
21	M51151-01	Fuel Line Tube	•		1
	M51151-02	Fuel Line Tube		•	1
22	M10990-3	Rubber Bushing	•	•	1
23	M50814-03	Airline	•	•	1
24	098511-296	Lower Shell (Service Part Will Be Black)	•	•	1
25	M30865-02	Bushing	•	•	3
26	M50104-01	Bushing	•	•	1
27	M11084-26	Screw, #10-16 x 3/8"	•	•	6
28	M11271-8	Clip Nut	•	•	8
29	M10908-14	Screw, #8-32 x 3/8"	•	•	1
30	113279-02	Fuel Tank	•		1
	113279-03	Fuel Tank		•	1
31	113280-02	Fuel Cap w/ Gauge (includes Gasket)	•		1
	113280-03	Fuel Cap w/ Gauge (includes Gasket)		•	1
32	102349-01	P.C. Board Support	•	•	5
33	M11143-1	Strain Relief Bushing	•	•	1
34	113065-01	Power Cord	•	•	1
35	M51077-18	Side Cover	•	•	2
36	M11084-26	Screw, #10-16 x 3/8"	•	•	8
37	104460-01	Thermostat Knob	•	•	1
38	104458-01	Thermostat	•	•	1
39	WLE-2	Lock Washer, EXT #8	•	•	1
40	113461-01	ON/OFF Switch with Light	•	•	1
41	097384-01	Nut, 8-32	•	•	1
42	101901-14	Electronic Ignitor	•	•	1
43	M11084-29	Screw, #10-16 x 3/4"	•	•	2
PARTS AVAILABLE NOT SHOWN					
	103814-01	Wire Tie	•	•	1
	M9900-77	Wire (T-stat to Ignition Control Assembly)	•	•	1
	079010-46	Wire (ON/OFF Switch to Ignition Control Assembly or Thermostat if Equipped)	•	•	1

Nozzle Bracket Assembly

Key#	Part	Description
1	PP221	Nozzle Assembly (B110DST)
	PP223	Nozzle Assembly (B155DST)
2	117000-02	Spark Ignitor
3	M10908-2	Screw, #6-32 x 3/8"
4	118390-03	Nozzle Adapter Bracket
5	104054-01	Nozzle Adapter

Motor and Pump Assembly

Key#	Part	Description
1	102001-33	Motor
2	079975-02	Pump Body
3	FHPF3-5C	Screw, #10-32 x 5/8"
4	M22009**	Rotor Insert
5	M22456-1**	Pump Rotor
6	M50545	Pump End Cover
7	M12179***	Intake Filter
8	M16545	Filter End Cover
9	M8950+	Steel Ball, 1/4" Diameter
10	M10993-1+	Relief Spring
11	M27694+	Adjusting Screw
12	M22997+	Plug
13	M12461-31	Screw, #10-32 x 1"
14	M12244-1***	Output Filter
15	M11637***	Lint Filter
16	104096-01	Fitting, Straight Nylon Barb
17	M8643**	Blade

** Included in Rotor Kit (PP204)

*** Included in Filter Kit (PP214)

+ Included in Pump Adjustment Kit (PP217)

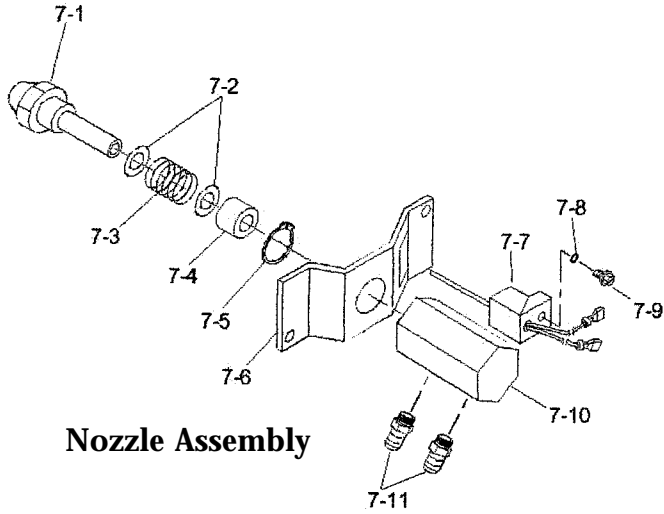
Desa 110-155,000 BTU HSI

200,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

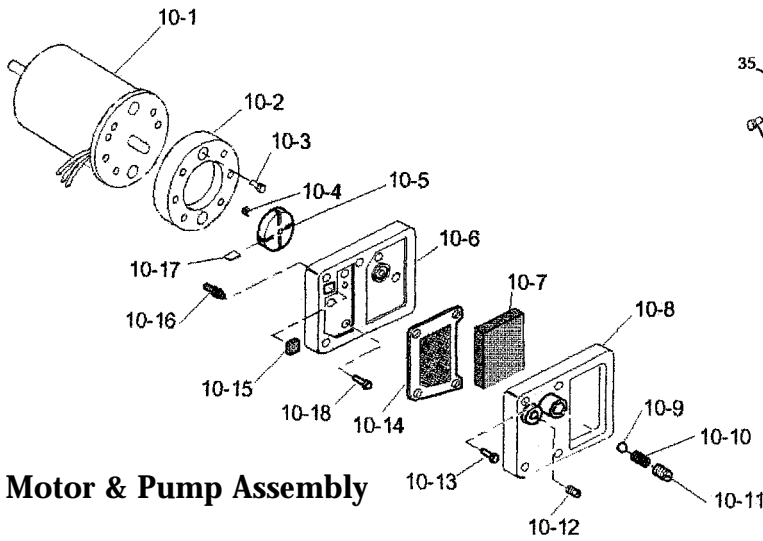
Model Numbers

Reddy	Remington	Master
RM200AT	REM200AT	B200AT
R200A		

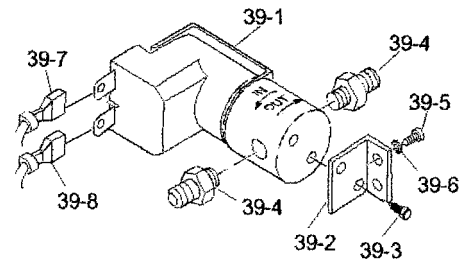
Pump Pressure Setting
6.2 PSI



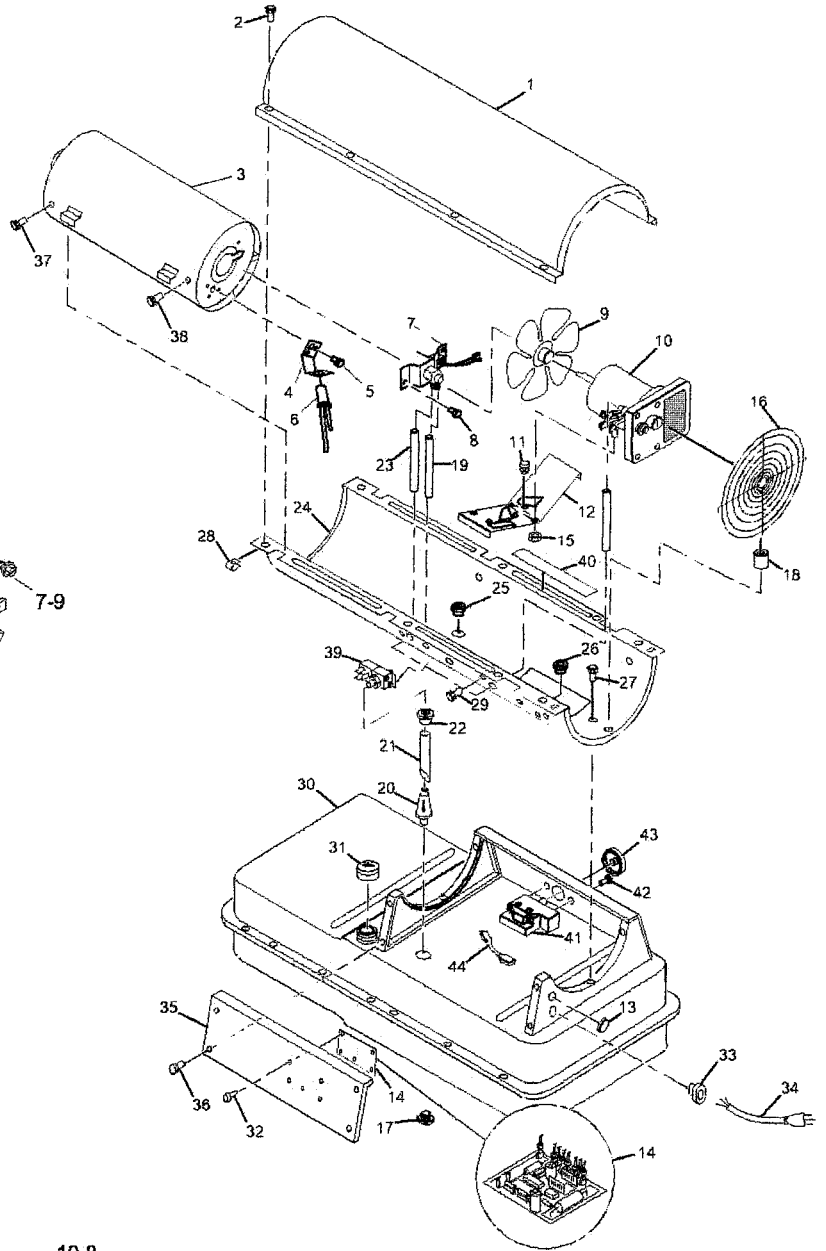
Nozzle Assembly



Motor & Pump Assembly



Fuel Valve Assembly



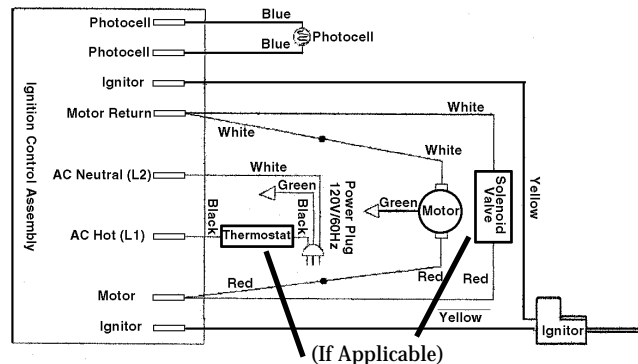
Desa 200,000 BTU HSI

200,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

Key No.	Part Number	Description
1	107353-10	Upper Shell
2	100647-01	Screw, #10-16 x 3/8" (qty. 8)
3	098512-69	Combustion Chamber
4	103154-05	Photozell Bracket
5	M10908-2	Screw, #6-32 x 3/8" (qty. 2)
6	M16656-24	Photozell Assembly
7	BURNER HEAD ASSEMBLY	
7-1	100735-13	Nozzle
7-2	M10659-1	Nozzle Washer (qty. 2)
7-3	M10809-1	Nozzle Spring
7-4	M8882	Nozzle Sleeve
7-5	107272-01	Retaining Ring
7-6	102336-04	Nozzle Adapter Bracket
7-7	HA1000	Ignitor Kit
7-8	103347-01	Belleville Washer
7-9	M10908-75	Screw, #6-32 x .88
7-10	107273-01	Nozzle Adapter
7-11	M50820-02	Barb Fitting (qty. 2)
8	M11084-27	Screw, #10-16 x 1/2" (qty. 2)
9	102042-01	Fan
10	MOTOR & PUMP ASSEMBLY	
10-1	102001-27	Motor
10-2	079975-03	Pump Body Ring (5/8" metal)
10-3	FHPF3-6C	Screw, #10-32 x 5/8" (qty. 2)
10-4	M22009	Rotor Insert
10-5	M22456-2	Pump Rotor (5/8")
10-6	M50545	Pump End Cover (metal)
10-7	M12179	Intake Filter (sponge)
10-8	M16545	Filter End Cover (plastic)
10-9	M8940	Steel Ball, 1/4" diameter
10-10	M10993-1	Pressure Relief Spring
10-11	M27694	Pressure Adjusting Screw
10-12	M22997	Plug
10-13	M12461-31	Screw, #10-32 x 1" (qty. 4)
10-14	M12244-1	Output Filter
10-15	M11637	Lint Filter (sponge)
10-16	M50820-02	Barb Fitting
10-17	M8643-2	Vanes (5/8") set of 4
10-18	M12461-32	Screw, #10-32 x 1.12" (qty. 6)
11	M50631	Rubber Bumper (qty. 2)
12	101206-01	Motor Mounting Bracket
13	101695-01	Button Plug
14	104068-02	Ignition Control Assembly
15	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)
16	102756-01	Fan Guard
17	M27417	Drain Plug (includes "O" Ring)
18	103523-01	Rubber Bushing
19	M51345-03	Fuel Line

Key No.	Part Number	Description
20	M51150-200	Fuel Filter
21	M51345-04	Fuel Line Tube
22	M10990-3	Rubber Bushing
23	M50814-03	Air Line
24	107353-11	Lower Shell
25	M30865-02	Bushing
26	M50104-01	Bushing
27	M11084-27	Screw, #10-16 x 1/2" (qty. 6)
28	M11271-8	Clip Nut (qty. 8)
29	M10908-14	Screw, #8-32 x 3/8"
30	FUEL TANK	
	108088-06	Fuel Tank (R200A)
	098513-105	Fuel Tank (RM200AT, B200AT)
31	097702-01	Fuel Cap (includes gasket)
32	102349-01	PC Board Support (qty. 5)
33	M11143-1	Strain Relief Bushing
34	098219-38	Power Cord
35	107333-04AA	Sidecover
36	M11084-27	Screw, #10-16 x 1/2" (qty. 4)
37	099230-01	Special Screw, (qty. 2)
38	M11084-27	Screw, #10-16 x 1/2" (qty. 2)
39	FUEL VALVE ASSEMBLY - if applicable	
39-1	105939-01	Fuel Valve (always order with #39-2)
39-2	107336-01	Fuel Valve Bracket
39-3	M12461-13	Hex Head Screw, #8-32 x 1/4" (qty. 2)
39-4	M50820-02	Fitting Barb (qty. 2)
39-5	M11084-38	Hex Tpg Screw, #8-18 x 3/8" (qty. 2)
39-6	WLE-2	Lock Washer (qty. 2)
39-7	107274-01	Wire Assembly (Red)
39-8	107274-02	Wire Assembly (White)
40	097785-04	Foam Gasket (qty. 2)
41	097657-03	Thermostat (If Applicable)
42	M10908-1	Screw, #6-32 x 1/4" (qty. 2)
43	104905-01	Thermostat Knob (If Applicable)
44	079010-35	Wire Assembly
	PARTS AVAILABLE-NOT SHOWN	
	HA1180	Air Gauge Kit
	HA2210	Fuel Tank Filter Screen
	HA3005	Rotor Kit
	HA3017	Filter Kit
	HA3020	Pump Kit
	HA2204	Handles (qty. 2)
	M12345-33	Screw, #10-24 x 1 3/4" (qty. 8)
	M12831-3	Wheel Support Frame
	NTC-3C	Hex Nut, #10-24 (qty. 8)
	097896-04	Wheel (qty. 2)
	M28526	Cap Nut (qty. 2)
	M16801-2	Axle

Output Rating	200,000 BTU/Hr
Fuel	K1 or No. 1 Fuel Oil
Fuel Tank Capacity	13.5 (US Gal.)
Fuel Consumption	1.4 GPH
Pump Pressure	6.2 PSI
Electric Requirements	120V/60Hz
Amperage	3.6
Hot Air Output (CFM)	600
Motor RPM	3400
Motor HP	1/4



Desa 200,000 BTU HSI

200,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

Model Numbers

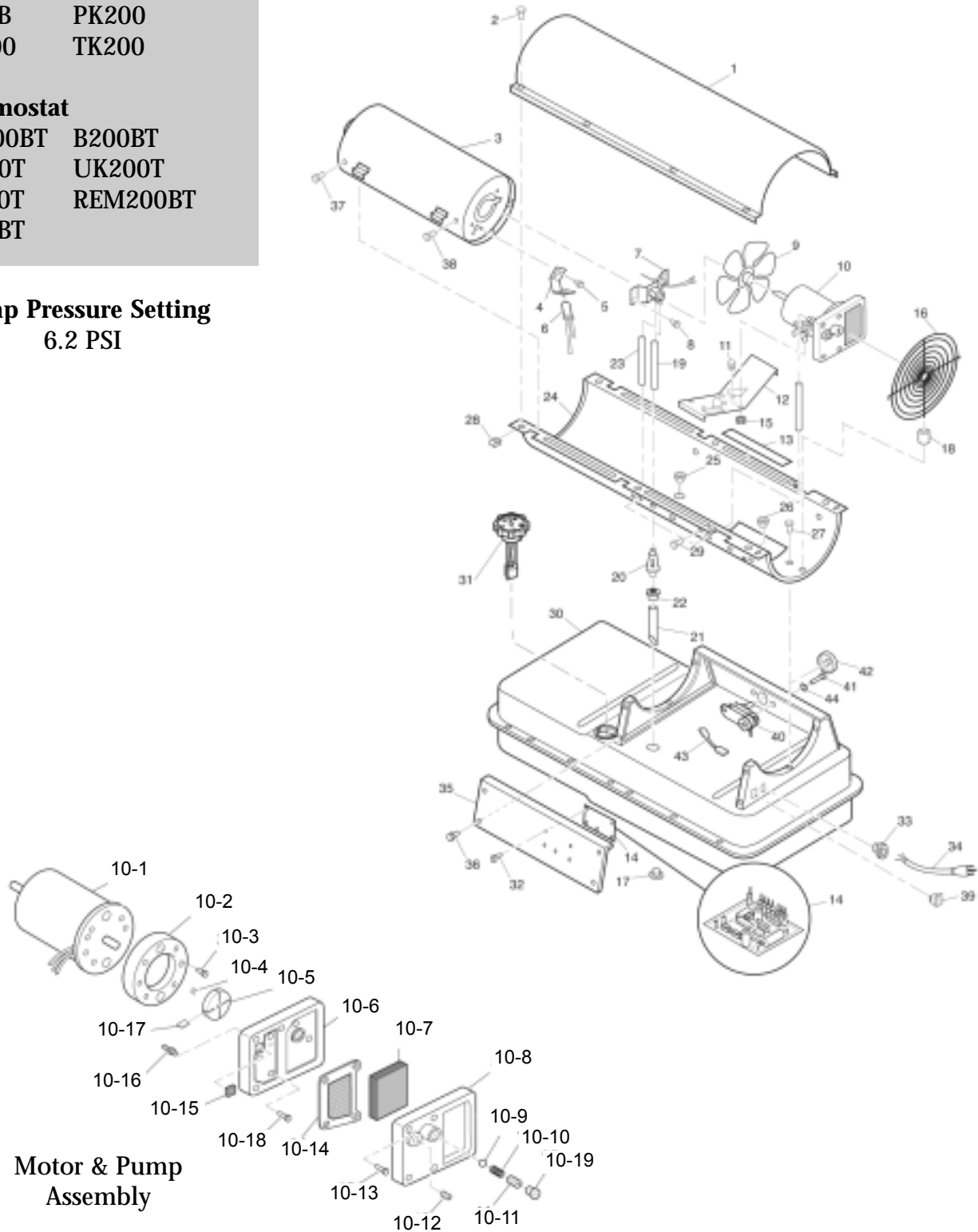
Standard

R200B PK200
 UK200 TK200

Thermostat

RM200BT B200BT
 PK200T UK200T
 TK200T REM200BT
 R200BT

Pump Pressure Setting
 6.2 PSI



**Motor & Pump
 Assembly**

Desa 200,000 BTU HSI

200,000 BTU Forced Air H.S.I. Desa Oil Fired Heater

Key No.	Part Number	Description	Key No.	Part Number	Description
1	107353-10	Upper Shell (Service Part Will Be Black)	31	097663-03	Fuel Cap w/ Gauge (includes Gasket) (Use with Fuel Tank 108088-17)
2	M15823-27	Screw, #10-16 x 1/2" (qty. 8)		113280-03	Fuel Cap w/ Gauge (includes Gasket) (Use with Fuel Tank 113279-04)
3	098512-78	Combustion Chamber	32	102349-01	P.C. Board Support (qty. 5)
4	M16660	Photocell Bracket	33	M11143-1	Strain Relief Bushing
5	M10908-2	Screw, #6-32 x 3/8" (qty. 2)	34	113065-01	Power Cord
6	M16656-24	Photocell Assembly	35	107333-04AA	Side Cover
7	(See page 70)	Burner Head Assembly	36	M11084-26	Screw, #10-16 x 3/8" (qty. 8)
8	M11084-26	Screw, #10-16 x 3/8" (qty. 2)	37	099230-01	Screw, Special (qty. 2)
9	102042-01	Fan	38	M11084-27	Screw, #10-16 x 1/2" (qty. 2)
10		Motor and Pump Assembly	39	113461-01	ON/OFF Switch with Cover
	1	102001-27 Motor	40	104458-01	Thermostat
	2	079975-03 Pump Body	41	M12461-18	Screw, #8-32 x 7/8"
	3	FHPF3-6C Screw, #10-32 x 5/8" (qty. 2)	42	104460-01	Thermostat Knob
	4	M22009 Rotor Insert	43	079010-35	Wire Assembly
	5	M22456-2 Pump Rotor	44	WLE-2	Lock Washer, EXT #8
	6	M50545 Pump End Cove			
	7	M12179 Intake Filter			
	8	M16545 Filter End Cover			
	9	M8940 Steel Ball, 1/4" Diameter			
	10	M10993-1 Relief Spring			
	11	M27694 Adjusting Screw			
	12	M22997 Plug			
	13	M12461-31 Screw, #10-32 x 1" (qty. 4)			
	14	M12244-1 Output Filter			
	15	M11637 Lint Filter			
	16	M50820-02 Barb Fitting			
	17	M8643-2 Blade (qty. 4)			
	18	M12461-32 Screw, #10-32 x 1.12" (qty. 6)			
	19	105780-01 Plastic Cap			
11	M50631	Rubber Bumper (qty. 2)			
12	101206-01	Motor Mounting Bracket			
13	097785-04	Foam Gasket (qty. 2)			
14	104068-02	Ignition Control Assembly			
15	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)			
16	102756-01	Fan Guard			
17	M27417	Drain Plug (Includes "o" Ring)			
18	103523-01	Rubber Bushing			
19	M51345-03	Fuel Line (Models with Fuel Valve Assembly)			
	M51345-04	Fuel Line (Models without Fuel Valve Assembly)			
20	M51150-01	Fuel Filter			
21	M51345-04	Fuel Line Tube (Models with Fuel Valve Assembly)			
	M51151-02	Fuel Line Tube (Models without Fuel Valve Assembly)			
22	M10990-3	Rubber Bushing			
23	M50814-03	Airline			
24	107353-11	Lower Shell (Service Part Will Be Black)			
25	M50104-06	Bushing (qty. 2)			
26	M50104-01	Bushing			
27	M11084-26	Screw, #10-16 x 3/8" (qty. 6)			
28	M11271-8	Clip Nut (qty. 8)			
29	M10908-14	Screw, #8-32 x 3/8"			
30	108088-17	Fuel Tank (Metal Filler Neck)			
	113279-04	Fuel Tank (Plastic Filler Neck)			

PARTS AVAILABLE-NOT SHOWN

103814-01	Wire Tie (Not Shown - For Ignition Control Assembly)
100621-06	Thermostat Decal (Not Shown)
079010-46	Wire (Not Shown - For ON/OFF Switch)
113137-01	Fuel Gasket

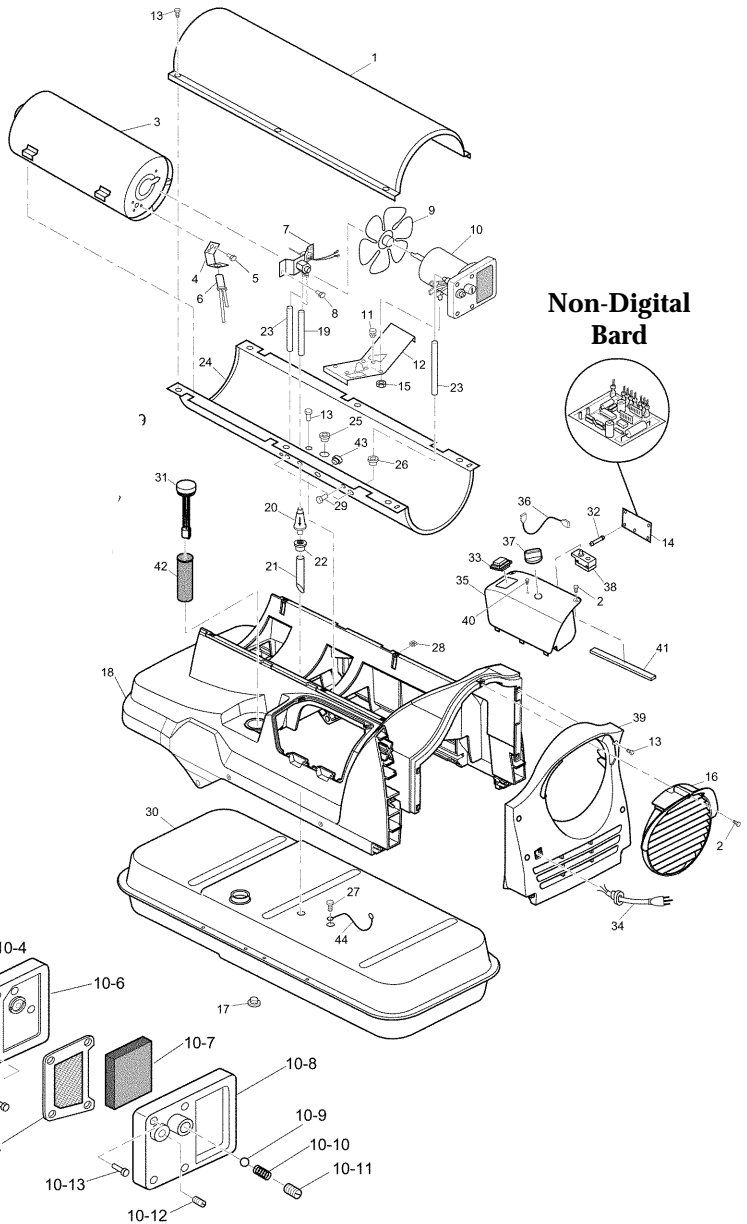
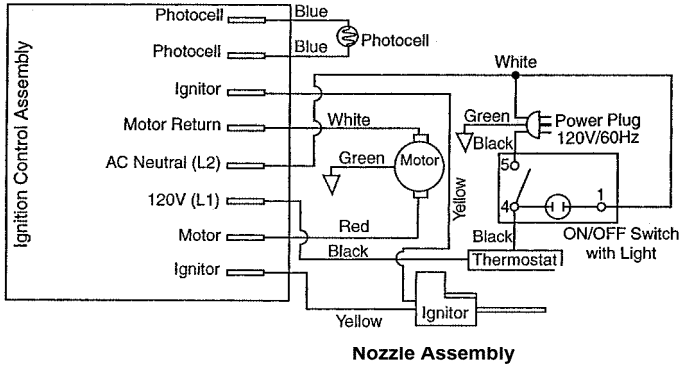
Desa 200,000 BTU HSI

Desa Pro Plus Series Heaters

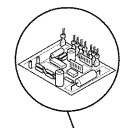
Model Numbers

125T Models	170T Models	200T Models
RH125T	RH170T	RHD200T
RHD125T	RHD170T	M200T
RL125T	RL170T	
M125T	M170T	

WIRING DIAGRAM



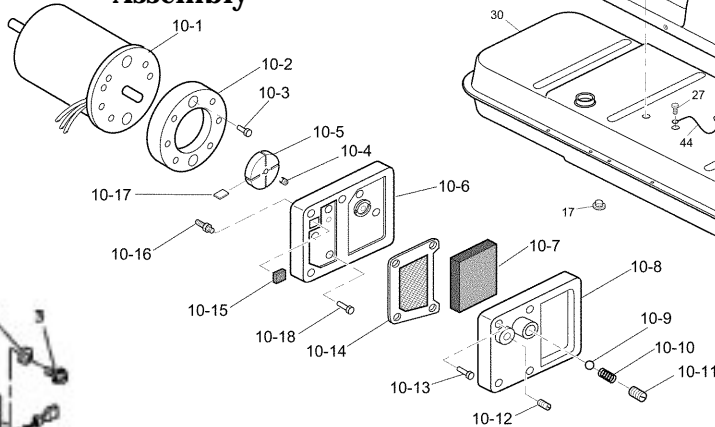
Non-Digital Bard



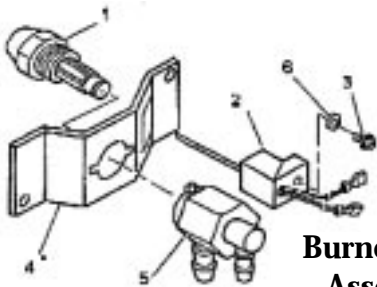
Pump Pressure Settings

BTU	PSI
125	6.0
170	6.0
200	6.2

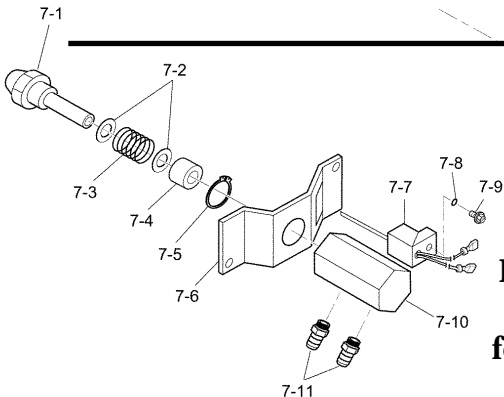
Motor & Pump Assembly



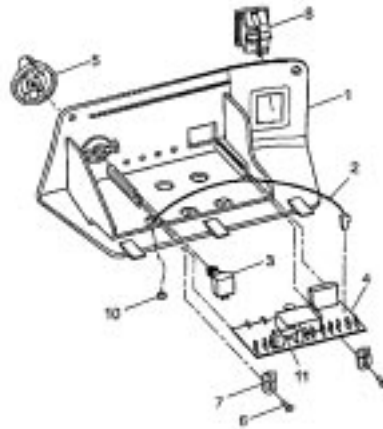
Burner Head Assembly for 125 & 170



Burner Head Assembly for 200 Series



Control Cover Assembly Digital Display Version



Key No.	Part Number	Description
1	108461-02	Control cover
2	113606-01	Temp. sensor
3	113607-01	Therm. control
4	116111-01	Ignition Control
5	108480-01	Knob
6	113379-01	Screw, #8
7	113378-01	Plastic Clip
8	108394-01	Switch Cover
9	M9900-170	Wire Assembly
10	113339-01	Rubber Grommet
11	113752-01	Fuse

Desa Pro Plus Series

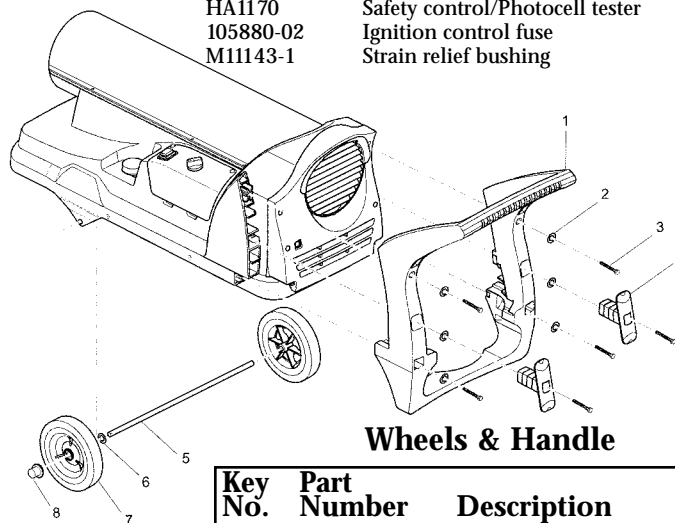
Desa Pro Plus Series Heaters

Key No.	Part Number	Description
1	107353-01	Upper Shell (Black)
2	108631-01	Screw, #10-16 x 1" (qty. 3)
3	COMBUSTION CHAMBER	
	098512-71	All 125T's
	098512-73	All 170T's
	098512-69	All 200T's
4	PHOTOCELL BRACKET	
	103154-05	All 125T's and 170T's
	107791-01	All 200T's
5	M10908-2	Screw, #6-32 x 3/8" (qty. 2)
6	M16656-21	Photocell Assembly
7	BURNER HEAD ASSEMBLY	
200T MODELS		
7-1	100735-13	Nozzle
7-2	M10659-1	Nozzle Washer (qty. 2)
7-3	M10809-1	Nozzle Spring
7-4	M8882	Nozzle Sleeve
7-5	107272-01	Retaining Ring
7-6	102336-04	Nozzle Adapter Bracket
7-7	HA1000	Ignitor Kit
7-8	103347-01	Belleville Washer
7-9	M10908-75	Screw, #6-32 x .88
7-10	107273-01	Nozzle Adapter
7-11	M50820-02	Barb Fitting (qty. 2)
125T & 170T MODELS		
7-1	HA3027	Nozzle (125T)
	HA3029	Nozzle Assembly (170T)
7-2	102548-07	Ignitor Kit
7-3	M10908-75	Screw
7-4	102336-01	Nozzle Adapter Bracket
7-5	104054-01	Nozzle Adapter
7-6	103347-01	Washer
8	M11084-26	Screw, #10-16 x 3/8" (qty. 2)
9	FAN	
	097293-01	All 125T's
	102042-01	All Others
10	MOTOR & PUMP ASSEMBLY	
10-1	MOTOR	
	102001-30	All 125T's
	102001-27	All 200T's and 170T's
10-2	PUMP BODY RING	
	079975-02	All 125T's
	079975-03	All 200T's and 170T's
10-3	FHPF3-5C	Screw, #10-32 x 5/8" (qty. 2)
	FHPF3-6C	Screw, #10-32 x 3/4" (qty. 2)
10-4	M22009	Rotor Insert
10-5	PUMP ROTOR	
	M22456-1	All 125T's
	M22456-2	All 200T's and 170T's
10-6	M50545	Pump End Cover (metal)
10-7	M12179	Intake Filter (sponge)
10-8	M16545	Filter End Cover (plastic)
10-9	M8940	Steel Ball, 1/4" diameter
10-10	M10993-1	Pressure Relief Spring
10-11	M27694	Pressure Adjusting Screw
10-12	M22997	Plug
10-13	M12461-31	Screw, #10-32 x 1" (qty. 4)
10-14	M12244-1	Output Filter
10-15	M11637	Lint Filter (sponge)
10-16	FITTING BARB	
	104096-01	All 125T's
	M50820-02	All 200T's and 170T's
10-17	BLADE	
	M8643	All 125T's (qty. 4)
	M8643-2	All 200T's and 170T's (qty. 4)
10-18	M12461-32	Screw, #10-32 x 1 1/8" (qty. 6)
11	M50631	Rubber Bumper (qty. 2)
12	101206-01	Motor Mounting Bracket
13	M11084-29	Screw, #10-16 x 3/4"
14	104068-02	Ignition Control Assembly

Key No.	Part Number	Description
15	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)
16	108460-01	Fan Guard
17	M27417	Drain Plug (includes "O" Ring)
18	108457-01	Shroud
19	FUEL LINE	
	M51345-12	All 125T's
	M51345-09	All 170T's
	M51345-04	All 200T's
20	M51150-01	Fuel Filter
21	M51151-02	Fuel Line Tube
22	M10990-3	Rubber Bushing
23	AIR LINE	
	M50814-08	All 125T's
	M50814-03	All 170T's and 200T's
24	107353-11	Lower Shell (Black)
25	M50104-06	Bushing (qty. 2)
26	M50104-01	Bushing
27	M12461-51	Screw, #10-16 x 1/2" (qty. 1)
28	108708-01	Clip Nut (qty. 13)
29	M10908-14	Screw, #8-32 x 1/4"
30	108088-12	Fuel Tank
31	097663-03	Fuel Cap / Gauge
32	108668-01	PC Board Support (qty. 5)
33	108394-01	On/Off Switch
34	107994-01	Power Cord
35	108461-01	Control Cover
36	M9900-170	Wire Assembly, Black (qty. 2)
37	104460-01	Knob
38	104458-01	Thermostat
39	108458-01	Rear Panel
40	M12461-18	Screw, #8-32 x 7/8"
41	097785-08	Foam Gasket
42	108739-01	Filler Neck Screen
43	097467-02	Button Plug
44	M9900-197	Wire Assembly, Green

PARTS AVAILABLE-NOT SHOWN

HA1180	Air Gauge Kit
HA1170	Safety control/Photocell tester
105880-02	Ignition control fuse
M11143-1	Strain relief bushing



Wheels & Handle

Key No.	Part Number	Description
1	108459-01	Handle/Support
2	WP4C	Washer (qty. 6)
3	108630-01	Screw (qty. 6)
4	108463-01	Extension Cord Wrap (qty. 2)
5	M16801-5	Axle
6	108468-01	Washer (qty. 2)
7	107426-01	Wheel Kit (Contains: 2 wheels & cap nuts)
8	M28526	Cap Nut (qty. 2)

Figure #1 (Old Style Burner Assembly)

Key No.	Part Number	Description
1	HA3009	Nozzle: B110A, R110A, REM110A
	HA3011	Nozzle: B150H, R150E, REM150A/D, R155A
2	M10659-1	Nozzle Washer (qty. 2)
3	M10809-1	Nozzle Spring
4	M8882	Nozzle Sleeve
5	M50924-04	Burner Head: B110A, R110A, REM110A
	M50924-06	Burner Head: B150H, R150E, REM150A/D, R155A
6	M50820-02	Barb Fitting (qty. 2)
7	102548-02	Glowbar Ignitor
8	M10908-2	Screw, #10-16 x 1/2"

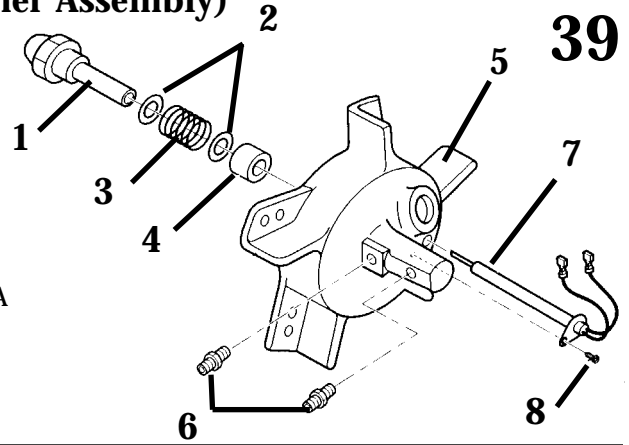
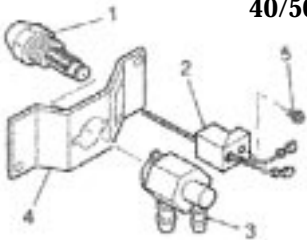


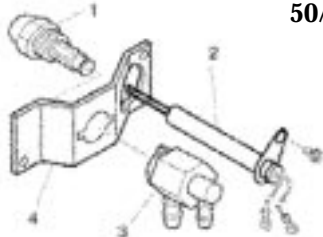
Figure #2 (Newer Style Burner Assembly) 40

40/50/55/60/70 MODELS WITH HA1000 IGNITOR



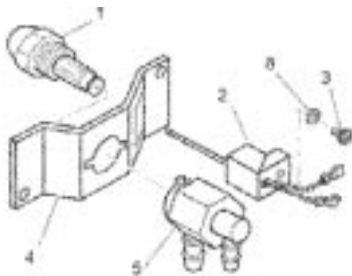
Key#	Part	Description
1	HA3006	Nozzle Assembly (40)
	HA3024	Nozzle Assembly (50/55/60)
	HA3026	Nozzle Assembly (70)
2	HA1000	Ignitor Kit
3	104056-01	Nozzle Adapter
4	102336-01	Nozzle Adapter Bracket
5	M10908-75	Screw, Hex Head, Tapping
6	103347-01	Belleville Washer

50/55/60 MODELS WITH 102548-08 IGNITOR



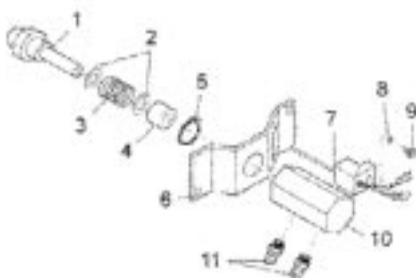
Key#	Part	Description
1	HA3024	Nozzle Assembly
2	HA1100	Ignitor Kit
3	102336-05	Nozzle Adapter Bracket
4	104056-01	Nozzle Adapter

110/115/155/165 MODELS



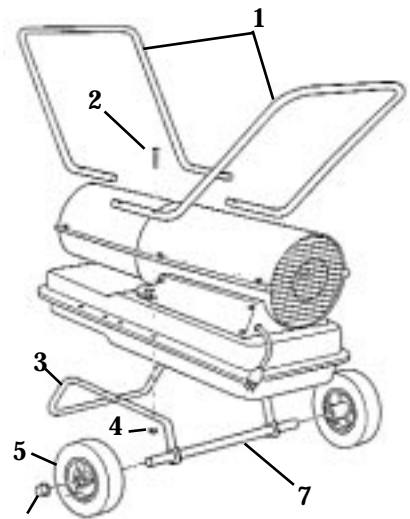
Key#	Part	Description
1	HA3027	Nozzle Assembly (110/115)
	HA3028	Nozzle Assembly (155/165)
2	HA1000	Ignitor Kit
3	M10908-75	Screw, #6-32 x 7/8"
4	102336-01	Nozzle Adapter Bracket
5	104054-01	Nozzle Adapter
6	103347-01	Washer

200 MODELS



Key#	Part	Description
1	100735-13	Nozzle Assembly
2	M10659-1	Nozzle Washer (qty. 2)
3	M10809-1	Nozzle Spring
4	M8882	Nozzle Sleeve
5	107272-01	Retaining Ring
6	102336-03	Nozzle Adapter Bracket
7	HA1000	Ignitor Kit
8	103347-01	Belleville Washer
9	M10908-75	Screw, #6-32 x .88
10	107273-01	Nozzle Adapter
11	M50820-02	Barb Fitting

Handle & Wheel Kit Assembly



Key No.	Part Number	Description
1	HA2203	Handle (110-115,000) (qty. 2)
	HA2204	Handle (150-165,000) (qty. 2)
2	M12345-33	Screw, #10-24 x 1 3/4" (qty. 8)
3	M12342-3	Wheel support frame (110/115)
	M12831-3	Wheel support frame (150/165)
4	NTC-3C	Hex Nut, #10-24 (qty. 8)
5	097896-01	Wheel (white) with push nut (2)
	107426-01	Wheel (black) with push nut (2)
6	M28526	Cap nut (qty. 2)
7	M51015-01	Axle (110-115,000)
	M16801-2	Axle (150-165,000)

PARTS AVAILABLE NOT SHOWN

105880-02	Fuse for 104068-02 ignition control
HA1180	Low pressure gauge
HA1210	Remote thermostat (most accurate)
PT100HTST	Remote thermostat (high-low)
103814-01	Wire tie-groups wires connected to ignition control assembly
HA3004	1/2" rotor kit
HA3017	Filter kit
HA3020	Pump kit
HA1170	Safety control/photocell tester

Desa Burners & Wheel Kit

Let Us Give You A Hand Fixing That Heater!



Tech Service Manual On CD

Part #CDTECH

Interactive Heater Troubleshooting CD

Part #CDTS



Low Pressure Manual On CD

Part #CD70101

Gas Fired Manual On CD

Part #CDGF



Oil Fired Service Manual

- Includes info on Desa HSI heaters
- It also covers all three manufacturers of low pressure oil fired heaters; Desa, Toro, and National Riverside

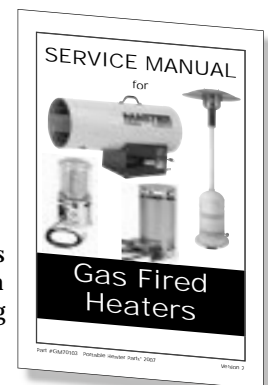
Part #
SM70106



Gas Fired Service Manual

- Gives an understanding of gas fired heaters, parts description & photos and troubleshooting
- It also covers three manufacturers of gas fired heaters: Desa, National Riverside and L.B. White

Part #
GM70103

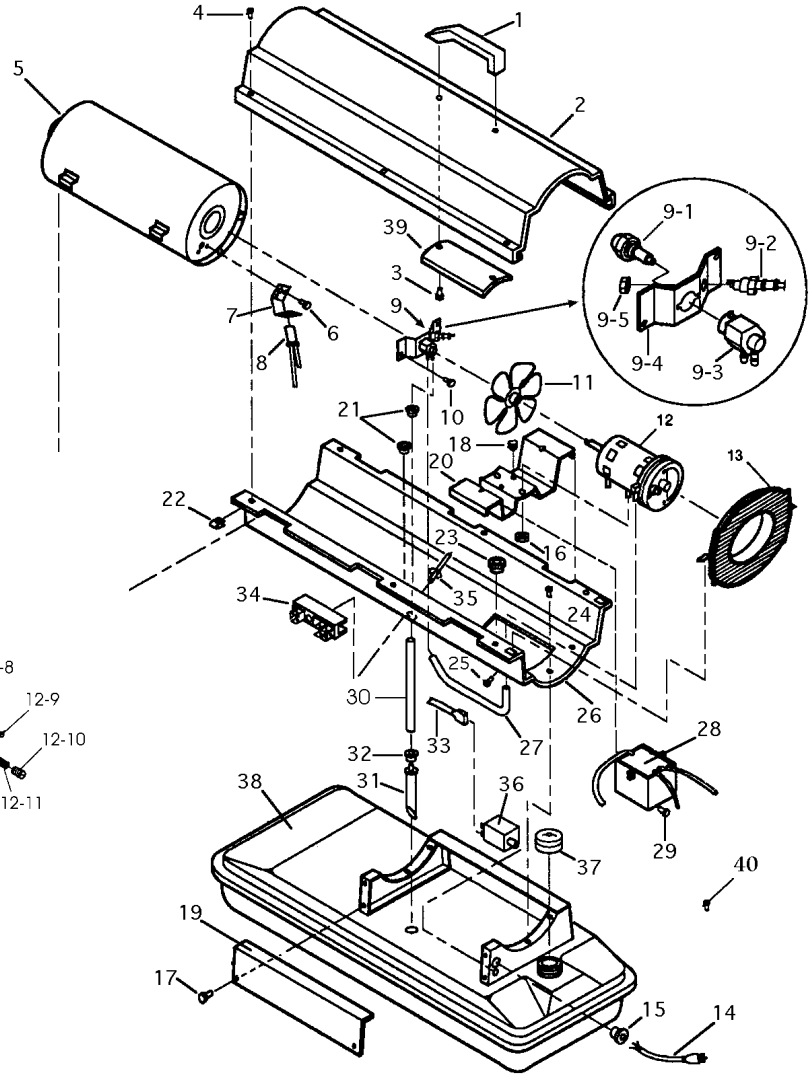


35,000-50,000 BTU Forced Air Desa Oil Fired Heater

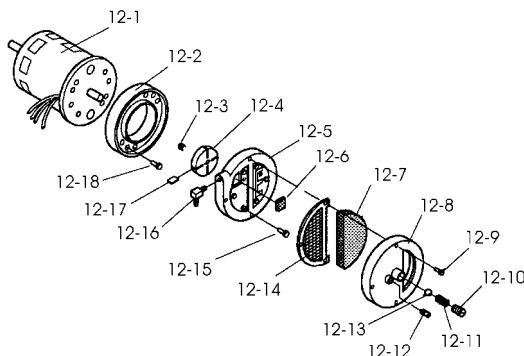
Model Numbers

Reddy	Remington	Desa
R35A	REM35A	C35B
R35B	REM50A	C50F
R50B	REM55	
R55		

Master	Knipco
B50F	F50G



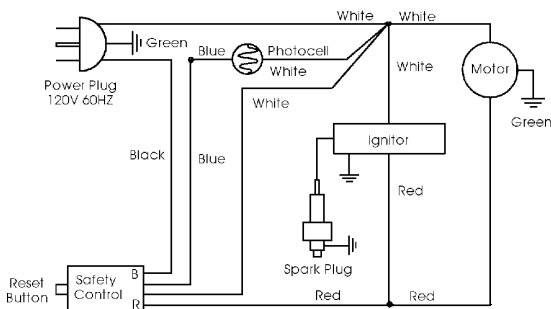
Motor & Pump Assembly



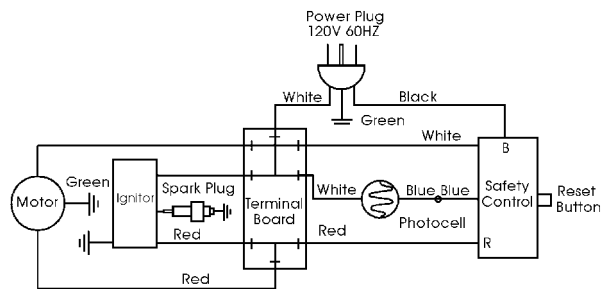
Pump Pressure Settings

BTU	PSI
35	3.0
50	3.6
55	3.4

Wiring Diagram without Terminal Board



Wiring Diagram with Terminal Board



Desa Oil 35-50,000 BTU

35,000-50,000 BTU Forced Air Desa Oil Fired Heater

Key No.	Part Number	Description	Key No.	Part Number	Description
1	M51104-01	Handle	13	M51105-01	Fan Guard
2	Upper Shell		14	Power Cord	
	098511-36	R35B, R50B, R55A Reddy (White)		098219-19	Power Cord
	098511-70	C35B, C50F Desa	15	M11143-1	Strain Relief Bushing
	098511-67	REM35A, REM50A, REM55 Remington (Black)	16	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)
	098511-54	B50F Master (Yellow)	17	M11084-26	Screw, #10-16 x 3/8" (qty. 2)
	098511-73	F50G Knipco	18	M50631	Rubber Bumper (qty. 2)
3	M11084-29	Screw, #10-16 x 3/4" (qty. 2)	19	M50899-03AA	Side Cover
4	100647-01	Screw, #10-16 x 1/2" (qty. 6)	20	101205-01	Motor Bracket
5	Combustion Chamber		21	M30865-02	Bushing (qty. 2)
	098512-05	R35A/B, C35B, REM35A	22	M11271-8	Clip Nut (qty. 6)
	098512-13	B50F, R50B, C50F, F50G, REM50A, R55, REM55	23	M50104-02	Bushing
6	M10908-2	Screw, #6-32 x 3/8" (qty. 2)	24	M11084-26	Screw, #10-16 x 3/8" (qty. 6)
7	M16660	Photocell Bracket	25	M15823-37	Screw, #8-18 x 1/4"
8	HA3019	Photocell Assembly	26	Lower Shell	
9	BURNER HEAD ASSEMBLY			098511-18	Reddy - R35B, R50B, R55
9-1	Nozzle			098511-91	Desa - C35B, C50F
	HA3006	R35B, C35B, R35A, REM35A		098511-81	Remington - REM35A, REM50A, REM55
	HA3007	B50F, R50B, C50F, F50G, REM50A, R55, REM55		098511-12	Master - B50F
9-2	HA3013	Spark Plug		098511-93	Knipco - F50G
9-3	079980-01	Nozzle Adapter	27	M29652-04	Rubber Airline 17"
	147082	Nozzle O-ring (for all nozzles)	28	102482-01	Ignitor Kit (transformer)
9-4	Bracket		29	M11084-29	Screw, #10-16 x 3/4"
	097125-01	R35A/B, C35B, REM35A, B50F, R50B, F50G, REM50A	30	Fuel Line	
	097124-01	R55, REM55		M29652-05	R35A/B, C35B, REM35A
9-5	M29824	Nut, 14mm		079973-01	B50F, R50B, C50F, F50G, REM50A, R55, REM55
10	M11084-26	Screw, #10-16 x 3/8" (qty. 2)	31	Fuel Filter	
11	M30884	Fan		M50876-04	R35A/B, C35B, REM35A
12	MOTOR AND PUMP ASSEMBLY			M50876-02	B50F, R50B, C50F, F50G, REM50A
12-1	102001-01	Motor		M50876-05	R55, REM55
12-2	Pump Body Ring		32	M10990-3	Rubber Bushing
	079975-01	1/2"-R35A/B, C35B, REM35A, B50F, R50B, C50F, F50G, REM50FA	33	M16841-57	Wire Assembly (Red, 6")
	079975-03	5/8"-R55, REM55	34	099125-02	Terminal Board
12-3	M22009	Insert	35	099157-01	Rivet
12-4	Rotor		36	HA3003	Safety Control
	M22456-1	1/2"- R35A/B, C35B, REM35A, B50F, R50B, C50F, F50G, REM50FA	37	097702-01	Fuel cap with gasket (2-1/8")
	M22456-2	5/8" - R55, REM55	38	Fuel Tank	
12-5	M29608	Pump End Cover (Metal)		108088-01	R35A/B, C35B, REM35A
12-6	M29632	Lint Filter		108088-02	B50F (Only)
12-7	M29633	Intake Filter		098513-20	R50B, F50G, REM50A
12-8	M29609	Filter End Cover (Plastic)		108088-03	R55, REM55
12-9	M12461-31	Screw, #10-32 x 1" (qty. 3)	39	M51108-01	Heat Shield
12-10	M27694	Adjusting Screw	40	NLA	No longer available
12-11	M10993-1	Pressure Relief Spring	PARTS AVAILABLE - NOT SHOWN		
12-12	M22997	Plug	M27417	Drain Plug with O ring	
12-13	M8940	1/4" Steel Ball	M51017-01	Cushion Grommet (B50F only) (qty 2)	
12-14	M29612-01	Output Filter	079871-01	Tradename Decal (C35B, Desa)	
12-15	Screw		098493-01	General Info Decal (All 35K listed)	
	M12461-31	Screw, #10-32 x 1" (R35A/B, C35B, REM35A, B50F, R50B, C50F, F50G, REM50A) (qty. 6)	097204-02	Tradename Decal (R50B Reddy)	
	M12461-32	Screw, #10-32 x 3/4" (R55, REM55) (qty. 6)	079863-01	Tradename Decal (C50F, Desa)	
12-16	M50016	Elbow 90°	079514-01	Tradename Decal (F50G, Knipco)	
12-17	Vanes (set of 4)		098493-01	General Info Decal (All 50K listed)	
	M8643	1/2" (R35A/B, C35B, REM35A, B50F, R50B, C50F, F50G, REM50A)	097204-08	Tradename Decal (R55, Reddy)	
	M8643-2	5/8" (R55, REM55)	097764-05	Tradename Decal (REM55 Remington)	
12-18	Screw		098493-01	General Info Decal (All 55K listed)	
	FHPF3-2C	#10-32 x 1/4" (R35A/B, C35B, REM35A, B50F, R50B, C50F, F50G, REM50A) (qty. 2)	OPTIONAL ACCESSORIES		
	FHPF3-6C	#10-32 x 3/4" (R55, REM55) (qty. 2)	PT100HTST	Thermostat, warmer-cooler dial	
			HA1210	Thermostat, degrees on dial	
			HA1202	Heavy Duty Wheel & Handle Kit	
			HA1206	Standard Wheel & Handle Kit	
			HA1180	Pressure Gauge, Low Pressure	
			HA3014	Filter Kit	
			HA1170	Safety Control/Photocell Tester	

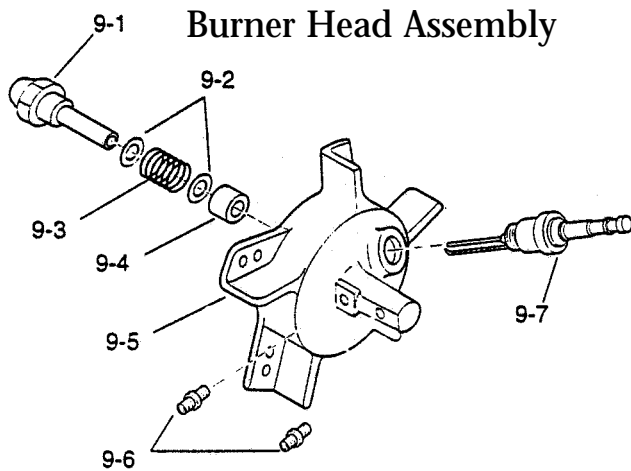
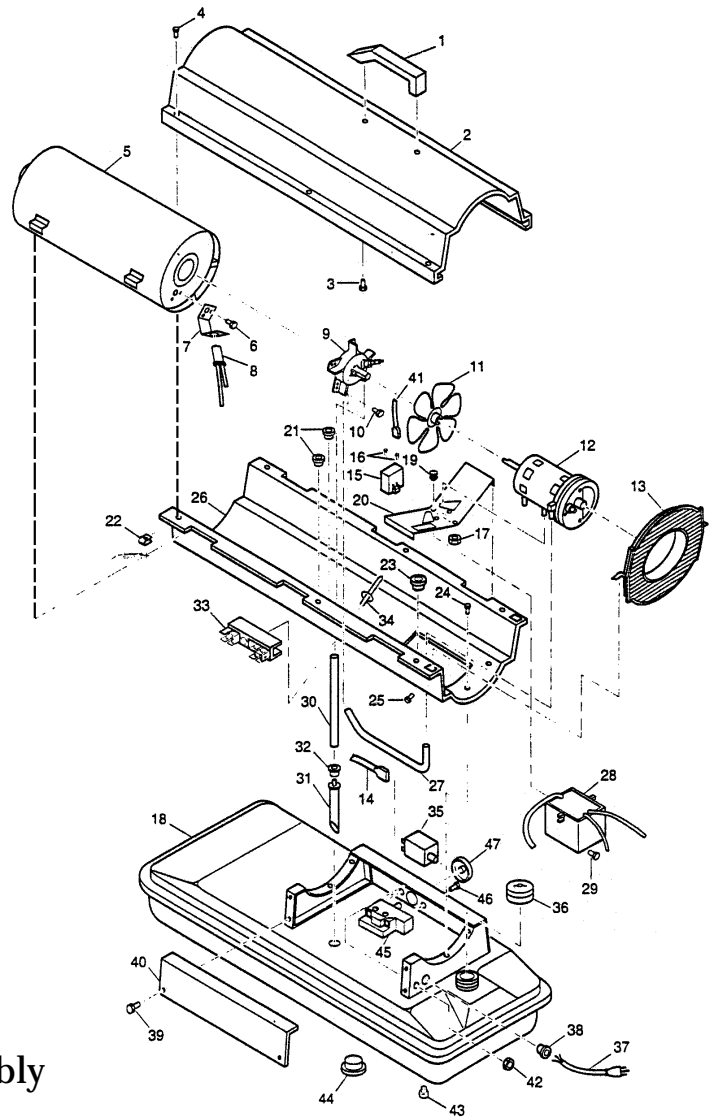
Desa Oil 35-50,000 BTU

70,000 BTU Forced Air Desa Oil Fired Heater Parts

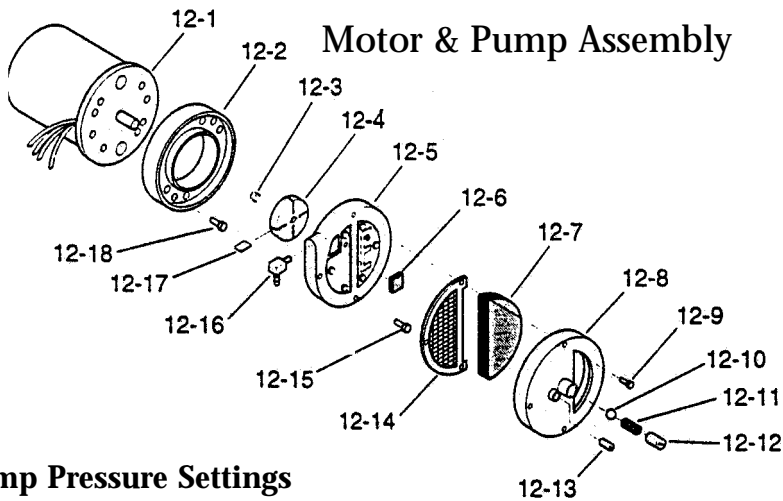
Model Numbers

Reddy	Master	L.B. White
R70	B70	K70(T)
R70A(T)	B70B	
R70B(T)	B70T	
R70T		
R70CT		

Handy Master
HM70



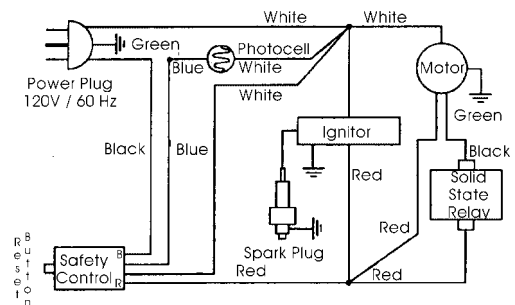
Burner Head Assembly



Motor & Pump Assembly

Pump Pressure Settings
4.0 PSI

Wiring Diagram-No Thermostat



Desa Oil 70,000 BTU

70,000 BTU Forced Air Desa Oil Fired Heater Parts

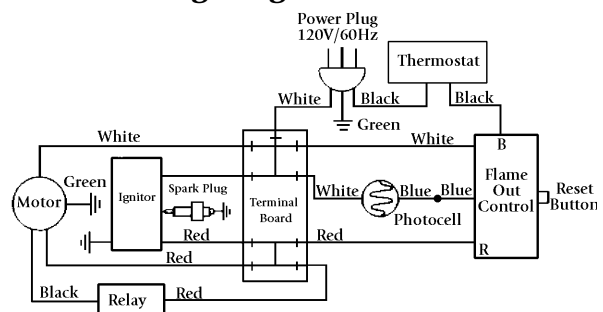
Key No.	Part Number	Description
1	M51104-01	Handle
2	Upper Shell	
	098511-36	White
	098511-54	Yellow
	098511-159	HM70
3	M11084-29	Screw, #10-16 x 3/4" (qty. 2)
4	100647-01	Screw, #10-16 x 1/2" (qty. 6)
5	098512-12	Combustion Chamber
6	M10908-2	Screw, #6-32 x 3/8" (qty. 2)
7	M16660	Photocell Bracket
8	HA3019	Photocell Assembly
9	BURNER HEAD ASSEMBLY	
9-1	HA3008	Nozzle
9-2	M10659-1	Washer, Nozzle Seal (qty. 2)
9-3	M10809-1	Spring Nozzle Seal
9-4	M8882	Nozzle Seal
9-5	M51098-02	Burner Head Body
9-6	M50820-01	Fitting Barb (qty. 2)
9-7	M10962-2	Spark Plug
10	M11084-27	Screw, #10-16 x 1/2" (qty. 3)
11	M51107-01	Fan
12	MOTOR & PUMP ASSEMBLY	
12-1	097308-05	Motor
12-2	079975-02	Pump Body Ring (1/2")
12-3	M22009	Insert
12-4	M22456-1	Rotor (1/2")
12-5	M29608	Cover, End Pump (Metal)
12-6	M29632	Lint Filter
12-7	M29633	Intake Filter
12-8	M29609	Filter End Cover (Plastic)
12-9	M12461-31	Screw, #10-32 x 1" (qty. 3)
12-10	M27694	Adjusting Screw
12-11	M10993-1	Pressure Relief Spring
12-12	M22997	Plug
12-13	M8940	Steel Ball, 1/4" diameter
12-14	M29612-01	Output Filter, (cork edge)
12-15	M12461-31	Screw, #10-32 x 1" (qty. 9)
12-16	M50016	Elbow, 90° Barb Fitting
12-17	M8643	Vanes (1/2") package of 4
12-18	FHPF3-2C	Screw, #10-32 x 1/2" (qty. 2)
13	M51105-01	Fan Guard
14	M16841-57	Wire Assembly
15	097061-01	Solid State Relay
16	M15823-39	Screw, #8-18 x 1/4" (qty. 2)
17	NTC-4C	Hex Lock Nut, 1/4"-20 (qty. 2)
18	108088-03	Fuel Tank
19	M50631	Rubber Bumper (qty. 2)
20	101205-01	Motor Bracket
21	M30865-02	Bushing
22	M11271-8	Clipnut (qty. 6)
23	M50104-02	Bushing
24	M11084-26	Screw, #10-16 x 3/8" (qty. 6)
25	Grounding Screw	
	M15823-37	#8x18x1/4" (B70/B, HM70, R70/A/B)
	M10908-14	#8x32x3/8" (B70BT, R70CT, K70)

Key No.	Part Number	Description
26	Lower Shell	
	098511-81	(B70/B/T) (HM70)
	098511-18	(R70/A/B, R70CT)
27	M29652-04	Air Line
28	102482-01	Transformer
29	M11084-29	Screw, #10-16 x 3/4" (qty. 2)
30	079973-01	Fuel Line
31	M50876-05	Fuel Filter (with bushing)
32	M10990-3	Rubber Bushing
33	099125-03	Terminal Board
34	099157-01	Rivet
35	HA3003	Safety Control
36	097702-01	Fuel cap w/gasket
37	Power Cord	
	098219-19	All non-thermostat models
	098219-27	All thermostat models
38	M11143-1	Strain Relief Bushing
39	M11084-26	Screw, #10-16 x 3/8" (qty. 2)
40	M50899-03AA	Side Cover
41	079010-18	Red Wire Assembly
42	099177-01	Hex Nut
43	M51017-01	Cushion Grommet (qty. 3)
44	M27417	Drain Plug (B70BT, includes O-ring)
45	097657-02	Thermostat (thermostat models only)
46	M10908-1	Screw, #6-32 x 1/4" (thermostat models only)
47	097658-02	Thermostat knob (thermostat models only)

PARTS AVAILABLE - NOT SHOWN

099650-01	Wire Clip (thermostat models only)
M9900-192	Combustion Chamber Ground Wire
098493-01	General Info Decal (All non-thermostat models)
101118-01	General Info Decal (R70T)
101118-02	General Info Decal (B70T)
097646-02	Tradename Decal (Master)
097204-03	Tradename Decal (Reddy)
078949-02	Tradename Decal (Handy Master)
HA1202	Heavy-duty Wheel Kit
HA1206	Standard Wheel Kit
PT100HTST	Optional Remote Thermostat
HA1210	Optional Remote Thermostat
HA1180	Air Gauge
HA3014	Filter Kit
HA1170	Safety Control/Photocell Tester

Wiring Diagram-Thermostat



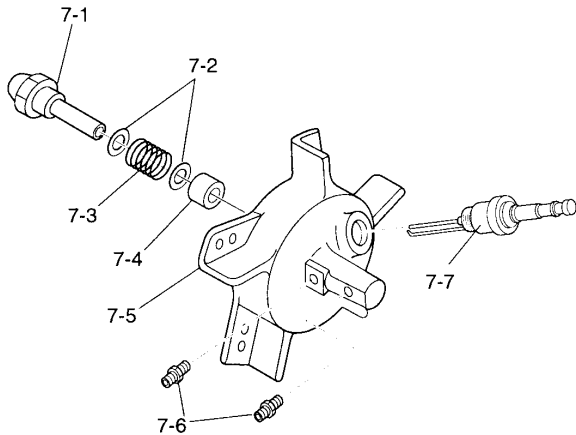
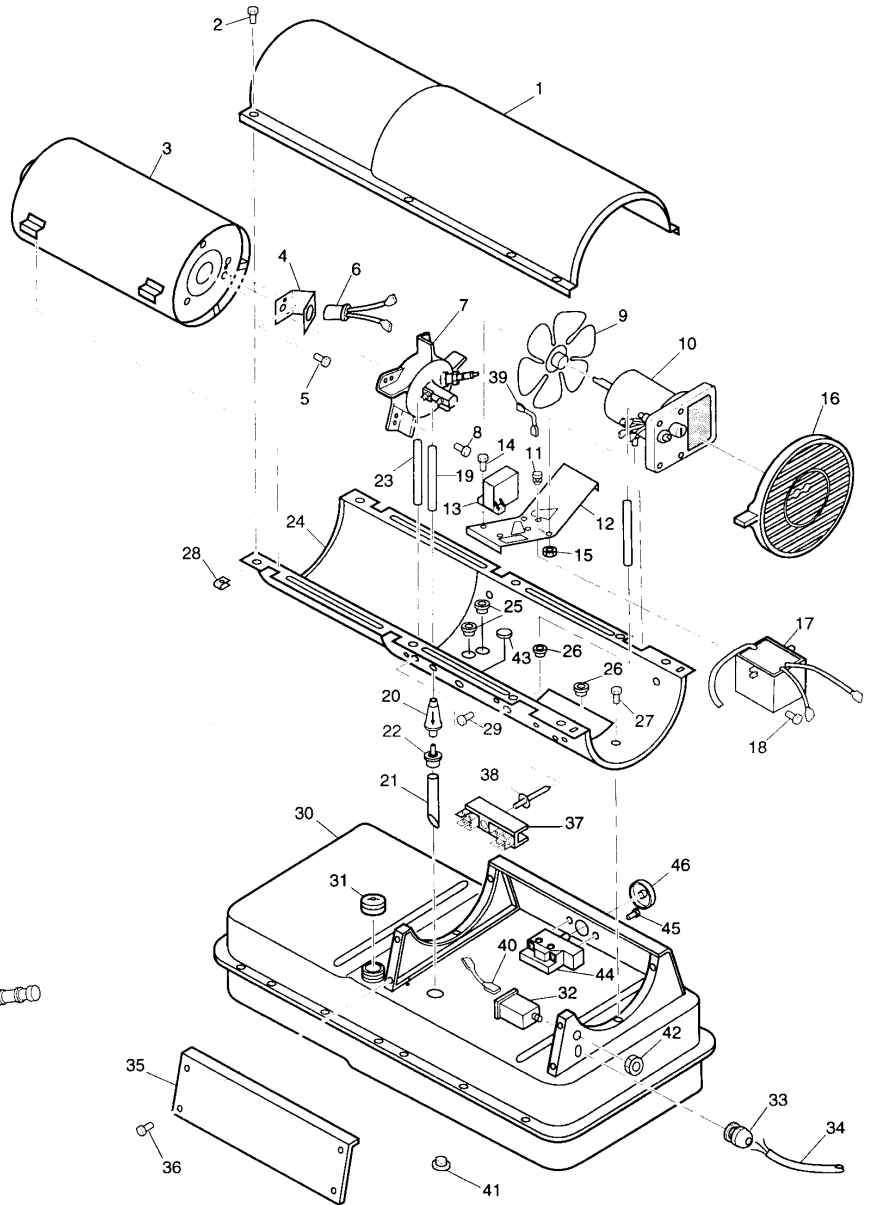
Desa Oil 70,000 BTU

100,000-165,000 BTU Forced Air Desa Oil Fired Heater

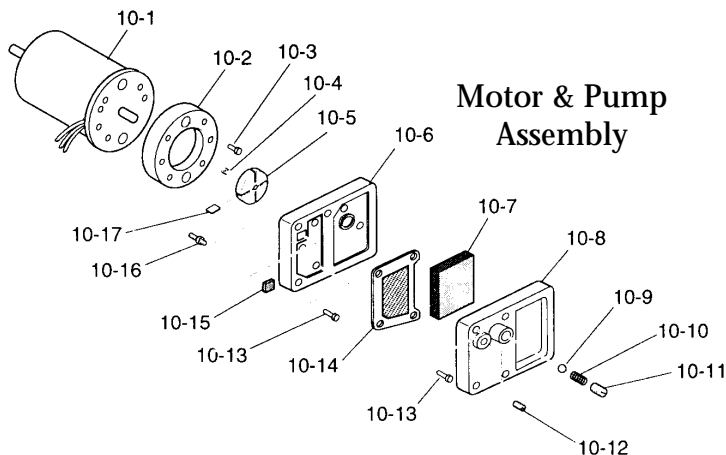
Model Numbers

Reddy	Remington	Master
R100A	REM100	B100B
R100B	REM100A	B100G
R110	REM110	B110
R150AT	REM150A	B110T
R150B	REM150B	B150F
R150BT	REM155	B150FT
R150D	REM165	B150GT
R155		B150T
R165		B165
R165T		B165G
		B165T

Desa	Knipco	L.B. White
C100E	F110G	K150
C100F	F110H	
C150F	F150H	

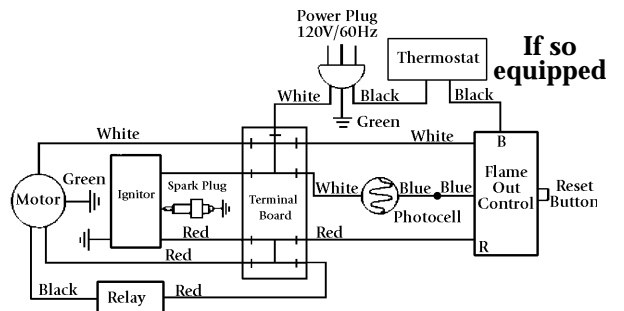


Burner Head Assembly



Motor & Pump Assembly

Wiring Diagram



Desa Oil 100-165,000 BTU

100,000-165,000 BTU Forced Air Desa Oil Fired Heater

Key No.	Part Number	Description	Key No.	Part Number	Description
1	098511-66	Upper Shell-Replacement part will be black	17	102482-01	Black Plastic Igniter
2	M15823-27	Screw, #10-16 x 1/2" (qty. 8)	18	M11084-29	Screw, #10-16 x 3/4" (qty. 2)
3	Combustion Chamber		19	M51345-06	Fuel Line - 100-155,000 BTU's
	098512-07	All 100,000 BTU Models		M51345-01	Fuel Line - 165,000 BTU's
	098512-31	All 110,000 BTU Models	20	M51150-01	Fuel Filter
	098512-29	All 150,000 BTU Models	21	M51151-01	Fuel Line Tube - 100-110,000 BTU's
	098512-37	All 155,000 BTU Models		M51151-02	Fuel Line Tube - 150-165,000 BTU's
	098512-36	All 165,000 BTU Models	22	M10990-3	Rubber Bushing
4	Photocell Bracket		23	M50814-03	Airline
	M16660	All 100-110,000 BTU Models	24	098511-82	Lower Shell-Replacement part will be black
	099229-01	All 150-155,000 BTU Models	25	Bushing	
5	M10908-2	Screw, #6-32 x 3/8" (qty. 2)		M30865-02	Bushing, 100-155,000 BTU's (qty. 3) 165K (qty.2)
6	HA3019	Photocell Assembly		M50104-03	Bushing, 165,000 BTU's (qty. 2)
7	BURNER HEAD ASSEMBLY		26	M50104-01	Bushing, 165,000 BTU's (qty. 2)
7-1	Nozzle			M50104-02	Bushing, 100-155,000 BTU's (qty. 2)
	HA3009	All 100-110,000 BTU Models	27	M11084-27	Screw, #10-16 x 1/2" (qty. 8)
	HA3011	All 150-155,000 BTU Models	28	M11271-8	Clip Nut (qty. 8)
	HA3023	All 165,000 BTU Models	29	M10908-14	Screw, #8-32 x 3/8"
7-2	M10659-1	Nozzle Washer (qty. 2)	30	Fuel Tank	
7-3	M10809-1	Nozzle Spring		108088-04	Fuel Tank (100-110,000 BTU)
7-4	M8882	Nozzle Sleeve		108088-05	Fuel Tank (150-165,000 BTU)
7-5	Burner Head Body		31	097702-01	Fuel Cap with gasket
	M50924-03	Burner Head Body - 100-155,000 BTU's	32	HA3003	Safety Control
	M50924-07	Burner Head Body - 165,000 BTU's	33	M11143-1	Strain Relief Bushing
7-6	M50820-02	Barb Fitting (qty. 2)	34	098219-38	Power Cord 6"
7-7	HA3012	Spark Plug	35	M51077-12	Painted Side Cover
8	M11084-27	Screw, #10-16 x 1/2" (qty. 3)	36	M11084-27	Screw, #10-16 x 1/2" (qty. 4)
9	Fan Blade		37	099125-03	Terminal Board
	097293-01	Fan, 8 1/4" - 110-155,000 BTU's	38	099157-01	Rivet
	101897-01	Fan, 8 3/8" - 165,000 BTU's	39	079010-20	Wire Assembly (red, 18")
10	MOTOR & PUMP ASSEMBLY		40	M16841-57	Wire Assembly (red, 6")
10-1	Motor		41	M27417	Drain Plug, includes o-ring
	097308-06	Motor, split phase - 100-155,000 BTU's	42	099177-01	Hex Nut, 3/8"-27
	102001-07	Motor, split phase - 165,000 BTU's	43	099213-01	Button Plug
10-2	079975-02	1/2" Pump Body Ring	44	097657-02	Thermostat (thermostat models only)
10-3	FHPF3-5C	Screw - 165,000 BTU's (qty. 2)	45	M10908-1	Screw, #6-32 x 1/4" (thermostat models only)
10-4	M22009	Rotor Insert	46	097658-02	Thermostat Knob "thermostat models only"
10-5	M22456-1	Rotor, 1/2"	PARTS AVAILABLE NOT SHOWN		
10-6	M50545	Pump End Cover (metal)	097896-01	Wheels (replacement will be white)(qty. 2)	
10-7	M12179	Intake Filter (sponge)	M51015-01	Axle (100-110,000 BTU)	
10-8	M16545	Filter End Cover (plastic)	M16801-2	Axle (150-165,000 BTU)	
10-9	M8940	Steel Ball, 1/4" diameter	M12342-3	Wheel Support Frame (100-110,000 BTU)	
10-10	M10993-1	Relief Spring	M12831-3	Wheel Support Frame (150-165,000 BTU)	
10-11	M27694	Adjusting Screw	HA2203	Front Handle (100-110,000 BTU)	
10-12	M22997	Plug	HA2204	Front Handle (150-165,000 BTU)	
10-13	M12461-31	Screw, #10-32 x 1" (qty. 10)	M12345-33	Screw, #10-24 x 1 3/4" (qty. 8)	
10-14	M12244-1	Output Filter	M28526	Nutcap (qty. 2)	
10-15	M11637	Lint Filter	NTC-3C	Hex Lock Nut #10-24 (qty. 8)	
10-16	M50820-02	Barb Fitting	OPTIONAL ACCESSORIES		
10-17	M8643	Blades 1/2" - Set of 4	PT100HTST	Thermostat, warmer-cooler dial	
11	M50631	Rubber Bumper (qty. 2)	HA1210	Thermostat with degrees on dial	
12	101206-01	Motor Mounting Bracket	HA1180	Air Gauge, 0-15 psi	
13	097061-01	Solid State Relay			
14	M15823-39	Screw, #8-18 x 1/2" (qty. 2)			
15	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)			
16	M51114-01	Fan Guard			

Desa Oil 100-165,000 BTU

SPECIFICATIONS

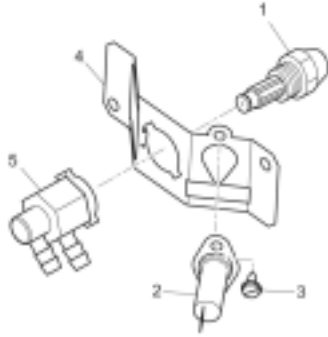
Output Rating	100,000	110,000	150,000	165,000	Output Rating	100,000	110,000	150,000	165,000
Fuel	Kerosene or #1 Fuel Oil		Kerosene or #1 Fuel Oil		Motor Output	3450 RPM	3450 RPM	3450 RPM	3450 RPM
Fuel Tank Capacity	9 gallons	9 gallons	13.5 gallons	13.5 gallons	Hot Air Output	480 CFM	480 CFM	600 CFM	500 CFM
Fuel Consumption	0.74 GPH	0.83 GPH	1.10 GPH	1.20 GPH	Air Pump Pressure	4.0 PSI	4.5 PSI	5.0 PSI	5.4 PSI
Electric Requirements	120V/60hZ	120V/60hZ	120V/60hZ	120V/60hZ	Shipping Weight	56 LBS	56 LBS	65 LBS	66 LBS
Amperage (normal run)	4.5	4.5	4.5	4.5	Weight without fuel	47 LBS	47 LBS	54 LBS	55 LBS
Starting Amps	10	10	10	10	Duct	Not Recommended		Not Recommended	

100,000-200,000 BTU Forced Air Desa Oil Fired Heater

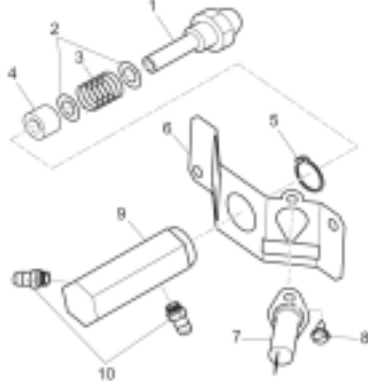
Model Numbers

TA100, TA103, TA106, TA111, TA101,
TA104, TA107, TA112, TA102, TA105,
TA108, TA113

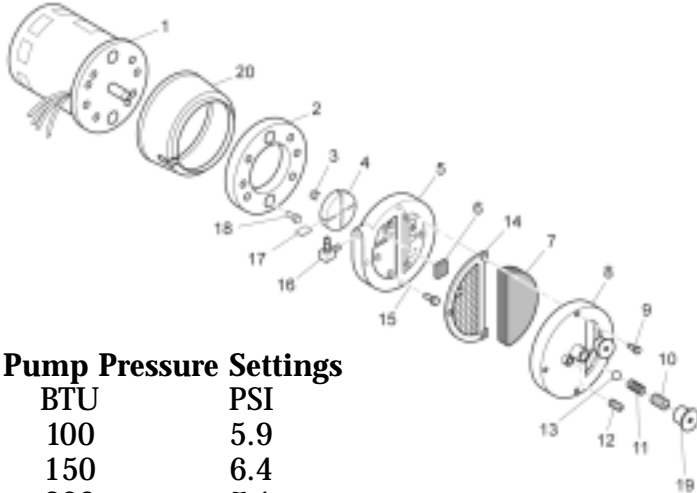
NOZZLE ASSEMBLY 100,000 AND 150,000 BTU MODELS



NOZZLE ASSEMBLY 200 MODELS



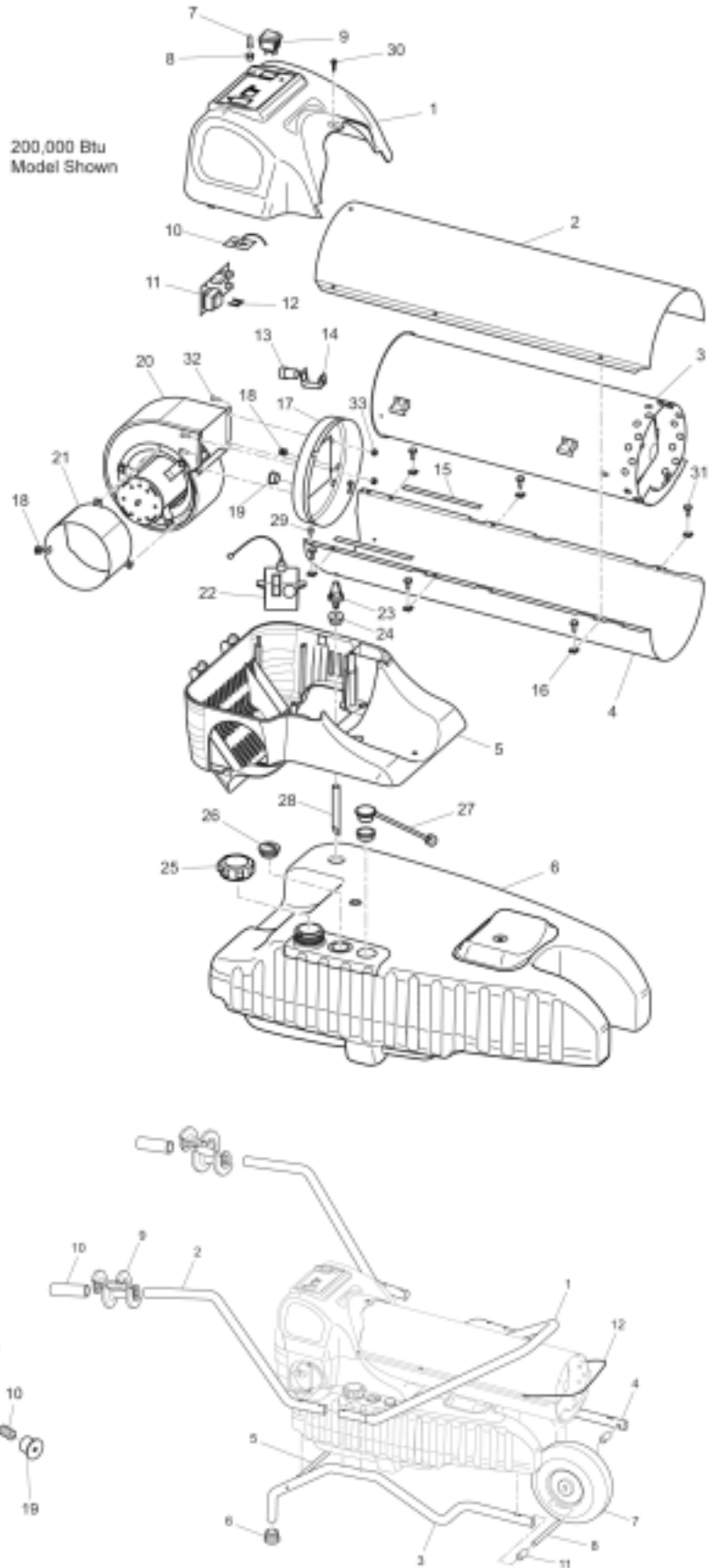
MOTOR AND PUMP ASSEMBLY



Pump Pressure Settings

BTU	PSI
100	5.9
150	6.4
200	7.1

200,000 Btu
Model Shown



Desa Oil 100-200,000 BTU

100,000-200,000 BTU Forced Air Desa Oil Fired Heater

Key No.	Part No.	Description	100K	150K	200K
1	118375-01	Upper Shroud	.	.	.
2	107353-17	Upper Shell	.	.	.
3	098512-79	Chamber Assembly (service part will be black)	.	.	.
	098512-80	Chamber Assembly	.	.	.
	098512-81	Chamber Assembly	.	.	.
4	107353-16	Lower Shell	.	.	.
5	122096-01	Lower Shroud Kit	.	.	.
6	108088-17	Fuel Tank	.	.	.
7	113606-01	Temperature Sensor	.	.	.
8	113339-01	Grommet	.	.	.
9	120336-01	Rocker Lighted Switch	.	.	.
10	121593-01	Thermostat Push Pad with Decal	.	.	.
11	117766-01	Microprocessor Control	.	.	.
	117766-02	Microprocessor Control	.	.	.
12	122187-01	Control Clip	.	.	.
13	M16656-26	Photocell	.	.	.
14	103154-03	Photocell Bracket	.	.	.
	107791-01	Photocell Bracket	.	.	.
15	097785-13	Gasket qty. 2	.	.	.
16	M11271-8	Nut Clip qty. 6	.	.	.
17	118393-01	Blower Coupling	.	.	.
	097785-12	Coupling Gasket	.	.	.
18	M30865-02	Bushing	.	.	.
19	097776-01	Bushing	.	.	.
20	120326-01	Motor and Blower Assembly	.	.	.
	120326-02	Motor and Blower Assembly	.	.	.
21	122095-01	Blower Sleeve Kit	.	.	.
22	122097-01	Ignition Module Kit	.	.	.
23	118422-01	Fuel Filter	.	.	.
24	M10990-3	Fuel Filter Bushing	.	.	.
25	118428-01	Fuel Cap with Gasket	.	.	.
26	121600-01	Tank Remote Plug	.	.	.
27	121543-01	Fuel Gauge with Gasket	.	.	.
28	M51151-03	Lower Fuel Tube	.	.	.
29	118445-01	Lower Shroud Screw	.	.	.
30	M11084-29	Upper Shroud Screw	.	.	.
31	M15823-27	Shell Screw qty. 6	.	.	.
32	M12461-62	Blower Bolts 1/4-20 x 5/8 qty. 4	.	.	.
33	103880-01	Blower Nuts 1/4 20 qty. 4	.	.	.
Parts available - not Shown					
	M51345-14	Upper Fuel Tube	.	.	.
	M51345-09	Upper Fuel Tube	.	.	.
	M50814-08	Air Line	.	.	.
	M50814-06	Air Line	.	.	.
	120337-01	Cable Assembly Switch	.	.	.
	M9900-197	Ignitor Ground Wire	.	.	.
	118418-01	Power Cord	.	.	.

WHEELS AND HANDLES

1	118404-01	Front Handle	.	.	.
2	118414-01	Rear Handle qty. 2	.	.	.
3	118800-01	Left Rear Leg	.	.	.
4	118800-02	Right Rear Leg	.	.	.
5	118411-01	Cross Support	.	.	.
6	118433-01	Rubber Foot qty. 2	.	.	.
7	118407-01	Wheel	.	.	.
8	M51015-05	Axle	.	.	.
9	118446-01	Extension Cord Wrap qty. 2	.	.	.
10	118425-01	Handle Grip qty. 2	.	.	.
11	113497-02	Spacers qty. 2	.	.	.
12	120365-01	Wire Guard	.	.	.

NOZZLE ASSEMBLY 100,000 AND 150,000 BTU

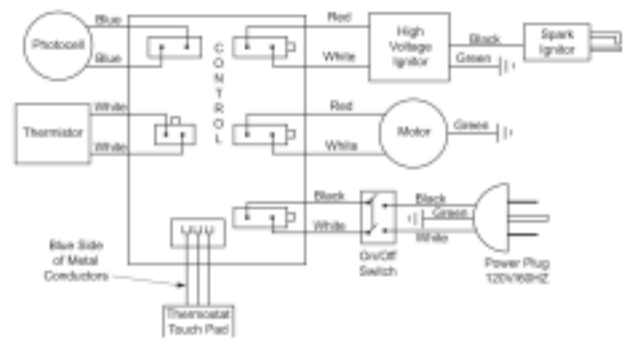
Key No.	Part No.	Description
1	100735-35	Nozzle Assembly (100)
	100735-36	Nozzle Assembly (150)
2	117000-01	Ignitor Electrode
3	M10908-2	Ignitor Screw
4	118390-01	Nozzle Adapter Bracket
5	104054-01	Nozzle Adapter

NOZZLE ASSEMBLY 200,000 BTU MODELS

1	100735-37	Nozzle Assembly
2	M10659-1	Nozzle Washer qty. 2
3	M10809-1	Nozzle Spring
4	M8882	Nozzle Sleeve
5	107272-01	Retaining Ring
6	118390-02	Nozzle Adapter Bracket
7	117000-01	Ignitor Electrode
8	M10908-2	Ignitor Screw
9	120254-01	Nozzle Adapter
10	M50820-02	Barb Fitting qty. 2

MOTOR ASSEMBLY

1	120326-02	Motor Blower (100)
	120326-01	Motor Blower (150/200)
2	079975-02	Pump Body (100)
	079975-03	Pump Body (150/200)
3	M22009	Insert
4	M22456-1	Rotor (100)
	M22456-2	Rotor (150/200)
5	M29608	Pump Cover (100/150)
	M29608-02	Pump Cover (200)
6	M29632	Lint Filter
7	M29633	Intake Filter
8	M29609	Pump End Cover
9	M12461-31	Screw, #10-32 x 1" qty. 3
10	M27694	Adjusting Screw
11	M10993-1	Pressure Relief Spring
12	M22997	Plug
13	M8940	Steel Ball, 1/4" Diameter
14	M29612-01	Output Filter
15	M12461-31	Screw, #10-32 x 1" (100) qty. 6
	M12461-33	Screw, #10-32 x 1 1/8" (150/200) qty. 6
16	103676-01	Plastic Elbow
17	M8643	Blade (100) qty. 4
	M8643-2	Blade (150/200) qty. 4
18	FHPF3-5C	Screw (100) qty. 2
	FHPF3-6C	Screw (150/200) qty. 2
19	105780-01	Plug Cap
20	121519-01	Rain Shield

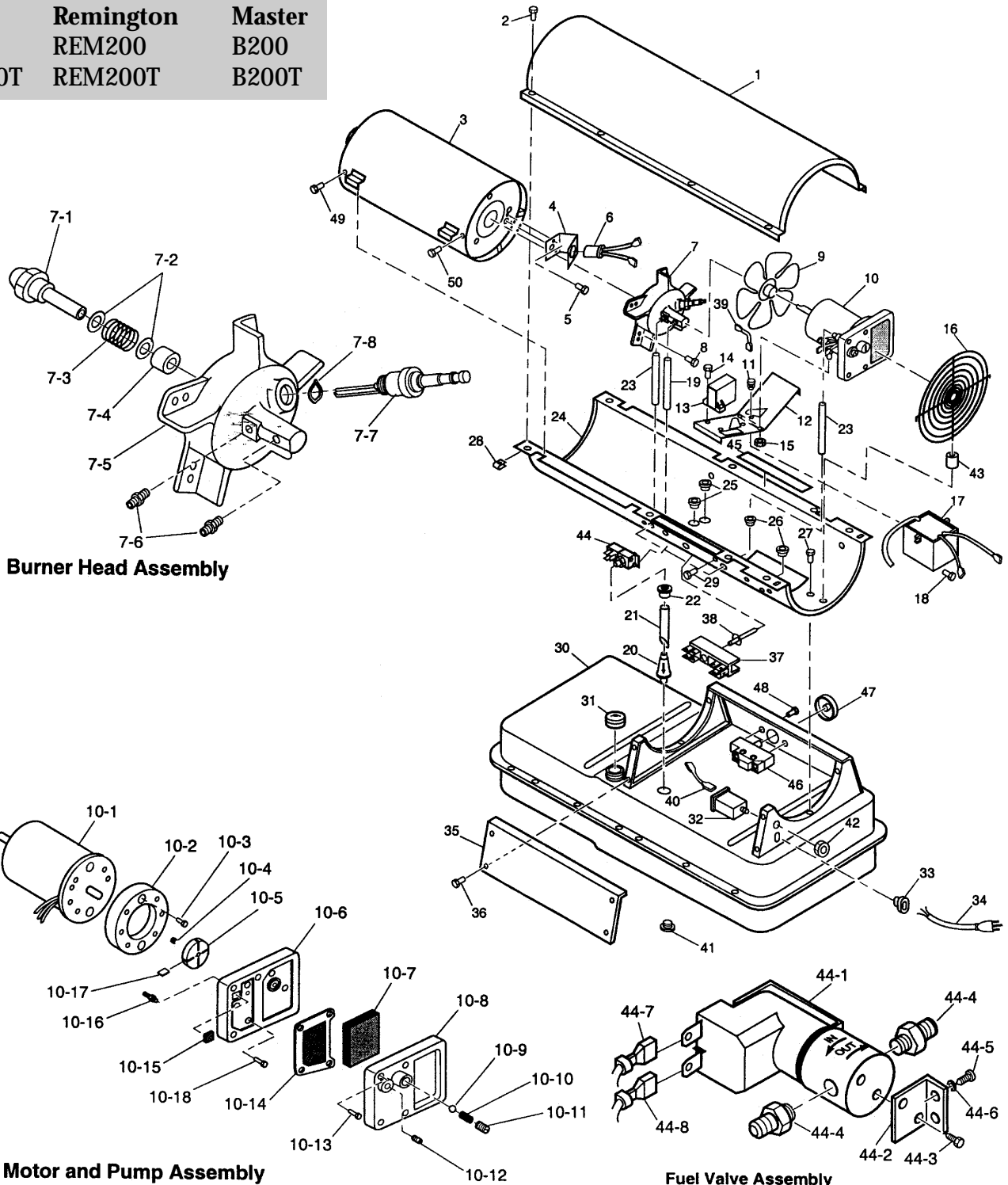


Desa Oil 100-200,000 BTU

200,000 BTU Forced Air Desa Oil Fired Heater

Model Numbers

Reddy	Remington	Master
R200	REM200	B200
RM200T	REM200T	B200T



Burner Head Assembly

Motor and Pump Assembly

Fuel Valve Assembly

Pump Pressure Settings
6.0 PSI

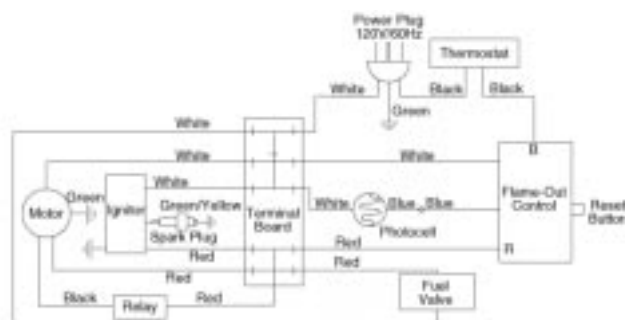
Desa Oil 200,000 BTU

200,000 BTU Forced Air Desa Oil Fired Heater

Key No.	Part Number	Description
1	UPPER SHELL	
	098511-229	Upper Shell (Yellow)
	098511-230	Upper Shell (White)
	107353-01	Upper Shell (Black)
2	M15823-27	Screw, #10-16 x 3/8" (qty. 8)
3	098512-48	Combustion Chamber
4	099229-01	Photocell Bracket
5	M10908-2	Screw, #6-32 x 3/8" (qty. 2)
6	HA3019	Photocell Assembly
7	BURNER HEAD ASSEMBLY	
7-1	100735-13	Nozzle
7-2	M10659-1	Nozzle Washer (qty. 2)
7-3	M10809-1	Nozzle Spring
7-4	M8882	Nozzle Sleeve
7-5	M50924-08	Burner Head Body
7-6	M50820-02	Barb Fitting (qty. 2)
7-7	HA3012	Spark Plug
7-8	103409-01	Washer, Wave Spring
8	M11084-27	Screw, #10-16 x 1/2" (qty. 3)
9	102042-01	Fan
10	MOTOR & PUMP ASSEMBLY	
10-1	102001-07	Motor
10-2	079975-03	Pump Body Ring (5/8" metal)
10-3	FHPF3-6C	Screw, #10-32 x 5/8" (qty. 2)
10-4	M22009	Rotor Insert
10-5	M22456-2	Pump Rotor (5/8")
10-6	M50545	Pump End Cover (metal)
10-7	M12179	Intake Filter (sponge)
10-8	M16545	Filter End Cover (plastic)
10-9	M8940	Steel Ball, 1/4" diameter
10-10	M10993-1	Pressure Relief Spring
10-11	M27694	Pressure Adjusting Screw
10-12	M22997	Plug
10-13	M12461-31	Screw, #10-32 x 1" (qty. 4)
10-14	M12244-1	Output Filter
10-15	M11637	Lint Filter (sponge)
10-16	M50820-02	Barb Fitting
10-17	M8643-2	Vanes (5/8") set of 4
10-18	M12461-32	Screw, #10-32 x 1.12" (qty. 6)
11	M50631	Rubber Bumper (qty. 2)
12	101206-01	Motor Mounting Bracket
13	097061-01	Solid State Relay
14	M15823-39	Screw, #8-18 x 1/2" (qty. 2)
15	NTC-4C	Hex Lock Nut, 1/4-20 (qty. 2)
16	102756-01	Fan Guard
17	102482-01	Plastic Ignitor (transformer)
18	M11084-29	Screw, #10-16 x 3/4" (qty. 2)
19	M51345-03	Fuel Line
20	M51150-200	Fuel Filter
21	M51345-04	Fuel Line Tube
22	M10990-3	Rubber Bushing
23	M50814-03	Air Line

Key No.	Part Number	Description
24	LOWER SHELL	
	098511-210	Lower Shell (Yellow)
	098511-211	Lower Shell (White)
	098511-230	Lower Shell (Black)
25	M50104-03	Bushing (qty. 2)
26	M50104-01	Bushing (qty. 2)
27	M11084-27	Screw, #10-16 x 1/2" (qty. 6)
28	M11271-8	Clip Nut (qty. 8)
29	M10908-14	Screw, #8-32 x 3/8" (qty. 1)
30	FUEL TANK	
	098513-86	Fuel Tank (B200, R200, REM200)
	098513-88	Fuel Tank (B200T, REM200T, RM200T)
31	097702-01	Fuel Cap (includes gasket)
32	HA3003	Flameout Safety Control
33	M11143-1	Strain Relief Bushing
34	POWER CORD	
	098219-19	Power Cord (B200, R200, REM200) 6"
	098219-38	Power Cord (B200T, REM200T, RM200T) 6"
35	102562-01AA	Sidecover (qty. 1)
36	M11084-27	Screw, #10-16 x 1/2" (qty. 4)
37	099125-12	Terminal Board
38	099157-01	Rivet
39	079010-20	Wire Assembly (Red, 18")
40	M16841-57	Wire Assembly (Red, 6")
41	M27417	Drain Plug (includes "O" ring)
42	099177-01	Hex Nut, 3/8"-27
43	103523-01	Rubber Bushing
44	FUEL VALVE ASSEMBLY	
44-1	105939-01	Fuel Valve (always order with #44-2)
44-2	103129-01	Fuel Valve Bracket
44-3	M12461-13	Hex Head Screw, #8-32 x 1/4" (qty. 2)
44-4	M50820-02	Fitting Barb (qty. 2)
44-5	M11084-38	Hex Tpg Screw, #8-18 x 3/8" (qty. 2)
44-6	WLE-2	Lock Washer (qty. 2)
44-7	079010-31	Wire Assembly (Red)
44-8	079010-32	Wire Assembly (White)
45	097785-04	Foam Gasket (qty. 2)
46	097657-03	Thermostat (thermostat models only)
47	104905-01	Thermostat Knob (thermostat models only)
48	M10908-1	Screw, #6-32 x 1/4" (thermostat models only) (qty. 2)
49	099230-01	Screws, Special (qty. 2)
50	M11084-27	Screw, #10-16 x 1/2" (qty. 2)
PARTS AVAILABLE-NOT SHOWN		
	099650-01	Clip (Secures thermostat & power cord wires)
	M9900-192	Combustion Chamber Grounding Wire
	100621-02	Thermostat Decal
	HA2204	Handles (qty. 2 if equipped)
	M12831-3	Wheel Frame Support
	M16801-2	Axle
	097896-01	Wheel with pushnut (qty. 2)
	M28526	Cap Nut (qty. 2)
	M12345-33	Screw, #10-24 x 1 3/4" (qty. 8)
	NTC-3C	Hex Nut, #10-24 (qty. 8)
	HA3017	Filter Kit

Output Rating	200,000 BTU/Hr
Fuel	K1 or No. 1 Fuel Oil
Fuel Tank Capacity	13.5 (US Gal.)
Fuel Consumption	1.4 GPH
Pump Pressure	6 PSI
Electric Requirements	120V/60Hz
Amperage	4.5
Hot Air Output (CFM)	600
Motor RPM	3450
Motor HP	1/4



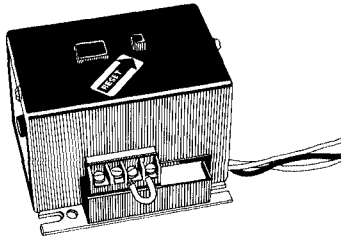
Desa Oil 200,000 BTU

350,000 BTU Forced Air Desa Oil Fired Heater

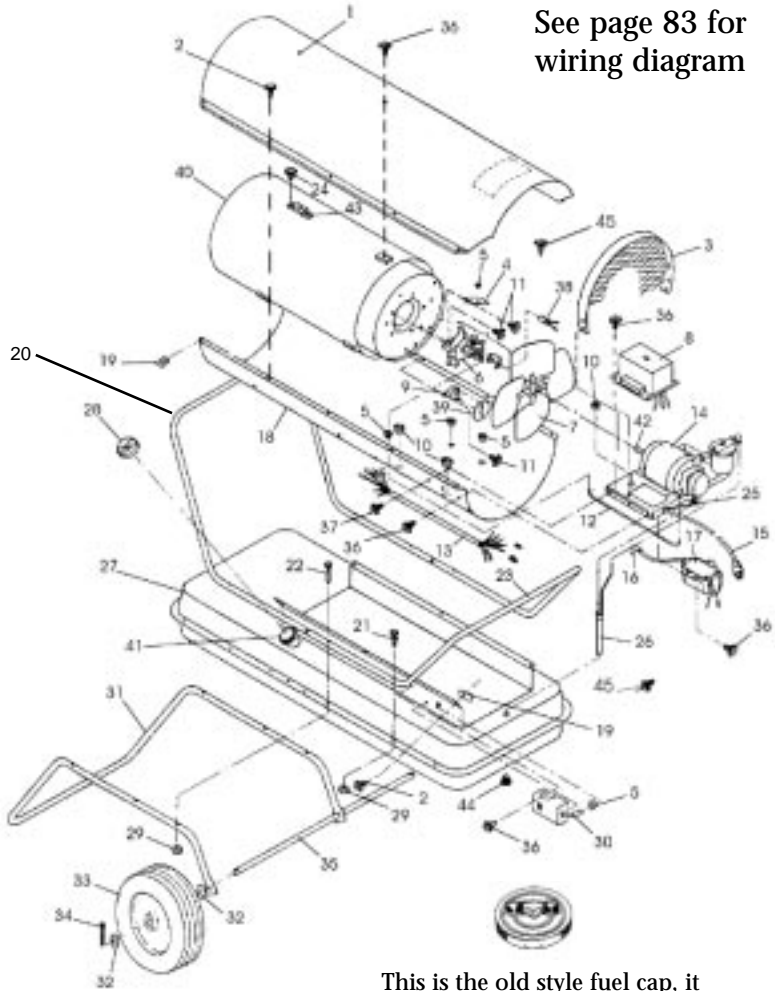
Model Numbers

Reddy	Master	Knipco
R350	B350	F350
Koehring	Dayton	L.B. White
K350	3E358	K350

Pump Pressure Setting
100 PSI



#M50230 Safety Control for heaters made before 1990. Newer style safety control is on the following page.



See page 83 for wiring diagram

This is the old style fuel cap, it is no longer available.

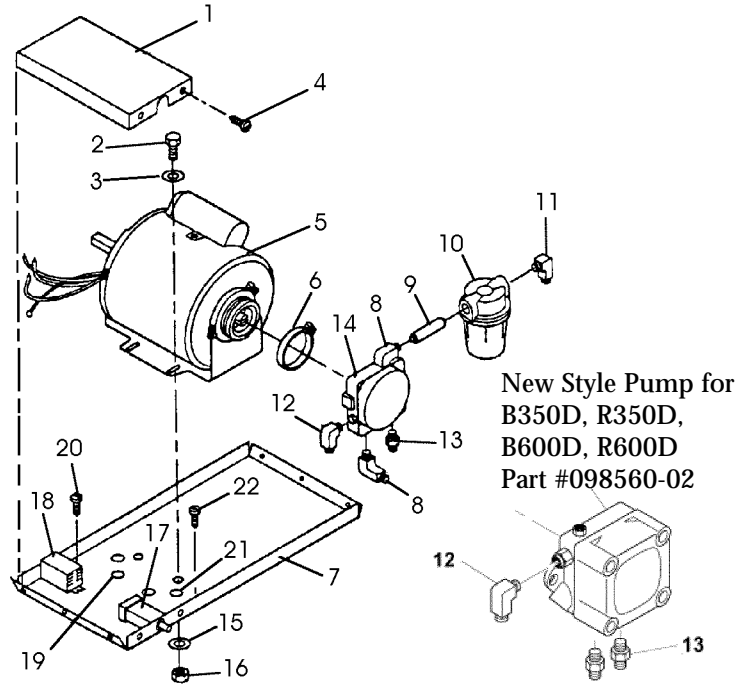
Desa Oil 350,000 BTU

Key No.	Part Number	Description
1	099329-02	Upper Shell (Yellow)
	M50060AC	Upper Shell (White)
2	M11084-27	Screw, #10-16 x 1/2
3	M50097-01AA	Fan Guard
4	M50086	Air Deflector
5	M30865-02	Bushing
6	Burner Head Assembly-see next page	
7	M50121	Fan
8	M50230	Safety Control
9	M51336-02	Fan Switch Kit
10	M50104-02	Shorty Bushing (qty. 3)
11	M11084-27	Screw (10-16 x 1/2)
12	M50295	Fuel Line
13	M50391-02	Wire Harness Assembly
14	Motor & Pump Assembly (see next page)	
15	098219-19	Extension Cord Assembly
	M10813-88	6 foot Power Cord
16	M50050	Ignition Boot
17	102482-04	Transformer
18	M50061AB	Lower Shell
19	M11271-8	Clip Nut
20	M50062-03	Front Handle
21	M51043-01	Screw
22	HC4-18C	Screw

Key No.	Part Number	Description
23	M50062	Rear Handle
24	M11084-26	Screw (qty. 3)
25	M11143-1	Strain Relief Bushing
26	M50115-04	Fuel Line Assembly
27	098513-05	Fuel Tank Assembly
28	097702-01	Fuel Cap Kit - 2 1/8"
29	NTC-4C	Hex Nut
30	099895-01	Thermostat Assembly
31	M50063	Wheel Support Frame
32	WP-10C	Flat Washer
33	M50389	Wheel
34	C5-10C	Cotter Pin
35	M18774	Axle
36	M11084-26	Screw
37	M10908-27	Screw
38	HA3019	Photocell Assembly
39	M51160-01	Fan Switch Cover
40	M50542-01	Heat Deflector & Comb. Chamber Assy.
41	M18053	Filler Neck Screen
42	M50278	Sleeve
43	M50274	Deflector Brace
44	M27417	Drain Plug
45	NLA	Screw

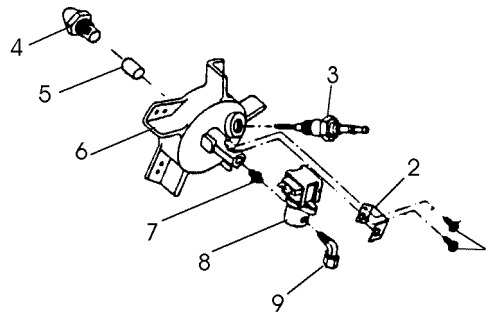
350 & 600,000 BTU Forced Air Desa Oil Fired Heater

Key No.	Part Number	Description
1	097495-02AA	Wiring cover
2	HF5-5C	Screw , 5/16-24 x 5/16 (qty. 4)
3	WLE-5	External lockwasher,5/16 (qty. 4)
4	M11084-26	Screw, #10,16 x 3/8 (qty. 3)
5	099562-01	Motor (350,000 BTU/HR)
	099562-02	Motor (600,000 BTU/HR)
6	M50116	Flange Clamp (holds pump to motor)
7	097506-01AA	Motor support (350,000 BTU/HR)
	097506-02AA	Motor support (600,000 BTU/HR)
8	57413	Street elbow (qty. 2)
9	M17499-2	Pipe nipple
10	098102-01	Fuel filter assembly (small, 3" tall)
	098103-01	Steel filter element(inside fuel filter assembly, includes rubber gaskets)
11	M50114-02	90° Male elbow
12	M50297	Compression elbow
13	M50113-02	Straight fitting
14	098560-01	Fuel pump
15	WLM-5C	Lockwasher 5/16 (qty. 4)
16	NPF-5C	Hex nut 5/16-24 (qty. 4)
17	HA3003	Safety control
18	097491-01	Power relay
19	M50104-02	Shorty bushing (qty. 3)
20	M10908-2	Screw, #6-32 x 3/8 (qty. 2)
21	M11143-1	Strain relief bushing
22	097211-01	Screw #8-32 x 1/4



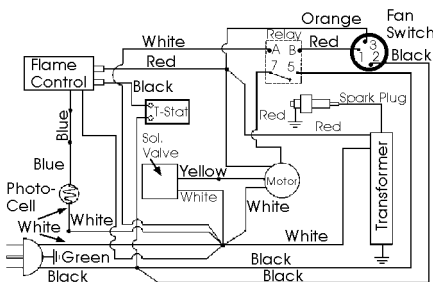
See page 15 for picture of old style fuel filter and filter element

Key No.	Part Number	Description
1	M10908-2	Screw, #6-32 x 3/8 (qty. 2)
2	099229-01	Photocell Bracket
3	M10962-2	Spark plug
4	M50112	Nozzle (350,000 BTU/HR)
	M30765	Nozzle (600,000 BTU/HR)
5	M51170-01	Plug
6	M50924-02	Burner Head Body
7	69246	Straight Nipple
8	M50077	Solenoid Valve
9	M50297	Compression Elbow

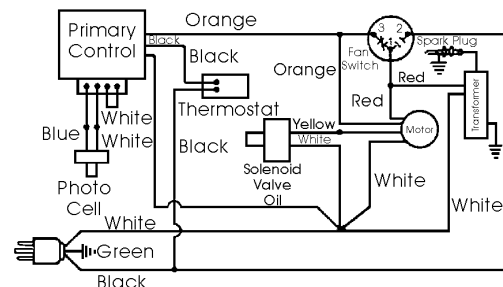


Wiring Diagram for 350,000 & 600,000 BTU

Wiring Diagram with newer style (1990+) Flame Control



Wiring Diagram with White Rogers/Robertshaw Flame Control

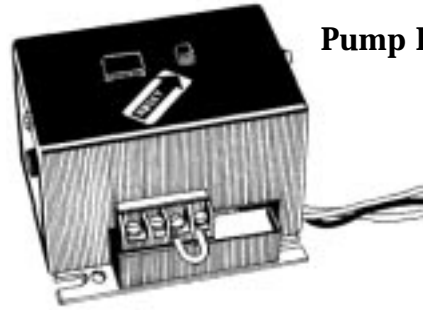


Desa 350 & 600,000 BTU

600,000 BTU Forced Air Desa Oil Fired Heater

Model Numbers

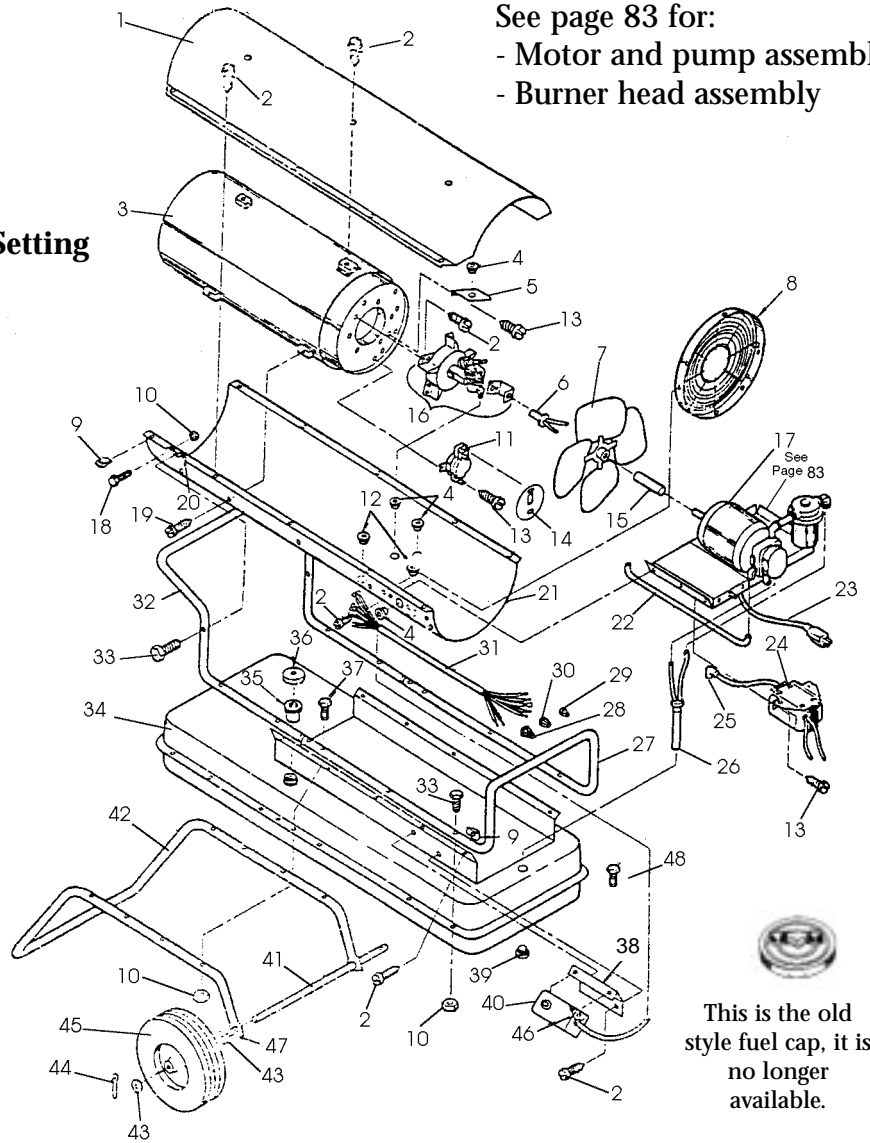
Reddy	Master	Knipco
R600	B600	F600
Koehring	Dayton	
K600	3E359	



**Pump Pressure Setting
110 PSI**

#M50230 Safety Control for heaters made before 1990.

Key No.	Part Number	Description
1	099329-04	Upper Shell (Yellow)
	M50167AC	Upper Shell (White)
2	M11084-27	Screw, #10-16 x 1/2
3	M50543-01	Combustion chamber & shield
4	M30865-02	Bushing
5	M50157	Air Deflector
6	HA3019	Photocell Assembly
7	M50194	Fan
8	M50186-01AA	Fan Guard
9	M11271-8	Clip Nut
10	NTC-4C	Hex Nut, 1/4-20
11	M51336-02	Fan Switch
12	M50104-02	Bushing
13	M11084-26	Screw, #10-16 x 3/8
14	M51160-01	Fan Switch Cover
15	M50278	Sleeve
16	See page 41	Burner Head Assembly
17	See page 39	Motor & Pump Assembly
18	HC4-3C	Screw, 1/4-20 x 3/8
19	M11084-27	Screw, #12-14 x 1/2
20	M50388AB	Support Bracket (Yellow)
	M50388AC	Support Bracket (White)
21	099329-03	Lower Shell (Yellow)
	M50168AC	Lower Shell (White)
22	M50119-01	Fuel line
23	099055-02	Power Cord
	M10813-88	6 foot Power Cord
24	102482-04	Transformer, 5000 Volt
25	M50050	Ignition Boot
26	M50115-02	Fuel Line Assembly
27	M28872-01	Rear Handle
28	*	Wire Connector (large)
29	*	Wire Connector (small)
30	*	Wire Connector (medium)
31	097494-02	Wire Harness
32	M50224	Front Handle
33	M51043-01	Screw, 1/4-20 x 1 1/2



See page 83 for:
- Motor and pump assembly
- Burner head assembly

This is the old style fuel cap, it is no longer available.

Key No.	Part Number	Description
34	098513-07	Fuel Tank
35	HA2210	Filler neck screen
36	097702-01	Fuel cap
37	HC4-22C	Screw, 1/4-20 x 2 3/4
38	M25121B	Thermostat bracket
39	M27417	Drain plug
40	099895-01	Thermostat
41	M18774	Axle
42	M28140-02	Wheel Support frame
43	WP-10C	Flat washer 5/8
44	C5-10C	Cotter pin
45	M50389	Wheel
46	Δ	Screw, #6-32 x 3/8
	Δ	Internal lock washer No.6
	Δ	Nut, 6-32
47	M50296	Wheel Spacer

Wiring diagrams are on page 83.

KNIPCO LOW PRESSURE

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
F30	102762-01	102482-01	HA3003	M29678	NA	HA3013	M29633	M29612-01	M29681	HA3019	HA3004	M50876-01	098513-41
F50	M31316	154009**	HA3003	M12431	M12462-5	HA3012	M11146-1	M15241	M11054-1	HA3019	HA3004	079725-01	M10716-1A
F50A	107262-01	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	M30875	HA3019	HA3004	M50876-01	098513-42
F50D	M31316	154009**	HA3003	M12431	M12462-5	HA3012	M11146-1	M15241	M11054-1	HA3019	HA3004	079725-01	M10716-1A
F50E	102001-01	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3007	HA3019	HA3004	M50876-02	098513-20
F50F	102001-01	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3007	HA3019	HA3004	M50876-02	098513-22
F50G	102001-01	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3007	HA3019	HA3004	M50876-02	098513-20
F50S	102001-14	102482-01	HA3003	M25727	107850-01	HA3012	M12179	M12244-1	M26316	HA3019	HA3004	M19630	M27553-02C
FV60S	102001-14	102482-01	HA3003	M28730	107850-01	HA3012	M12179	M12244-1	M26316	HA3019	HA3004	M19630	M27553-04A
F65 / F65D	M31316	154009**	HA3003	M20517	M12462-5	HA3012	M11146-1	M15241	M11054-1	HA3019	HA3004	M19630	M17016-1S
F66D	102001-14	102482-01	HA3003	M25727	107850-01	HA3012	M12179	M12244-1	M26316	HA3019	HA3004	M19630	M27533-010A
F70 / F75	M5721	M5301-1	NA	M4502	M5727	M4752-2	NA	NA	M6638	NA	M5703	M5855	M5723 / M6620
F80/F85/F85C	M21023-1	M27827-3	NA	M14529	M12462-5	M8989 (Left) M8990 (Right)	M8849	M9942G1	M18048	NA	HA3004	M8976-2	M86634
F85E	M9922	M27827-3	NA	M9726	M9725	M8989 (Left) M8990 (Right)	M8849	M9942G1	M18048	NA	HA3004	M8976	M86634
F88	M21023-1	M27827-3	NA	M14529	M12462-5	M8989 (Left) M8990 (Right)	M8849	M9942G1	M18048	NA	HA3004	M10808-1	M10780-1
F98	M31316	102482-01	HA3003	M14529	M12462-5	HA3012	M12179	M12244-1	M18048	HA3019	HA3004	M13846-1	M12321-1
F98	M31316	M27827-3	NA	M14529	M12462-5	M8989 (Left) M8990 (Right)	M12179	M12244-1	M18048	NA	HA3004	M19630	M12321-1
F98C	M31316	M27827-3	M12013	M12464	M12462-5	M8989 (Left) M8990 (Right)	M12179	M12244-1	M18048	M9211-4	HA3004	M13846-1	M12321-1
F98D	M31316	102482-01	HA3003	M14529	M12462-5	HA3012	M12179	M12244-1	M18048	HA3019	HA3004	M19630	098513-04
F110	M31316	102482-01	HA3003	M23147	M12462-9	HA3012	M12179	M12244-1	100735-05	HA3019	M22465-3 Rotor M8643-3 Blades	M19630	098513-04
F110D	M31316	102482-01	HA3003	M23147	M12462-9	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	M19630	098513-04
F110E	097308-06	102482-01	097528-01	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	098513-31
F110F / F110G	097308-06	102482-01	HA3003	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04

** 154009 is closest fit

Desa Oil Quick Parts Ref.

KNIPCO LOW PRESSURE (CONT.)

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
F110H	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
F120	097308-04	M27827-3	NA	M13038	M12462-5	M12951 (Left) M12952 (Right)	M12179	M12244-1	M14293	NA	HA3004	M14259-1	M12820-4
F120D	097308-04	M27827-3	HA3003	M13038	M12462-5	M12951 (Left) M12952 (Right)	M12179	M12244-1	M14293	HA3019	HA3004	M14259-1	M12820-4
FV125C	097308-04	102482-01	M50230	M27982	Call	HA3012	M12179	M12244-1	100735-05	097059-01	M22456-3 Rotor M8643-3 Blades	079722-01	098513-11
FV125S	097308-04	102482-01	M50230	M27982	Call	HA3012	M12179	M12244-1	100735-05	HA3019	M22456-3 Rotor M8643-3 Blades	079722-01	098513-11
F140	097308-04	M27827-3	NA	M13038	Call	M12951 (Left) M12952 (Right)	M12179	M12244-1	HA3011	NA	M22456-3 Rotor M8643-3 Blades	M16667-1	M12820-4
F140D	097308-04	M27827-3	HA3003	M13038	Call	M12951 (Left)	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M16667-1	M12820-4
F150 / F150D	097308-04	102482-01	HA3003	M17058	Call	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11
50E	097308-04	102482-01	HA3003	M17058	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11
F105F	097308-04	102482-01	HA3003	M17058	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M19630	098513-11
F150S	097308-04	102482-01	HA3003	M17058	Call	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11
F150G	097308-04	102482-01	HA3003	M17058	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M19630	098513-11
F150H	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M51150-01	108088-05

REDDY LOW PRESSURE OIL

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
M30	102762-01	102482-01	HA3003	M29678	NA	HA3013	M29633	M29612-01	M29681	HA3019	HA3004	M50876-01	098513-41
R30	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	M29681	HA3019	HA3004	M50876-04	108088-01
R35/R35A/R35B	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3006	HA3019	HA3004	M50876-04	108088-01
R35D	102001-28	104068-02	NA	M30884	NA	HA1000	M29633	M29612-01	HA3006	M16656-24	HA3004	M50876-04	108088-01
R35E	102001-28	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3006	M16656-24	HA3004	M50876-04	108088-01
R40 / R40T	102001-28	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3006	M16656-24	HA3004	M50876-04	108088-01
Mfni Furnace	M31316	154009**	NA	M20941	M12462-5	HA3012	M11146-1	M15241	M11054-1	NA	HA3004	M19630	108088-01
Mark 50D	M31316	154009**	HA3003	M12431	M12462-5	HA3012	M11146-1	M15241	M11054-1	HA3019	HA3004	M11146-1	M17016-(H)
M50	M31316	154009**	HA3003	M12431	M12462-5	HA3012	M11146-1	M15241	M11054-1	HA3019	HA3004	M19630	M17016-1B
M50A	102762-01	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	M30875	HA3019	HA3004	M50876-01	098513-42
M50D	M31316	154009**	HA3003	M12431	M12462-5	HA3012	M11146-1	M15241	M11054-1	HA3019	HA3004	M19630	M17016-1B
M50S	102001-14	102482-01	HA3003	M25727	107850-01	HA3012	M12179	M12244-1	M26316	HA3019	HA3004	M19630	M27553-02AA
R50 / R50A / R50B/102001-28	102482-01	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3007	HA3019	HA3004	M50876-02	098513-20
R55	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3021	HA3019	HA3005	M50876-05	108088-03
R55A	102001-28	104068-02	NA	M30884	NA	HA1000	M29633	M29612-01	HA3027	M16656-24	HA3005	M50876-05	108088-03
R55B / R55BT	102001-28	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3024	M16656-24	HA3005	M50876-05	108088-03
R55M	102001-02	100777-02	NA	M30884	NA	HA3013	M29633	M29612-01	HA3021	M16656-20	HA3005	M50876-05	108088-03
R60/R60T/ RM60/RM60T	102001-28	104068-02	NA	103684-01	NA	102548-03	M29633	M29612-01	HA3024	M16656-24	HA3005	M50876-05	108088-03
R60A	102001-28	104068-02	NA	103684-01	NA	"L" Shaped - HA1000 "Pencil" Shaped - HA1100	M29633	M29612-01	HA3024	M16656-24	HA3005	M50876-05	108088-16 Metal 113279-01 Pestic
MC60	102001-14	102482-01	M50230	M25727	107850-01	HA3012	M12179	M12244-1	M26316	097059-01	HA3004	079725-02	M27553-03AA
M65 / M65D	M31316	154009**	HA3003	M25727	M12462-5	HA3012	M11146-1	M15241	M26316	HA3019	HA3004	M19630	M10716-1B
M66D/Round End Cover	102001-14	102482-01	HA3003	M25727	097061-01	HA3012	M29633	M29612-01	M26313	HA3019	HA3004	M19630	M27553-01AA
M66D/Rectangular End Cover	102001-14	102482-01	HA3003	M25727	107850-01	HA3012	M12179	M12244-1	M26313	HA3019	HA3004	M19630	M27553-01AA
R70	097308-02	102482-01	HA3003	M51107-01	107850-01	HA3012	M29633	M29612-01	HA3008	HA3019	HA3004	M50876-05	108088-03
R70A / R70AT	097308-02	102482-01	HA3003	M51107-01	097061-01	HA3012	M29633	M2612-01	HA3008	HA3019	HA3004	M50876-02	108088-03
R70B/R70BT/ R70CT	097308-02	102482-01	HA3003	M51107-01	097061-01	HA3012	M29633	M2612-01	HA3008	HA3019	HA3004	M50876-05	108088-03
R70D	102001-20	104068-02	NA	M29678	NA	HA1000	M29633	M29612-01	HA3026	M16656-24	HA3004	M50876-05	108088-03
R70DT	102001-20	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3026	M16656-24	HA3004	M50876-05	108088-03
Mark 75D	M31316	M27827-3	HA3003	M13580	M12462-5	M8989 (Left) M899 (Right)	M12179	M12244-1	M18048	HA3019	HA3004	M13846-1	M12321-1
R75	M23622-1	M3501-3	M6657	M4502	M5727	M8035	NA	NA	M4966	NA	M8243 / NA	M8616	M8490
M580	M31316	M27827-3	NA	M12464	097061-01	M8989 (Left) M899 (Right)	M12179	M12244-1	M18048	NA	M22456-3 Rotor M8643-3 Blades	M13846-1	M11636-1
M85 / M85D	M31316	102482-01	HA3003	M14529	M12462-5	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	M19630	098513-04
M100	M31316	102482-01	HA3003	M23147	M12462-5	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	M19630	098513-04

Desa Oil Quick Parts Ref.

REDDY LOW PRESSURE OIL (CONT)

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
M100D	M31316	102482-01	HA3003	M23147	M12462-6	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	M19630	098513-04
R100	097308-06	102482-01	097528-01	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
R100A / R100B	097308-06	102482-01	HA3003	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
RH100VT	102001-30	104068-06	NA	097293-01	NA	HA1000	M12179	M12244-1	100735-32	M16656-21	HA3004	106896-01	108088-12
R110	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
R110A	097308-06	104065-01	NA	097293-01	NA	102548-02	M12179	M12244-1	HA3009	M16656-24	HA3004	M51150-01	108088-04
R10B(R10C(T) RM110C(T))	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	M51150-01	108088-04
R110M3	097308-06	101551-02	NA	097293-01	NA	HA3012	M12179	M12244-1	HA3009	M16656-21	HA3004	M51150-01	108088-04
R115(T)RM115 R115C(R115C1/RM115C	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	M51150-01	108088-04
R115CT	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	M51150-01	108088-11
R115DT	102001-30	104068-02	NA	097293-01	NA	PP200	M12179	M12244-1	PP221	PP236	PP204	106896-01	108088-11 113279-02
RH115DT	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	103896-01	108088-10 Meal 113279-03 Plastic
Mark 120D	097308-04	M27827-3	HA3003	M13038	M12462-5	M12951 (Left) M12952 (Right)	M12179	M12244-1	M14293	HA3019	M22456-3 Rotor M8643-3 Blades	M14259-1	M12820-4
RD125T	102001-30	116111-01	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-21	HA3004	106896-01	108088-12
RE125T	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-21	HA3004	106896-01	108088-12
RE125AT	102001-30	116111-01	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-21	HA3004	106896-01	108088-12
RH125T/RHD125/ RL125T	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-21	HA3004	M51150-01	108088-12
RH125AT	102001-30	104068-02	NA	097293-01	NA	HA1100	M12179	M12244-1	HA3027	M16656-21	HA3004	M51150-01	108088-12
RHD125AT	102001-30	116111-01	NA	097293-01	NA	HA1100	M12179	M12244-1	HA3027	M16656-21	HA3004	M51150-01	108088-12
RL125AT	102001-30	116111-01	NA	097293-01	NA	HA1100	M12179	M12244-1	HA3027	M16656-21	HA3004	M51150-01	108088-12
PKHD125T	102001-30	116111-01	NA	097293-01	NA	HA1100	M12179	M12244-1	HA3027	M16656-21	HA3004	M51150-01	108088-12
TKU125T	102001-30	116111-01	NA	097293-01	NA	HA1100	M12179	M12244-1	HA3027	M16656-21	HA3004	M51150-01	108088-12
UKU125T	102001-30	116111-01	NA	097293-01	NA	HA1100	M12179	M12244-1	HA3027	M16656-21	HA3004	M51150-01	108088-12
RH140VT	102001-30	104068-06	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-24	M16656-21	HA3004	106896-01	108088-12
Mark 140D	097308-04	M27827-3	HA3003	M14529	M12462-5	M12951 (Left) M12952 (Right)	M12179	M12244-1	M18048	HA3019	M22456-3 Rotor M8643-3 Blades	M16667-1	M12820-4
M150D / M150S	097308-04	102482-01	HA3003	M17058	Call	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11
R150(R150A/ R150AT	097308-04	102482-01	HA3003	M17058	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M19630	098513-11
R150B(R150BT R150D/R155	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M51150-01	108088-05
R150E	097308-06	104065-01	NA	097293-01	NA	102548-02	M12179	M12244-1	HA3011	M16656-24	HA3004	M51150-01	108088-05
R150M	102762-02	100777-02	NA	097293-01	NA	HA3012	M12179	M12244-1	HA3011	103696-01	HA3004	M51150-01	098513-68
R150M2	097308-06	101551-02	NA	097293-01	NA	HA3012	M12179	M12244-1	HA3011	M16656-21	HA3004	M51150-01	079503-13AA

REDDY LOW PRESSURE OIL (CONT)

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
Mark 150D	097308-04	102482-01	HA3003	M17058	M12462-6	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades HA3004	M16790-12	098513-11
PKHD170T	102001-30	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3004	106896-01	108088-12
R155A	097308-06	104065-01	NA	097293-01	NA	102548-02	M12179	M12244-1	HA3011	M16656-24	HA3004	M51150-01	108088-05
R155B / RM155	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05
R155C(T)/ RM155C(T)	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05
R155D	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	106896-01	108088-10 113279-03 Plastic
R165 / R165T	102001-07	102482-01	HA3003	101897-01	097061-01	HA3012	M12179	M12244-1	HA3023	HA3019	HA3004	M51150-01	108088-05
R165A / R165AT	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-24	HA3004	M51150-01	108088-05
R165C(T)/ RM165C(T)	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05
R165DT	102001-30	104068-02	NA	102042-01	NA	PP200	M12179	M12244-1	PP222	PP236	PP204	106896-01	108088-10 113279-03
RD170T	102001-30	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3004	106896-01	108088-12
RE170T	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3004	106896-01	108088-12
RE170AT	102001-30	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3004	106896-01	108088-12
RH170T/RHD170T/ RL170T	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3004	106896-01	108088-12
RL170AT	102001-30	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3004	106896-01	108088-12
RH170AT	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3005	106896-01	108088-12
RHD170AT	102001-30	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3005	106896-01	108088-12
TKU170T	102001-30	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3005	106896-01	108088-12
UKU170T	102001-30	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3005	106896-01	108088-12
R200	102001-07	102482-01	HA3003	102042-01	097061-01	HA3012	M12179	M12244-1	100735-13	HA3019	HA3005	M51150-200	098513-86
R200A/R200AT R200B/TRM200AT	102001-27	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-24	HA3005	M51150-200	108088-06
RD200T	102001-27	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12
RE200T	102001-27	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12
RE200AT	102001-27	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12
RH200VT/ RHD200VT	102001-27	104068-07	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12
RH200AT / RHD200AT	102001-27	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12
RHD200T	102001-27	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-24	HA3005	M51150-200	108088-12
RL200AT	102001-27	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12
RM200T	102001-07	102482-01	HA3003	102042-01	097061-01	HA3012	M12179	M12244-1	100735-13	HA3019	HA3005	M51150-200	108088-06
PKHD200T	102001-27	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12
TKU200T	102001-27	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12
UKU200T	102001-27	116111-01	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12

MASTER LOW PRESSURE OIL

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
B30	102762-01	102482-01	HA3003	M29678	NA	HA3013	M29633	M29612-01	M29681	HA3019	HA3004	M50876-01	098513-41
B30C	102762-01	102482-01	M50230	M26317	NA	HA3013	M29633	M29612-01	M29681	HA3019	HA3004	M50876-01	098513-41
B50	M31316	154009**	HA3003	M12431	M12462-5	HA3012	M11146-1	M15241	M11054-1	HA3019	HA3004	M20371-1	098513-42
B50A	102762-01	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	M30875	HA3019	HA3004	M50876-01	M30873-01BA
B50B	102762-01	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	M30875	HA3019	HA3004	M50876-03	098513-42
B50D (Square Shell)	M31316	154009**	HA3003	M12431	M12462-5	HA3012	M11146-1	M15241	M11054-1	HA3019	HA3004	M50876-02	108088-02
B50D (Round Shell)	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3007	HA3019	HA3004	M50876-02	108088-02
B50E/B50F/B50G	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3007	HA3019	HA3004	M50876-02	108088-02
B50H	102001-28	104068-02	NA	M30884	NA	HA1000	M29633	M29612-01	HA3021	M16656-24	HA3005	M50876-02	108088-02
B50J/B55/B55B/ B55B/B55T/B60	102001-28	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3024	M16656-24	HA3005	M50876-05	108088-03
B55CT	102001-28	104068-02	NA	103684-01	NA	"L" Shaped - HA1000 "Pencil" Shaped - HA1100	M29633	M29612-01	HA3024	M16656-24	HA3005	M50876-05	Metal 108088-19 Plastic 113279-01
BV60S	102001-14	102482-01	HA3003	M28730	107850-01	HA3012	M12179	M12244-1	M26313	HA3019	HA3004	M19630	M27553-04A
B65 / B65D	M31316	154009**	HA3003	M20517	M12462-5	HA3012	M11146-1	M15241	M26316	HA3019	HA3004	M19630	M10716-1A
B66D (Round End Cover)	102001-14	102482-01	HA3003	M25727	097061-01	HA3012	M29633	M29612-01	M26316	HA3019	HA3004	M19630	M27553-01AA
B66D (Rectangular End Cover)	102001-14	102482-01	HA3003	M25727	097061-01	HA3012	M12179	M12244-1	M26313	HA3019	HA3004	M19630	NLA
B70	M5721	M5301-1	M5761	M4502	NA	M4752-2	NA	NA	M5669	NA	M5703	M5763	M5723
B70B / B70BT	097308-02	102482-01	HA3003	M51107-01	097061-01	HA3012	M29633	M29612-01	HA3008	HA3019	HA3004	M50876-05	108088-03
B70D	102001-20	104068-02	NA	M29678	NA	HA1000	M29633	M29612-01	HA3026	M16656-24	HA3004	M50876-05	108088-03
B70DT	102001-20	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3026	M16656-24	HA3004	M50876-05	108088-03
B70ET	102001-29	104068-02	NA	M29678	NA	"L" Shaped - HA1000 "Pencil" Shaped - HA1100	M29633	M29612-01	HA3026	M16656-24	HA3004	M50876-05	Metal 108088-16 Plastic 113279-01
B75	M5721	M5301-1	M5761	M4502	NA	M4752-2	NA	NA	M5669	NA	M5703	M5855	M6620
B80	M21023-1	M27827-3	M3480	M14529	M12462-5	M8989 (Left) M8990 (Right)	M8849	M8764	M18048	M9211	M8644	M8796 M8643 Blades	M9228
B90	M21023-1	M27827-3	M3480	M14529	M12462-5	M8989 (Left) M8990 (Right)	M8849	M8764	M18048	M9211	M8644	M10808-1	M10780-1
B99 (With Electrodes)	M31316	M27827-3	NA	M14529	M12462-6	M8989 (Left) M8990 (Right)	M12179	M12244-1	M18049	NA	HA3004	M11932-1	M12377-1
B99 (With Spark Plug)	M31316	102482-01	100508-01	M14529	M12462-5	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	M19630	098513-04
B99D	M31316	102482-01	HA3003	M14529	M12462-6	HA3012	M12179	M12244-1	M18048	HA3019	HA3004	M11932-1	M12321-1
B100	M31316	102482-01	HA3003	M23147	M12462-6	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	M51150-01	M3292
B100AK	097308-06	102482-01	HA3003	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
B100A / B100B	097308-06	102482-01	097528-01	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
B100D	M31316	102482-01	097528-01	M23147	M12462-6	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	M19630	098513-04

MASTER LOW PRESSURE OIL (CONT)

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
B100G	097308-06	102482-01	HA3003	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
B100KD	097308-06	102482-01	HA3003	M23147	M12462-6	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	M19630	098513-04
B110 / B110T	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
B110A	097308-06	104065-01	NA	097293-01	NA	102548-02	M12179	M12244-1	HA3009	M16656-24	HA3004	M51150-01	108088-04
B108(T)/B110C(T)	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	M51150-01	108088-04
B110DST	102001-33	110901-14 104068-08	NA	097293-01	NA	117000-02	M12179	M12244-1	PP221	PP236	PP204	106896-01	113279-02
B115B(T)/B115C(T)	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	M51150-01	108088-04
B115DT	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	106896-0	Metal 108088-11 Plastic 113279-02
B115T	102001-30	102482-03	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	M51150-01	108088-04
BC100	M31316	102482-01	M50230	M23147	M12462-6	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	079725-03	098513-04
M100VT	102001-30	104068-06	NA	097293-01	NA	HA1000	M12179	M12244-1	100735-32	M16656-21	HA3004	106896-01	108088-12
B120	097308-04	M27827-3	HA3003	M13038	Call	M12951 (Left) M12952 (Right)	M12179	M12244-1	M14293	HA3019	M22456-3 Rotor M8643-3 Blades	M14259-1	M12820-4
BV125/BV125S	097308-04	102482-01	HA3003	M27982	Call	HA3012	M12179	M12244-1	100735-05	HA3019	M22456-3 Rotor M8643-3 Blades	079725-03	098513-04
M125T	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-21	HA3004	M51150-01	108088-12
M125AT	102001-30	104068-02	NA	097293-01	NA	HA1100	M12179	M12244-1	HA3027	M16656-21	HA3004	M51150-01	108088-12
B140 / B140D	097308-04	102482-01	HA3003	M17058	Call	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11
M140VT	102001-30	104068-06	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-24	M16656-21	HA3004	106896-01	108088-12
B150	097308-04	102482-01	HA3003	M17058	M12462-6	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11
B150A	097308-04	102482-01	HA3003	M17058	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11
B150B/B150C/ B150CAK	097308-04	102482-01	HA3003	M17058	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M19630	098513-11
B150D/B150KD	098308-04	102482-01	HA3003	M17058	M12462-6	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11
B150F/B150FT B150G/B150GT	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M51150-01	108088-05
B150H	097308-06	104065-01	NA	097293-01	NA	102548-02	M12179	M12244-1	HA3011	M16656-24	HA3004	M51150-01	108088-05
B150J / B150JT	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05
B150KD	097308-04	102482-01	HA3003	M17058	M12462-6	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11
B150M	102762-02	100777-02	NA	097293-01	NA	HA3012	M12179	M12244-1	HA3011	103698-01	HA3004	M51150-01	098513-68
B155T	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05
B155BT	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05

MASTER LOW PRESSURE OIL (CONT)

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
B155DT	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	Metal 108088-10 Plastic 113279-03
B155DST	102001-33	101901-14 104068-08	NA	102042-01	NA	117000-02	M12179	M12244-1	PP223	PP236	PP204	106896-01	113279-03
B165 / B165T	102001-07	102482-01	HA3003	101897-01	097061-01	HA3012	M12179	M12244-1	HA3023	HA3019	HA3004	M51150-01	108088-05
B165AT/B166C(T)	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3029	M16656-24	HA3004	M51150-01	108088-05
B165DT	102001-30	104068-02	NA	102042-01	NA	PP200	M12179	M12244-1	PP222	PP236	PP204	106896-01 113279-03	108088-10
M170T	102001-30	104068-02	NA	102042-1	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3004	M51150-01	108088-12
M170AT	102001-30	104068-02	NA	102042-1	NA	HA1000	M12179	M12244-1	HA3029	M16656-21	HA3005	M51150-01	108088-12
B200	102001-07	102482-01	HA3003	102042-01	097061-01	HA3012	M12179	M12244-1	100735-13	HA3019	HA3005	M51150-200	098513-86
B200T	102001-07	102482-01	HA3003	102042-01	097061-01	HA3012	M12179	M12244-1	100735-13	HA3019	HA3005	M51150-200	108088-06
B200AT	102001-27	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-24	HA3005	M51150-200	108088-06
B200BT	102001-27	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-24	HA3005	M51150-200	Metal 108088-17 Plastic 113279-04
M200T	102001-27	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12
M200AT	102001-27	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	106896-01	108088-12
M200VT	102001-27	104068-07	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-21	HA3005	M51150-200	108088-12

MASTER LOW PRESSURE OIL (TA SERIES)

Model#	Motor	Transformer/ Ignition Control	Ignition Control	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
TA110	102001-30	NA	104068-02	097293-01	NA	PP200 PP201	M12179	M12244-1	PP221	PP236	PP204	106896-01	108088-12
TA100	120326-02	122097-01	117766-01	122313-02	NA	117000-01	M12179	M12244-1	100735-35	PP236	PP204	118422-01	108088-01
TA103	120326-02	122097-01	117766-01	122313-02	NA	117000-01	M12179	M12244-1	100735-35	PP236	PP204	118422-01	108088-01
TA106	120326-02	122097-01	117766-01	122313-02	NA	117000-01	M12179	M12244-1	100735-35	PP236	PP204	118422-01	108088-01
TA111	120326-02	122097-01	117766-01	122313-02	NA	117000-01	M12179	M12244-1	100735-35	PP236	PP204	118422-01	108088-01
TA101	120326-01	122097-01	117766-01	122313-01	NA	117000-01	M12179	M12244-1	100735-36	PP236	PP205	118422-01	108088-18
TA104	120326-01	122097-01	117766-01	122313-01	NA	117000-01	M12179	M12244-1	100735-36	PP236	PP205	118422-01	108088-18
TA107	120326-01	122097-01	117766-01	122313-01	NA	117000-01	M12179	M12244-1	100735-36	PP236	PP205	118422-01	108088-18
TA112	120326-01	122097-01	117766-01	122313-01	NA	117000-01	M12179	M12244-1	100735-36	PP236	PP205	118422-01	108088-18
TA102	120326-01	122097-01	117766-02	122313-01	NA	117000-01	M12179	M12244-1	100735-37	PP236	PP205	118422-01	108088-01
TA105	120326-01	122097-01	117766-02	122313-01	NA	117000-01	M12179	M12244-1	100735-37	PP236	PP205	118422-01	108088-01
TA108	120326-01	122097-01	117766-02	122313-01	NA	117000-01	M12179	M12244-1	100735-37	PP236	PP205	118422-01	108088-01
TA113	120326-01	122097-01	117766-02	122313-01	NA	117000-01	M12179	M12244-1	100735-37	PP236	PP205	118422-01	108088-01

REMINGTON LOW PRESSURE OIL

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
REM35 / REM35A	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3003	HA3019	HA3004	M50876-04	108088-01
REM35B	102001-28	104068-02	NA	M30884	NA	HA1000	M29633	M29612-01	HA3006	M16656-24	HA3004	M50876-04	108088-01
REM35C	102001-28	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3006	M16656-24	HA3004	M50876-04	108088-01
REM40 / REM40T	102001-28	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3006	M16656-24	HA3004	M50876-02	108088-01
REM50 / REM50A	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3007	HA3019	HA3004	M50876-02	098513-20
REM50B	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3021	HA3019	HA3005	M50876-02	108088-02
REM50C	102001-28	104068-02	NA	M30884	NA	HA1000	M29633	M29612-01	HA3021	M16656-24	HA3005	M50876-02	108088-02
REM55	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3021	HA3019	HA3005	M50876-05	108088-03
REM55-W	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3021	HA3019	HA3005	M50876-05	108088-03
REM55A	102001-28	104068-02	NA	M30884	NA	HA1000	M29633	M29612-01	HA3021	M16656-24	HA3005	M50876-05	108088-03
REM55B	102001-28	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3024	M16656-24	HA3005	M50876-05	108088-03
REM60/REM60T	102001-28	104068-02	NA	103684-01	NA	HA1000	M29633	M29612-01	HA3024	M16656-24	HA3005	M50876-05	108088-03
REM100/REM100A	097308-06	102482-01	HA3003	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
REM110	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
REM110A	097308-06	104065-01	NA	097293-01	NA	102548-02	M12179	M12244-1	HA3009	M16656-24	HA3004	M51150-01	108088-04

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
REM110B(T) REM110C(T)	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	M51150-01	108088-04
REM115(T) REM115C(T)	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3027	M16656-24	HA3004	M51150-01	108088-04
REM150	097308-04	102482-01	HA3003	M17058	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M19630	098513-11
REM150A/REM150B	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M51150-01	108088-05
REM150D	097308-06	104065-01	NA	097293-01	NA	102548-02	M12179	M12244-1	HA3011	M16656-24	HA3004	M51150-01	108088-05
REM150E	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05
REM155	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M51150-01	108088-05
REM155A	097308-06	104065-01	NA	097293-01	NA	102548-02	M12179	M12244-1	HA3011	M16656-24	HA3004	M51150-01	108088-05
REM155B	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05
REM155C(T)	102001-30	104068-02	NA	097293-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05
REM165	102001-07	102482-01	HA3003	101897-01	097061-01	HA3012	M12179	M12244-1	HA3023	HA3019	HA3004	M51150-01	108088-05
REM165C(T)	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	HA3028	M16656-24	HA3004	M51150-01	108088-05
REM200(T)	102001-07	102482-01	HA3003	102042-01	097061-1	HA3012	M12179	M12244-1	100735-13	HA3019	HA3005	M51150-200	098513-86
REM200AT	102001-30	104068-02	NA	102042-01	NA	HA1000	M12179	M12244-1	100735-13	M16656-24	HA3005	M51150-200	108088-06

DESA LOW PRESSURE

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
C35 / C35B	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3006	HA3019	HA3004	M50876-04	108088-01
C35A	102001-28	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	HA3006	HA3019	HA3004	M50876-02	108088-01
C50D / C50E	102001-28	102482-01	HA3003	M30884	NA	HA0313	M29633	M29612-01	HA3007	HA3019	HA3004	M50876-02	098513-20
C50F	102001-28	102482-01	HA3003	M30884	NA	HA0313	M29633	M29612-01	HA3007	HA3019	HA3004	M50876-02	108088-02
C100D	097308-06	102482-01	097528-01	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
C100E / C100F	097308-06	102482-01	HA3003	M51153-01	097061-01	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
C150D / C150E	097308-04	102482-01	HA3003	M17058	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M19630	098513-11
C150F	097308-06	102482-01	HA3003	097293-01	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M51150-01	108088-05

KOEHRING LOW PRESSURE

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
K30	102762-01	102482-01	HA3003	M29678	NA	HA3013	M29633	M29612-01	M29681	HA3019	HA3004	M50876-01	098513-41
K50 / K50A	102762-01	102482-01	HA3003	M30884	NA	HA3013	M29633	M29612-01	M29681	HA3019	HA3004	M50876-01	098513-42
KV60	102001-14	102482-01	HA3003	M28730	107850-01	HA3012	M29633	M29612-01	M26316	HA3019	HA3004	M19630	M27553-04BA
K100	M31316	102482-01	HA3003	M23147	Call	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M19630	098513-04
K100A	097308-06	102482-01	097528-01	M51153-01	097061-1	HA3012	M12179	M12244-1	HA3009	HA3019	HA3004	M51150-01	108088-04
KV125	097308-04	102482-01	HA3003	M27982	Call	HA3012	M12179	M12244-1	HA3009	HA3019	M22456-3 Rotor M8643-3 Blades	079725-03	098513-11
K150	097308-04	102482-01	HA3003	M17058	M12462-6	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	098513-11

QUEEN BEE LOW PRESSURE

Model#	Motor	Transformer/ Ignition Control	Safety/Flame Out	Fan	Relay	Spark Plug / Electrode	Intake Filter	Output Filter	Nozzle	Photo Cell	Rotor Kit	Fuel Filter	Fuel Tank
SB50 / SB50D	M31316	154009**	HA3003	M12431-2	M12462-5	HA3012	M12179	M12244-1	HA3011	HA3019	HA3004	M20371-1	M17016-2
SB66 / SB66D	102001-14	102482-01	HA3003	M25727	107850-01	HA3012	M1217+9	M12244-1	M26313	HA3019	HA3004	M19630	M26224-1B
HB85 / HB85B	M31316	102482-01	HA3003	M14529	M12462-9	HA3012	M12179	M12244-1	100735-05	HA3019	HA3004	M19630	098513-04
HB100 / HB100D	M31316	102482-01	HA3003	M23147	M12462-9	HA3012	M12179	M12244-1	M18048	HA3019	HA3004	M19630	098513-04
BB150 / BB150D	097308-04	102482-01	HA3003	M17058	097061-01	HA3012	M12179	M12244-1	HA3011	HA3019	M22456-3 Rotor M8643-3 Blades	M19630	NLA

**154009 is closest fit

KNIPCO HIGH PRESSURE

Model#	Motor	Transformer	Safety/Flame Out	Fan	Relay	Spark Plug/Electrode	Fuel Filter	Fuel Pump	Nozzle	Photo Cell	Solenoid	Switch: Fan/Limit
F105	M9809-2	M27827-3	M3371	M3979	NA	M3981 (Qty 2)	M51102-01	M18972	M3295	NA	M50077	NA
F125 F125C	M9809-2	M27827-3	M4896	M3243	NA	M3981 (Qty 2)	M51102-01	M18972	M3107	NA	M50077	NA
F150 F150C	M9809-2	M27827-3	M5654	M3243	NA	M3981 (Qty 2)	M51102-01	M18972	M3107	NA	M50077	NA
F155 F155C	M9809-2	M27827-3	M5654	M9928	NA	M3981 (Qty 2)	M51102-01	M18972	M3107	NA	M50077	NA
FV200	M18398	M22827-3	M11231	M11230-1	NA	M3981 (Qty 2)	M51102-01	M18972	M3107	NA	M50077	NA
F220	M18398	M27827-3	M50230	M18878	M20302	M3981 (Qty 2)	M51102-01	M18972	M18876	NA	M50077	NA
F250	M18398	M27827-3	M5654	M6303	NA	M3981 (Qty 2)	M51102-01	M18972	M22626	NA	M50077	NA
F350	099562-01	102482-04	M50230	M50121	NA	HA3012	M51102-01	098560-01	M50112	HA3019	M50077	M51336-02

DART HIGH PRESSURE

Model#	Motor	Transformer	Safety/Flame Out	Fan	Relay	Spark Plug/Electrode	Fuel Filter	Fuel Pump	Nozzle	Photo Cell	Solenoid	Switch: Fan/Limit
DVB250C	M23357-1	M27827-3	M50230	M27555	M20302	M3981 (Qty 2)	M51102-01	M18972	M27828	097059-01	M50077	NA
DB300	M23357-1	M27827-3	M50230	M27555	M21686	M3981 (Qty 2)	M51102-01	M18972	M27828	097059-01	M50077	NA
DB500A	M16006	M27827-3	M50230	M14968	M20302	M3981 (Qty 2)	M51102-01	M18972	M124969	097059-01	M50077	NA
DB600	M16006	M27827-3	M50230	M14968	M20302	M3981 (Qty 2)	M51102-01	M18972	M30765	097059-01	M50077	M51336-02

KOHRING HIGH PRESSURE

Model#	Motor	Transformer	Safety/Flame Out	Fan	Relay	Spark Plug/Electrode	Fuel Filter	Fuel Pump	Nozzle	Photo Cell	Solenoid	Switch: Fan/Limit
KV250	M23357-1	M27827-3	M50230	M23377	M20302	M3981 (Qty 2)	M51102-01	M18972	M25119	097059-01	M50077	NA
K350 K350A	099562-01	102482-04	M50230	M50121	NA	HA3012	M51102-01	098560-01	M50112	HA3019	M50077	M51336-02
K600	099562-02	102482-04	M50230	M50194	NA	HA3012	M51102-01	098560-01	M30765	HA3019	M50077	M51336-02

MASTER HIGH PRESSURE

Model#	Motor	Transformer	Safety/Flame Out	Fan	Relay	Spark Plug/Electrode	Fuel Filter	Fuel Pump	Nozzle	Photo Cell	Solenoid Switch: Fan/Limit
B100 / B100C B100F	M3294	M27827-3	M3374	M3243	M3480	M3268 (Left) M3269 (Right)	M51102-01	M3295	M3292	NA	M3338 NA
B125 / B125C	M3909	M27827-3	M5839	M3243	NA	M3981 (Qty 2)	M51102-01	M18972	M3107	M5654	M50077 NA
B150 / B150C	M9809-2	M27827-3	M4896	M3243	NA	M3981 (Qty 2)	M51102-01	M18972	M9108	M5654	M50077 M5895
B155 / B155A	M9809-2	M27827-3	M11309	M9928	M3480	M3981 (Qty 2)	M3301-1	M18972	M9108	NA	M3296 NA
B155C	M9808	M27827-3	M5653	M9928	M3480	M3981 (Qty 2)	M3301-1	M18972	M9108	M5654	M50077 NA
BV200	M18398	M27827-3	M13675	M11230-1	NA	M3981 (Qty 2)	M51102-01	M18972	M3107	M23802-2	M50077 NA
B220	M18894-2	M27827-3	M50230	M18878	M20302	M3981 (Qty 2)	M3301-1	M18972	M18876	NA	M50077 NA
B220S	M18894-2	M27827-3	M50230	M18878	M20302	M3981 (Qty 2)	M51102-01	M18972	M18876	NA	M50077 NA
BV250	M23357-1	M27827-3	M12657	M23377	M20302	M3981 (Qty 2)	M51102-01	Call	M27828	097059-01	M50077 NA
BV250AS	M23357-1	M27827-3	M50230	M23377	M20302	M3981 (Qty 2)	M51102-01	M18972	M25119	M29935	M50077 NA
B300 B300C	M23357-3	M27827-3	M50230	M23377	M20302	M3981 (Qty 2)	M51102-01	M18972	M25119	M29935	M50077 NA
B300D	M23357-1	M27827-3	M50230	M27555	M20302	M3981 (Qty 2)	M51102-01	M18972	M22626	097059-01	M50077 NA
B320	M6301	M27827-3	NA	M6303	NA	M3981 (Qty 2)	M51102-01	M18972	M22626	NA	M50077 NA
B325A B325AS	M18894-6	M27827-3	M50230	M19458	M20302	M3981 (Qty 2)	M51102-01	M18972	M22626	M29935	M50077 NA
B350 B350A	099562-01	102482-04	M50230	M50121	NA	HA3012	M51102-01	098560-01	M50112	HA3019	M50077 M51336-02
B350B	099562-01	102482-04	HA3003	M50121	097491-01	HA3012	M51102-01	098560-01	M50112	HA3019	M50077 M51336-02
B350D	099562-01	102482-04	HA3003	M50121	097491-01	HA3012	098102-01	098560-01	M50112	HA3019	M50077 M51336-02
SB350D	099562-01	102482-04	HA3003	M50121	097491-01	HA3012	110381-01	098560-02	M50112	M16656-17	M50077 M51336-02
BV400A BV400AS	M16006	M27827-3	M50230	M16050	M20302	M3981 (Qty 2)	M51102-01	M18972	M18303	M29935	M50077 NA
B500 B500A	M16006	M27827-3	M50230	M14968	M20302	M3981 (Qty 2)	098102-01	M18972	M14969	M29935	M50077 NA
B600 B600A	099562-02	102482-04	M50230	M50194	NA	M10962-2	M51102-01	098560-01	M30765	HA3019	M50077 M51336-02
B600B	099562-02	102482-04	HA3003	M50194	097491-01	M10962-2	M51102-01	098560-01	M30765	HA3019	M50077 M51336-02
B600D	099562-02	102482-04	HA3003	M50194	097491-01	M10962-2	098102-01	098560-01	M30765	HA3019	M50077 M51336-02
SB600D	099562-02	102482-04	HA3003	M50194	097491-01	M10962-2	110381-01	098560-02	M30765	104679-01	M50077 M51336-02

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Scheu Oil Fired Heaters

National Riverside made some heaters to fire using a spark plug and others to fire using an electrode. It is important to verify that you have a new style or an old style heater prior to making any kind of service repairs or parts replacement. New style heaters have an octagon cover and old style heaters have a round cover.

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater. You can use the Quick Parts Reference Parts Guide located in the back of this section as an easy way to locate parts. If your model number does not appear in the breakdowns, please refer to the Quick Parts Reference Parts Guide for common replacement parts.

If you need technical assistance, feel free to call **PHP** at **1-800-362-6951**. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service. You may also email your technical service questions to us at techservice@phpdistribution.com.

*National Riverside
Name Brands Include:
All-Pro
Scheu Products
Universal*

HEATER INDEX

BTU Size and Description	Ignition Type	Reset Button	Page No.
50,000 - 150,000 New Style (Octagon cover)	Solid State	Yes	99
100,000 - 150,000 Old Style (Round cover)	Solid State	Yes	100
75,000 - 175,000	Solid State	Yes	101
Quick Parts Reference			102

50-150,000 BTU Scheu Oil Fired Heater

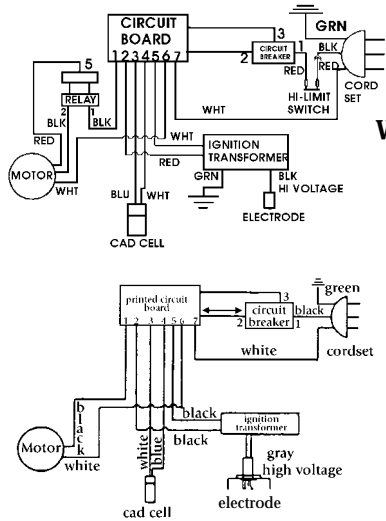
New Style with Octagon Cover & Electrode

Model Numbers

Universal	All Pro
K50FA/T	SPCK50
K100FA/T	SPCK100
K150FA/T	SPCK150

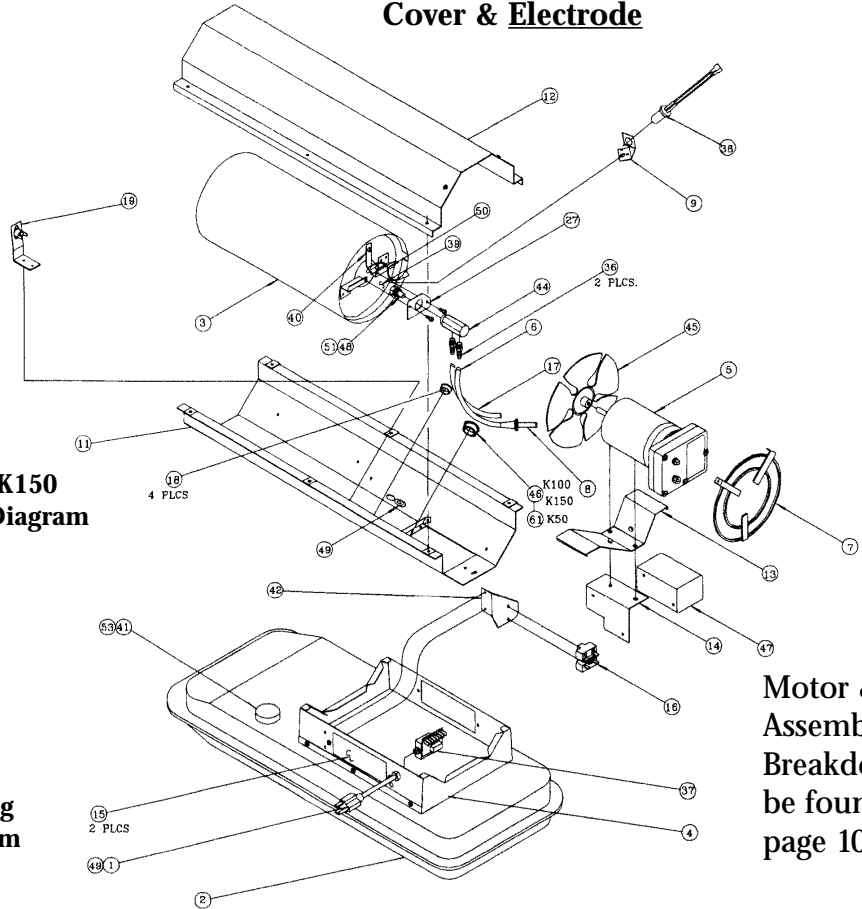
Pump Pressure Settings

BTU	PSI
50	3.6
100	4.25
150	5.25



**K100/K150
Wiring Diagram**

**K50
Wiring Diagram**



Motor & Pump Assembly Breakdown can be found on page 100.

Key No.	50K BTU Part No.	100K BTU Part No.	150K BTU Part No.	Description
1	1036NR	1036NR	1036NR	Power Cord Assembly
2	1676NR	1400NR	1400NR	Fuel Tank Assembly
3	1679NR	1773NR	1783NR	Radiation Shield Assy.
4	1688NR	1779NR	1782NR	Control Box Assembly
5	1682NR	1407NR	1407NR	Power Pac Assembly
6	1686NR	3429NR	3429NR	Fuel Tube
7	1685NR	1771NR	1768NR	Grille Assembly
8	-----	1408NR	1408NR	Fuel Filter Assembly
9	4011NR	4011NR	4011NR	Oil Cad Cell Bracket
11	1756NR	1777NR	3795NR	Bottom Shell
12	3715NR	3822NR	3810NR	Top Shell
13	3704NR	3500NR	3417NR	Motor Mounting Brkt.
14	3705NR	3818NR	3705NR	Ignition Mounting Brkt.
15	-----	3427NR	3427NR	Access Panel
16	-----	6864NR	6864NR	Start Relay
17	3725NR	3430NR	3421NR	Air Tube
18	6225NR	6225NR	6225NR	Snap Bushing
19	1796NR	1797NR	1798NR	High Limit Control Assy.
27	3761NR	3761NR	3761NR	Nozzle Mounting Plate
36	6856NR	6856NR	6856NR	Hose Barb Fitting
37	0854NR	0854NR	0854NR	Oil Flame Cntrl Assy.
38	6865NR	6865NR	6865NR	Cad Cell Flame Snsr.
39	-----	1775NR	1719NR	Comb.Cmbr.Cyl. Assy.

Key No.	50K BTU Part No.	100K BTU Part No.	150K BTU Part No.	Description
40	3843NR	3843NR	3843NR	Electrode Mtg. Brkt.
41	6993NR	6993NR	6993NR	Oil Fuel Cap
42	-----	3423NR	3423NR	Start Relay Brkt.
44	7417NR	7417NR	7417NR	Nozzle Adapter
45	7421NR	6885NR	6866NR	Fan
46	-----	6227NR	6227NR	Snap Bushing
47	2138NR	2138NR	2138NR	Ignitor Assembly
48	7416NR	7538NR	7537NR	Fuel Air Aspir. Nozzle
49	6223NR	6223NR	6223NR	Strain Relief Bushing
50	1803NR	1803NR	1803NR	Electrode Assembly
51	7429NR	7429NR	7429NR	Extrnl. Retaining Ring
53	3487NR	3487NR	3487NR	Fuel Cap Gasket
*	3707NR	-----	-----	Left Side Panel
*	7094NR	-----	-----	Clip Handle Mtg.
*	7095NR	-----	-----	Handle, 3 piece
*	-----	1942NR	1942NR	Knob Assembly
*	-----	2098NR	2098NR	Thermostat Panel Assy.
*	-----	3441NR	3441NR	Bracket Thermostat Mtg.
*	-----	1734NR	1734NR	Thermostat Assembly
*	-----	6070NR	6070NR	Clamp Loop

PARTS AVAILABLE - NOT SHOWN

APOS	Tune-up Kit
HA1180	0-15 P.S.I. Air Gauge
7399NR	Motor for SPCK50FA
6862	Fuel Grommet

Scheu Oil 50-150,000 BTU

100-150,000 BTU Scheu Oil Fired Heater

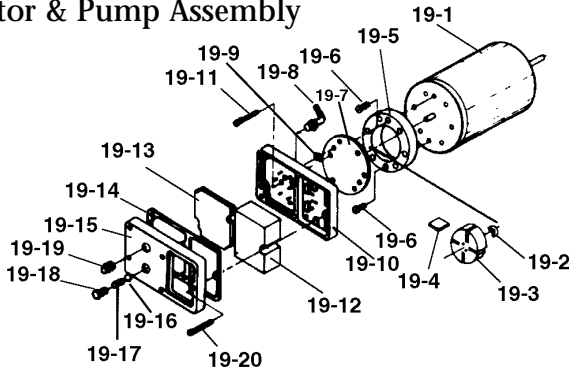
Model Numbers

Universal
K100FA
K150FA

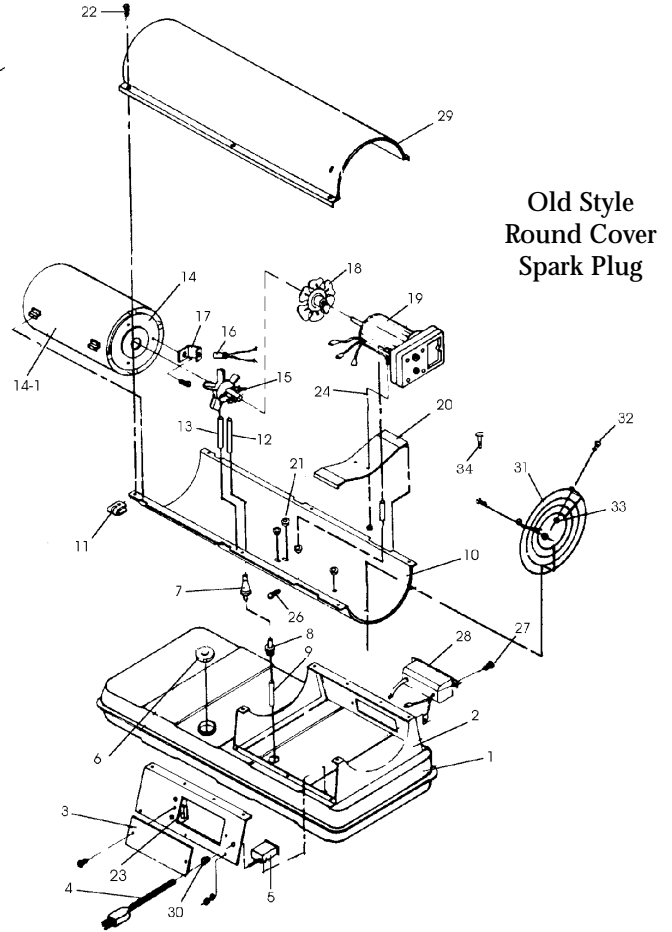
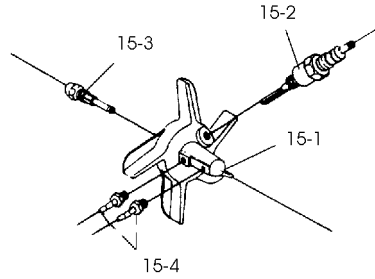
Pump Pressure Settings

BTU	PSI
100	4.25
150	5.25

Motor & Pump Assembly



Burner Assembly



Old Style
Round Cover
Spark Plug

Key No.	K100FA Part No.	K150FA Part No.	Description
1	1400NR	1400NR	Fuel Tank
2	1411NR	1403NR	Control Box
3	3427NR	3427NR	Panel Access
4	1036NR	1036NR	Power Cord
5	6863NR	6863NR	Flame Control Assy
6	6993NR	6993NR	Fuel Cap
7	6861NR	6861NR	Fuel Filter
8	6862NR	6862NR	Bushing, Filter
9	3419NR	3419NR	Hose Suction
10	3575NR	3574NR	Housing Bottom
11	6871NR	6871NR	Nut, U-Type (qty. 6)
12	3429NR	3429NR	Fuel Tube
13	3430NR	3421NR	Air Tube
14	1412NR	1405NR	Comb. Chamber Assy
14-1	1537NR	1536NR	Shield Radiation Assy
15	Burner Assy		
15-1	6883NR	6853NR	Casting
15-2	6855NR	6855NR	Spark Plug
15-3	6884NR	6854NR	Nozzle
15-4	6856NR	6856NR	Fitting, Hose Barb (qty. 2)
16	6865NR	6865NR	Flame Sensor
17	3414NR	3506NR	Bracket, Cad Cell
18	6885NR	6866NR	Fan Blade
19	1407NR	1407NR	Power Pac Assy.
19-1	15434I	15434I	Motor
19-2	6834NR	6834NR	Insert, Nylon
19-3	6831NR	6831NR	Rotor
19-4	6835NR	6835NR	Vanes
19-5	6833NR	6833NR	Cylinder, Air Pump
19-6	6906NR	6906NR	Screw, Machine (qty. 2)
19-7	6832NR	6832NR	Plate, Backing
19-8	6847NR	6847NR	Fitting, Hose Adapt.
19-9	6848NR	6848NR	O-Ring
19-10	6836NR	6836NR	Housing, Lower
19-11	6908NR	6908NR	Screw, Machine (qty. 6)
19-12	6844NR	6844NR	Inlet Filter
19-13	6843NR	6843NR	Outlet Filter

Key No.	K100FA Part No.	K150FA Part No.	Description
19-14	6839NR	6839NR	Gasket
19-15	6837NR	6837NR	Housing, Upper
19-16	6850NR	6850NR	Relief Ball
19-17	6851NR	6851NR	Spring
19-18	6842NR	6842NR	Adjusting Screw
19-19	6849NR	6849NR	Plug
19-20	6838NR	6838NR	Screw (qty. 5)
20	3437NR	3417NR	Bracket, Motor
21	6225NR	6225NR	Bushing, Snap (qty. 4)
22	6447NR	6447NR	Screw, Tapping (qty. 6)
23	6864NR	6864NR	Relay, Start
24	6048NR	6048NR	Lock Nut
26	6014NR	6014NR	Screw, Tapping
27	6015NR	6015NR	Screw, Tapping
28	154009	154009	Transformer
	3818NR	3818NR	Mounting Plate
29	3495NR	3495NR	Housing Top
30	6223NR	6223NR	Bushing, Strain Relief
31	7097NR	7096NR	Grille
32	6021NR	6021NR	Screw (qty. 3)
33	6037NR	6037NR	Nut (qty. 3)
34	NLA	NLA	Screw

PARTS AVAILABLE - NOT SHOWN

HA1180 0-15 P.S.I. Air Gauge

Scheu Oil 100-150,000 BTU

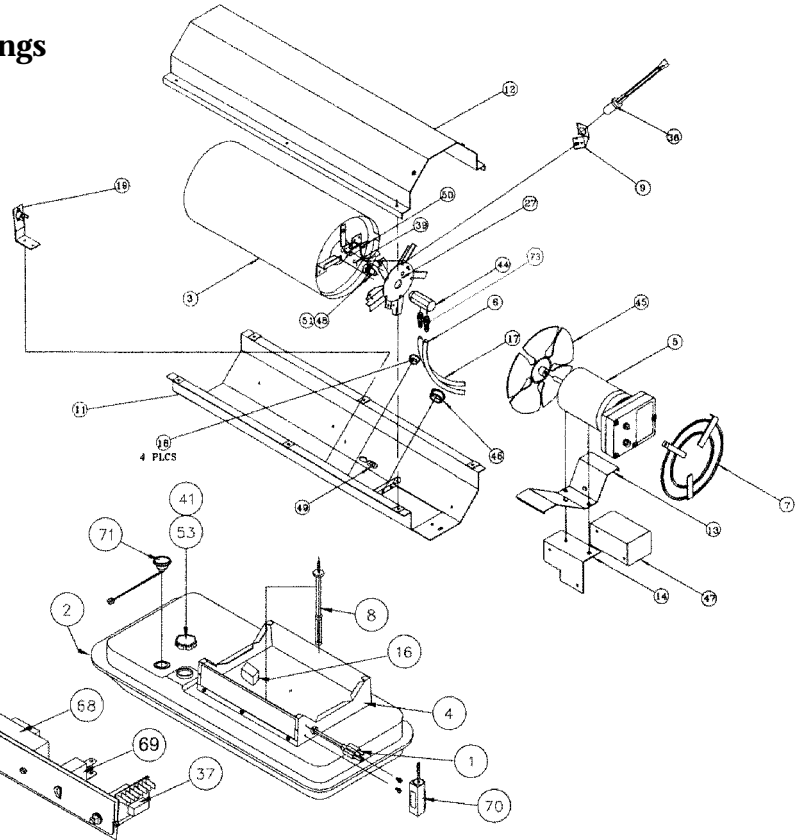
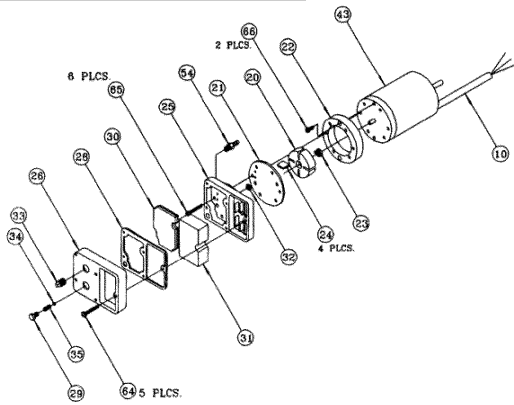
75-175,000 BTU Scheu Oil Fired Heater

Model Numbers

Universal	All-Pro
K75	SPCK75
K125	SPCK125
K175	SPCK175

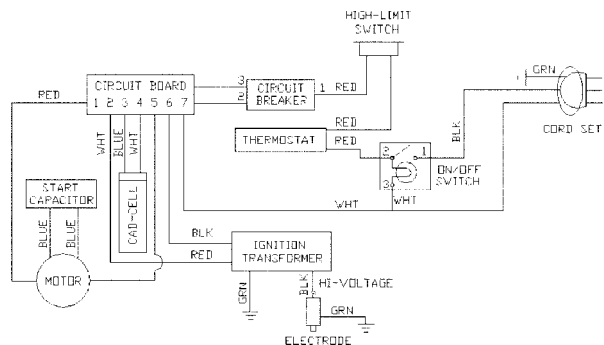
Pump Pressure Settings

BTU	PSI
75	3.9
125	5.0
175	5.75



Key No.	K75 Part	K125 Part	K175 Part	Description
1	1036NR	1036NR	1036NR	Power Cord
2	2213NR	2214NR	2214NR	Fuel Tank Assembly
3	2215NR	2216NR	1783NR	Radiation Shield Ass'y
4	2217NR	2218NR	2219NR	Control Box Ass'y
5	2258NR	2259NR	2259NR	Power Pac Ass'y
6	1686NR	4346NR	4346NR	Fuel Tube
7	8734NR	1771NR	1768NR	Grille Assembly
8	8779NR	8780NR	8780NR	Fuel Filter Assy
9	4011NR	4011NR	4011NR	Oil Cad Cell Bracket
10	3449NR	3449NR	3449NR	Motor Cord Sleeve
11	2223NR	1777NR	3795NR	Bottom Shell (Universal)
11-1	2224NR	1805NR	3846NR	Bottom Shell (All-Pro)
12	2225NR	3822NR	3810NR	Top Shell (Universal)
12-1	2226NR	3845NR	3847NR	Top Shell (All-Pro)
13	4332NR	4333NR	4334NR	Motor Mounting Bracket
14	3705NR	3818NR	3705NR	Ignition Mounting Brkt
16	8735NR	8735NR	8735NR	Start Capacitor
17	3725NR	4345NR	4345NR	Air Tube
18	6225NR	6225NR	6225NR	Snap Bushing
19	1796NR	1797NR	1798NR	High Limit Control
20	6831	6831	6831	Rotor Kit (includes #6834,6835)
21	6832NR	6832NR	6832NR	Backing Plate
22	6833NR	6833NR	6833NR	Air Pump Cylinder
23	6834	6834	6834	Nylon Air Pump Insert
24	6835	6835	6835	Air Pump Vane (4 ea.)
25	6836NR	6836NR	6836NR	Lower Housing
26	6837NR	6837NR	6837NR	Upper Housing
27	2257NR	2257NR	2257NR	Burner
28	6839NR	6839NR	6839NR	Gasket
29	6842NR	6842NR	6842NR	Adjusting Screw
30	6843NR	6843NR	6843NR	Outlet Filter
31	6844NR	6844NR	6844NR	Inlet Filter
32	6848NR	6848NR	6848NR	O Ring
33	6849NR	6849NR	6849NR	Nylon Pipe Plug
34	6850NR	6850NR	6850NR	Relief Ball, 1/4" Dia.
35	6851NR	6851NR	6851NR	Spring, 24 O.D. x .58
37	0854NR	0854NR	0854NR	Oil Flame Control Assembly
38	6865NR	6865NR	6865NR	Cad Cell Flame Sensor
39	2232NR	2233NR	2234NR	Comb. Chamber Cyl. Ass'y
41	6993C	6993C	6993C	Oil Fuel Cap
43	8737NR	8738NR	8738NR	Motor, 1/4 HP
44	7790NR	8739NR	8739NR	Nozzle Adapter
45	8740NR	6885NR	6866NR	Fan
46	-----	6227NR	6227NR	Snap Bushing
47	2138NR	2138NR	2138NR	Ignitor Assembly
48	8715NR	8714NR	8710NR	Fuel Air Aspir. Nozzle

Key No.	K75 Part	K125 Part	K175 Part	Description
49	6223NR	6223NR	6223NR	Strain Relief Bushing
50	1803NR	2235NR	2235NR	Electrode Assembly
51	7429NR	7429NR	7429NR	Extrnl. Retaining Ring
53	3487NR	3487NR	3487NR	Fuel Cap Gasket
54	8744NR	8744NR	8744NR	Hose Barb Adapter
*	8745NR	6862NR	6862NR	Fuel Filter Bushing
64	6838NR	6838NR	6838NR	Screw, Tapping #9 x 1-1/4"
65	6908NR	6908NR	6908NR	Screw, Machine #10 x 1-1/4"
66	6906NR	6906NR	6906NR	Screw, Machine #10 x 1/2"
67	1942NR	1942NR	1942NR	Thermostat Knob
*	3441NR	3441NR	3441NR	Bracket Thermostat Mtg.
68	1734NR	1734NR	1734NR	Thermostat Assembly
*	6070NR	6070NR	6070NR	Clamp Loop
69	8785NR	8785NR	8785NR	ON/OFF Switch
70	8782NR	8781NR	8781NR	Pressure Gauge
71	8778NR	8778NR	8778NR	Fuel Gauge
72	4341NR	4342NR	4342NR	Access Panel
73	-----	8783NR	8783NR	Hose Barb Adaptor



Scheu Oil 75-175,000 BTU

Scheu Quick Parts Reference Low Pressure Oil

Model#	Motor	Power Pack	Transformer	Fan Blade	Relay/Capacitor	Spark Plug/Electrode	Nozzle	High Limit	Thermostat	Other
K50FA (1994 ON)	7399NR	1682NR	2138NR & 3705NR Mig Plate	7421NR	NA	1803NR Electrode	7416NR	1796NR	NA	7417NR Nozzle Adapter 1685NR Grill Assy 1676NR Fuel Tank
SPCK75 K75 (2003)	8737NR	2258NR	2138NR	8740NR	8735NR Capacitor	2235NR Electrode	8741NR	1796NR	1734NR	8778NR Fuel Gage 8782NR Pressure Gage 8785NR On/Off Switch
K100FA (Pre 1994)	6841NR	1407NR	2138NR & 3818NR Mig Plate	6885NR	6882NR Relay	6855NR Plug	6884NR	NA	NA	Round Shell Model 7417NR Nozzle Adapter 6869NR Wheel (Qty 2)
SPCK100FAS (Post 1994)	6841NR	1407NR	2138NR	6885NR	6882NR Relay	1803NR Electrode	7538NR	1797NR	NA	Octagon Shell 6869NR Wheel (Qty 2) 7417NR Nozzle Adapter
SPCK100FAT	6841NR	1407NR	2138NR	6885NR	6882NR Relay	1803NR Electrode	7538NR	1797NR	1734NR	1400NR Fuel Tank 1942NR Thermostat Knob 6869NR Wheel (Qty 2)
SPCK125 K125 (2003)	8738NR	2259NR	2138NR	6865NR	8735NR Capacitor	2235NR Electrode	8742NR	1797NR	1734NR	8785NR On/Off Switch 8781NR Pressure Gage 8778NR Fuel Gage
K150FA (Pre 1994)	6841NR	1407NR	2138NR & 3705NR Mig Plate	6866NR	6868NR Relay	6855NR Plug	6854NR	NA	NA	6869NR Wheel (Qty 2) 1696NR Grill Assy 1412NR Combustion Chamber
SPCK150FAS (Post 1994)	6841NR	1407NR	2138NR	6866NR	6868NR Relay	1803NR Electrode	7537NR	1798NR	NA	7417NR Nozzle Adapter 6869NR Wheel (Qty 2) 1768NR Grill Assy
SPCK150FAT	6841NR	1407NR	2138NR	6866NR	6868NR Relay	1803NR Electrode	7537NR	1798NR	1734NR	1942NR Thermostat Knob 7417NR Nozzle Adapter 6869NR Wheel (Qty 2)
SPCK175 K175FAT (2003)	8738NR	2259NR	2138NR	6866NR	8735NR Capacitor	2235NR Electrode	8743NR	1798NR	1734NR	8785NR On/Off Switch 8781NR Pressure Gage 8778NR Fuel Gage

All Of The Above Scheu Kerosene Heaters Have These Popular Parts In Common:
6863NR Safety Control, 6865NR Photo Cell, 6831NR Rotor, 6835NR Blades (Set of 4),
6844 Intake Filter, 6843 Output Filter, 6839 Pump Gasket, and 6861 Fuel Filter

Scheu Quick Parts Reference High Pressure Oil

Model#	Motor	Transformer	Safety/Flame Control	Fan	Relay	Electrode	Nozzle	Pump	Fuel Filter	Other
K150FAI	8428NR	8444NR	8440NR	8424NR	8446NR	8436NR	8437NR	8432NR	8449NR	8439NR Flame Sensor 8426NR Capacitor, 8441NR Switch, 8477NR Aftercooling Thermostat 8452NR Fuse, 8430NR Coupling
K275FAI	8429NR	8444NR	8440NR	8425NR	8446NR	8436NR	8438NR	8433NR	8449NR	8439NR Flame Sensor 8427NR Capacitor, 8442NR Switch, 8477NR Aftercooling Thermostat 8448NR Fuse, 8431NR Coupling
K350FAT	7939NR	2052NR	6863NR	7954NR	7944NR	7788NR	7950NR	7941NR	7942NR	6865NR Photocell 2061NR Solenoid Valve 7949NR Fan Switch 7951NR Wheel (Qty 2)
K650FAT	7939NR	2052NR	6863NR	7940NR	7944NR	7788NR	7945NR	7941NR	7942NR	6865NR Photocell 2061NR Solenoid Valve 7494NR Fan Switch

Toro Portable Heaters

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater.

If you need technical assistance, feel free to call **PHP** at **1-800-362-6951** or e-mail us at **techservice@phpdistribution.com**. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service.

Toro Name Brands Include:

Ace	Guardian
Agway	Huskee
Allis	Jim Dandy
Chalmers	Lawn Boy
Arctic Heat	Little Champ
Central	Montgomery
Tractor	Ward
Century	Mr. Heat
Champion	Porta Heat
Farm Heat	Red Line
Five Points	Stone
Ford	Toro
Gilson	Wheatbelt
Green Line	

HEATER INDEX

BTU Size and Description	Fuel Type	Page Number
40,000 Made prior to 1992	Kerosene	104
40,000 Made in 1992-1993	Kerosene	104
55,000 Made in 1992-1993	Kerosene	104
55,000 Made prior to 1992	Kerosene	106
60,000 Old Style IEF Series Model #I60EF	Kerosene	105
97,000 Old Style IEF Series Model #I101EF	Kerosene	105
100,000 Model	Kerosene	106
120,000 Air Scoop Transformer Flips to left	Kerosene	112
150,000 Old Style IEF Series Model #I151EF	Kerosene	105
150,000 Model	Kerosene	106
155,000 Air Scoop Transformer flips to the Left	Kerosene	112
155,000 Air Scoop Transformer flips to the Rear	Kerosene	114
230,000 Air Scoop Transformer flips to the Left	Kerosene	112
230,000 Air Scoop Transformer flips to the Rear	Kerosene	114
Motor/Compressor Assembly		108-109
Toro Replacement Parts		18
Toro Service Information		16
Toro Troubleshooting		17

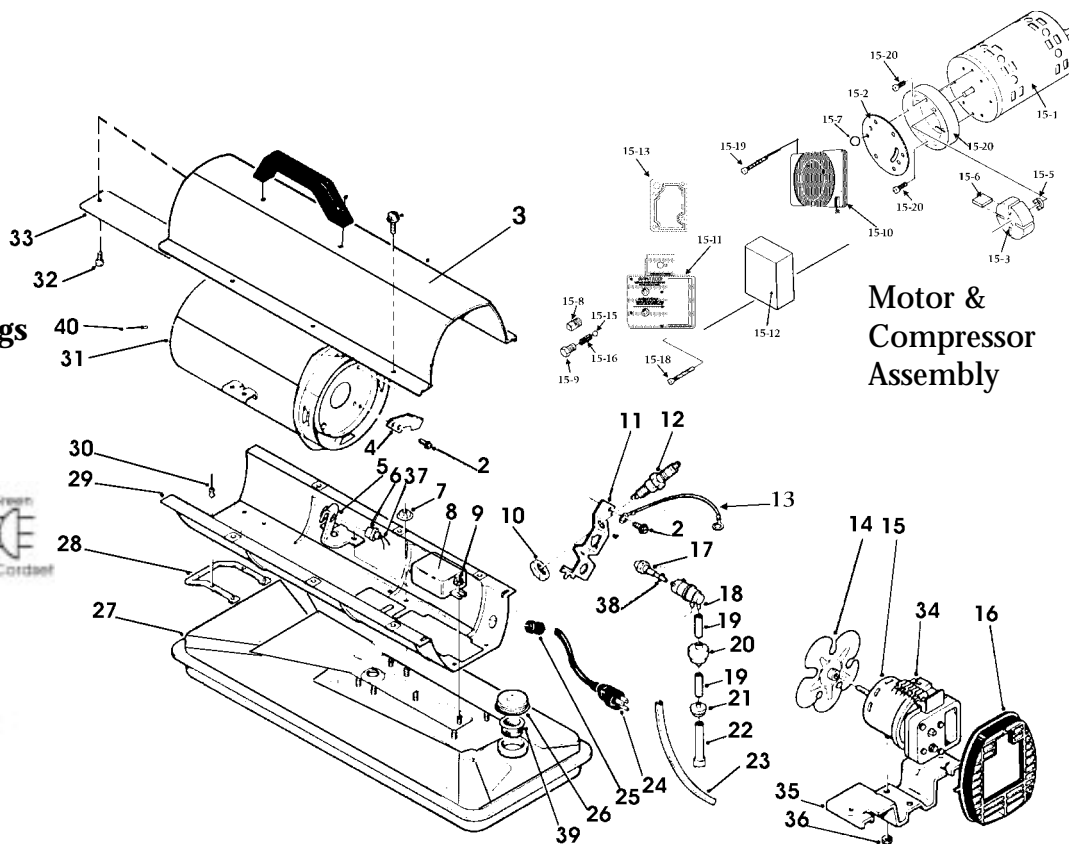
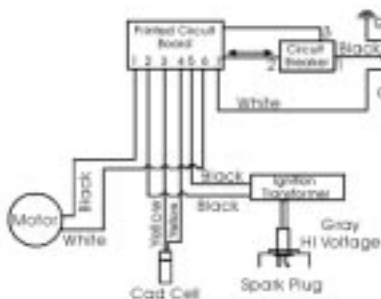
40-55,000 BTU Forced Air Toro Heaters (1992-1993)

Model Number

Toro
53400
53401
53412

Pump Pressure Settings

BTU	PSI
40	3.0
55	4.1



Motor & Compressor Assembly

Key No.	Part No.	Description	Key No.	Part No.	Description
1	148538	Handle	28	148650	Front Guard
2	147000	Screw	29	148586	Lower Jacket
3	148585	Jacket, Upper	30	702365	Rivet
4	148552	Deflector, Rear Head	31	154884	Combustion chamber & heat shield Assy
5	148684	Cad Cell bracket	32	148547	Screw
6	154874	Cad Cell Assy	33	148540	Handle Support
7	148539	Nut	34	154348	P.C. Board w/Breaker Assy
8	73-7100	Transformer - NLA	35	148531	Motor Mount
9	147158	Nut	36	147004	Nut
10	147635	Spark Plug Nut	37	154877	Wire Assembly
11	148545	Bracket, Nozzle Plug	38	147082	O-Ring
12	148544	Spark Plug (RN13LYC5)	39	154685	Strainer-Fuel (Optional)
13	154930	Ground Wire Assy	40	147083	Rivet
14	154900	Fan Assembly (40,000 BTU)	MOTOR & COMPRESSOR ASSEMBLY		
	154929	Fan Assembly (55,000 BTU)	15-1	154876	Motor 1/15 H.P., 115V 60Hz
15	154879	Compressor & Motor Assy	15-2	154797	Backing Plate
16	148537	Grille	15-3	73-6420	Rotor 5/8"
17	154027	Nozzle Assembly (40,000 BTU)	15-4	147003	Body Ring 5/8"
	154881	Nozzle Assembly (55,000 BTU)	15-5	73-6430	Insert (Black)
18	148530	Nozzle Adapter Kit	15-6	154616	Vane 5/8" (Set of 4)
19	148648	Hose, Fuel Line	15-7	73-6440	O-Ring
20	148647	Fuel Filter	15-8	147009	Plug 1/4 NPT
21	148546	Grommet	15-9	147010	Adjusting Screw
22	148645	Pickup Tube (40,000 BTU)	15-10	148420	Filter Housing-Bottom
	148646	Pickup Tube (55,000 BTU)	15-11	148419	Filter Housing-Top
23	148649	Hose-Air Line	15-12	148442	Input Filter
24	154878	Power Cord Assembly	15-13	154822	Output Filter Kit
25	147053	Strain Relief	15-15	147022	Relief Ball
26	154021	Fuel Cap (includes 148317 fuel gasket)	15-16	147021	Relief Spring
27	154867	Fuel Tank Assy (40,000 BTU)	15-18	148233	Screw (qty. 4)
	154868	Fuel Tank Assy (55,000 BTU)	15-19	148394	Screw

60, 97, 150,000 BTU Forced Air Toro Heaters (Older Style "Champion" Heaters)

Toro Oil 60-150,000 BTU

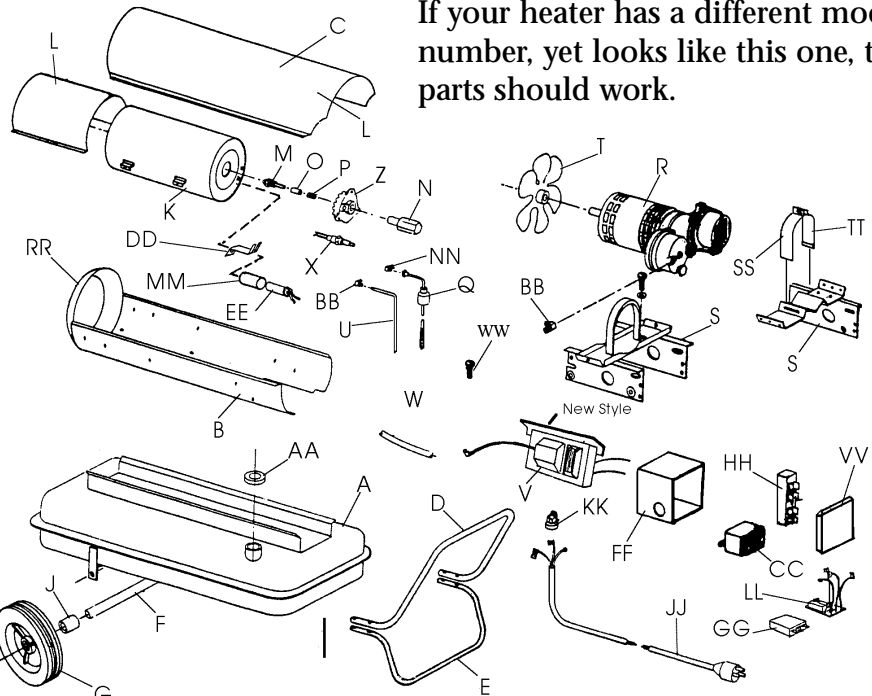
Model Numbers

Toro
I-60EF Inline
I-101EF Inline
I-151EF Inline

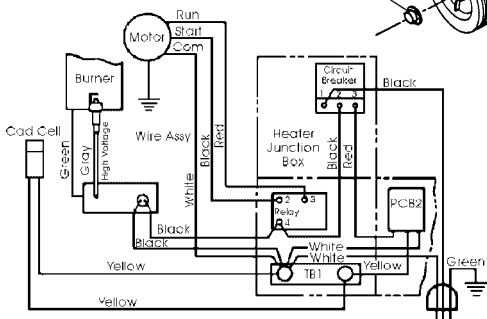
PSI Setting

I60EF	4
I101EF	5
I151EF	5

If your heater has a different model number, yet looks like this one, these parts should work.

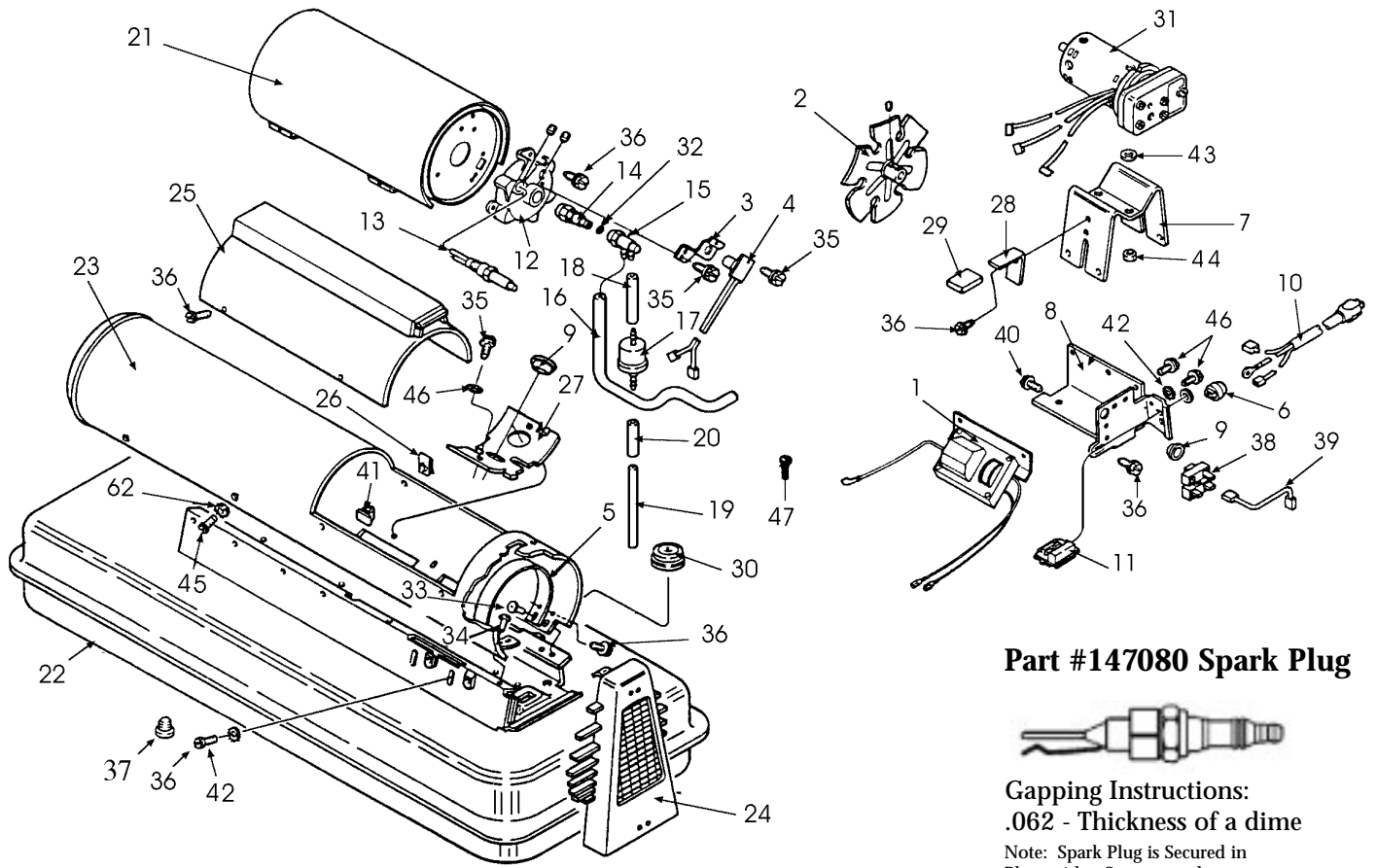


See page 108 for Compressor Assembly Parts.



Heater Size	60,000 btu	97,000 btu	150,000 btu	Heater Size	60,000 btu	97,000 btu	150,000 btu		
Ref	Possible Model	I-60EF	I-101EF	I-151EF	Ref	Possible Model	I-60EF	I-101EF	I-151EF
No.	Description	Part No.	Part No.	Part No.	No.	Description	Part No.	Part No.	Part No.
A	Tank Assembly	154371	154372	154372	W	Insulator	222924	222924	222924
B	Jacket Bottom Ay	220567	154437	220569	X	Spark Plug	147080	147080	147080
C	Jacket Top	147752	147756	147754	Z	Burner	147730	147769	147769
D	Handle	147775	147123	147123	AA	Fuel Cap	154021	154021	154021
E	Front Support	147735	147761	147761	BB	1/4 CC x 1/8 IP Elbow	147014	147014	147014
F	Axle	147776	147122	147122	CC	Relay	154600	154600	154383
G	Wheel	154902	154902	154902	DD	Cad Cell Bracket	147699	147699	147699
H	Push Nut	147157	147157	147157	EE	Cad Cell	154709	154709	154709
J	Spacer	147688	147688	147688	FF	Junction Box Ay.	154514	154514	154514
K	Combustion Chamber	154022	73-8620	154055	GG	Reset Breaker	154012	154012	154012
L	Com. Cham. Shield	N/A	N/A	154382	HH	Terminal Block	154502	154502	154502
M	Nozzle	147862	147863	147840	JJ	Cord Assembly	154423	154423	154423
N	Nozzle Adapter	147798	147798	147798	KK	Strain Relief	147921	147921	147921
O	Nozzle Seal	154603	154603	154603	LL	Circuit Board	154361	154361	154361
P	Nozzle Seal Spring	147692	147692	147692	MM	Hood	147367	147367	147367
Q	Fuel Lift Tube Ay.	154512	154364	154364	NN	1/4 FL x 1/8 IP Elbow	219999	219999	219999
R	Motor & Comp Ay.	See page 108			SS	Strap Assembly	221894	221894	222010
S	Motor Mount	154511	154511	222126	TT	Strap	221895	221895	222009
T	Fan	154023	154032	154043	UU	Cover Plate	N/A	N/A	N/A
U	Air Line	147799	147800	147802	VV	Cover, Junction Box	147922	147922	147922
V	Transformer	154009	154009	154009	WW	Screw	N/A	N/A	N/A

40-150,000 BTU Forced Air Toro Heater



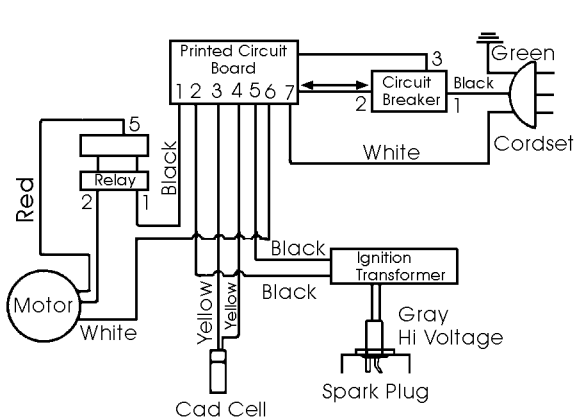
Part #147080 Spark Plug



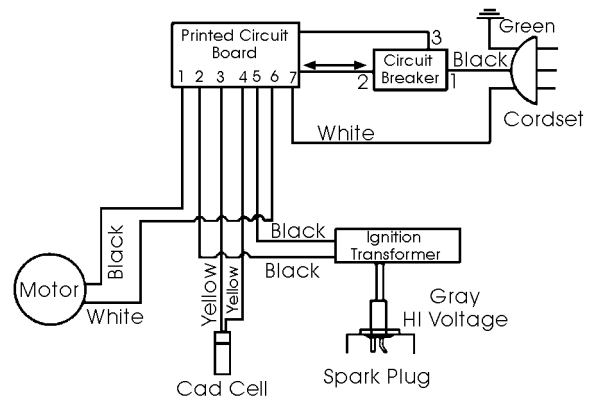
Gapping Instructions:
 .062 - Thickness of a dime
 Note: Spark Plug is Secured in Place with a Setscrew only.
 Line up red mark on plug with notch on burner head.

See page 108 for motor/pump assembly

Wiring Diagram 97,000 - 150,000 BTU 1986 - Current



Wiring Diagram 40,000 & 55,000 BTU 1986 - Current



40,000 to 150,000 Toro Heater Parts Listing

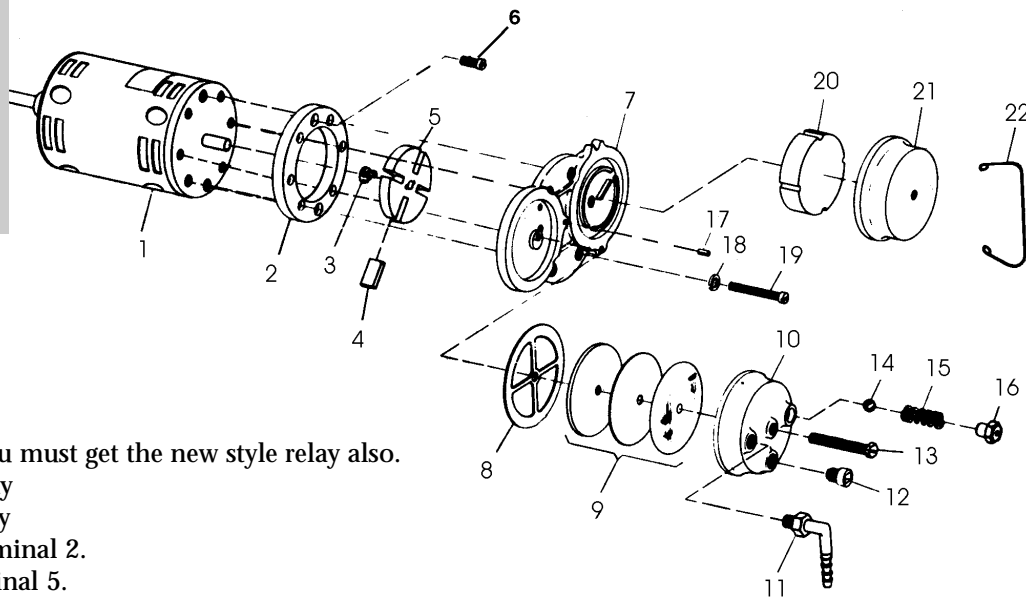
Key No.	Part No.	Description	Key No.	Part No.	Description
1	154009	Transformer	26	147025	Clip, Tinnerman
2	154006	Fan (40,000 BTU)	27	147049	Insert
	154023	Fan (55,000 BTU)	28	147001	Jacket Brace (40,000 BTU)
	154032	Fan (97-100,000 BTU)		147120	Jacket Brace (55-100,000 BTU)
	154043	Fan (150,000 BTU)		147133	Jacket Brace (150,000 BTU)
3	147028	Cad Cell Bracket	29	147002	Grip, Jacket Brace
4	154709	Cad Cell	30	154021	Cap, Tank
5	147047	Fan Guard (40,000 BTU)	31	Motor/Compressor Assembly (available as parts only)	
	147098	Fan Guard (55-100,000 BTU)		See page 109 for individual part numbers	
	147153	Fan Guard(150,000 BTU)		154368	40,000-55,000 BTU
6	147053	Strain Relief Bushing		154345	100,000 B TU
7	147005	Motor Mount		154342	150,000 BTU
8	73-6460	Transformer Mount	32	147082	Nozzle "O" Ring
9	147054	Bushing	33	700218	Rivet
10	154008	Cord Assembly	34	146489	Rivet
11	154348	Printed Circuit Board with Breaker	35	147024	Cap Screw, #8 x 3/8"
12	154019	Burner with Set Screw	36	147000	Cap Screw, #10-24 x 1/2"
13	147080	Spark Plug	37	154796	Drain Plug (100-150,000 BTU Only)
14	154027	Nozzle (40,000 BTU)	38	154039	Relay (Black Motor - 100,000 BTU)
	154028	Nozzle (55,000 BTU)		154600	Relay (Gray Motor - 100,000 BTU)
	154030	Nozzle (100,000 BTU)		154052	Relay (Black Motor - 150,000 BTU)
	154060	Nozzle (150,000 BTU)		154383	Relay (Gray Motor - 150,000 BTU)
15	147081	Nozzle Adapter	39	154040	Wire Assembly
16	73-6520	Airline	40	147118	Screw, Hex Head #8 x 3/8"
17	147046	Fuel Filter	41	147229	Super Clip (150,000 BTU Only)
18	73-6520	Upper Fuel Tube	42	147119	Washer, Ext Tooth lock #10
19	73-6450	Copper Fuel Tube (40-55,000 BTU)	43	700324	Washer, Flat SAE 1/4-20
	147126	Copper Fuel Tube (100-150,000 BTU)	44	147004	Nut, Ext Tooth Lock #8
20	147038	Lower Fuel Tube	45	147041	Washer, Ext Tooth Lock #8
21	154020	Combustion Chamber (40,000 BTU)	46	146502	Washer
	154022	Combustion Chamber (55,000 BTU)	47	NLA	Screw
	154031	Combustion Chamber (100,000 BTU)		Parts Available Not Shown	
	154055	Combustion Chamber (150,000 BTU)		154423	6' Power Cord
22	154138	Tank Assembly w/Decal (40,000 BTU)		154902	Wheels (100,000 & 150,000 BTU Only)
	154141	Tank Assembly w/Decal (55,000 BTU)		147122	Axle (100,000 & 150,000 BTU Only)
	154140	Tank Assembly w/Decal (100,000 BTU)		147157	Pushnut for wheel
	154139	Tank Assembly w/Decal (150,000 BTU)			(100,000 & 150,000 BTU Only)
23	154017	Jacket Assembly (40,000 BTU)		147123	Top Handle(100,000 & 150,000 BTU Only)
	154024	Jacket Assembly (55,000 BTU)		147125	Tank Support (100,000 & 150,000 BTU Only)
	154034	Jacket Assembly (100,000 BTU)		147121	Screw for handle
	154453	Jacket Assembly (150,000 BTU)			(100,000 & 150,000 BTU Only)
24	73-7030	Grille Assembly (40,000 BTU)		147158	Nut for handle (100,000 & 150,000 BTU Only)
	73-7010	Grille Assembly (55,000 & 100,000 BTU)		HA1210	Thermostat - Degrees on Dial
	73-7020	Grille Assembly (150,000 BTU)		KT121	Thermostat - Warmer/Colder
25	154131	Access Cover w/Label (Red 40,000 BTU)			
	154135	Access Cover w/Label (Red 55,000 BTU)			
	154137	Access Cover w/Label (Green 100,000 BTU)			
	154130	Access Cover w/Label (Lawn Boy Green 100 BTU)			
	154131	Access Cover w/Label (Red 100,000 BTU)			
	154129	Access Cover w/Label (Silver 100,000 BTU)			
	154137	Access Cover w/Label (Green 150,000 BTU)			
	154130	Access Cover w/Label (Lawn Boy Green 150 BTU)			
	154409	Access Cover w/Label (Red 150,000 BTU)			
	154129	Access Cover w/Label (Silver 150,000 BTU)			

Air Pressure Settings	
BTU	PSI
40-55,000	3
100,000	5.5
150,000	6.25

Replacement parts for Motor/Compressor Assembly (Old Style)

Possible Brands

Champion, Redline
Century, Greenline
Stone, Ford
Jim Dandy



If you order a new motor, you must get the new style relay also.

154369 motor = 154039 relay

154341 motor = 154052 relay

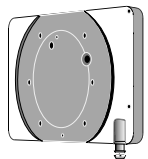
Black motor wire goes to terminal 2.

Red motor wire goes to terminal 5.

The new relay is position sensitive, make sure top is up.

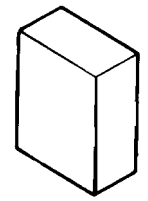
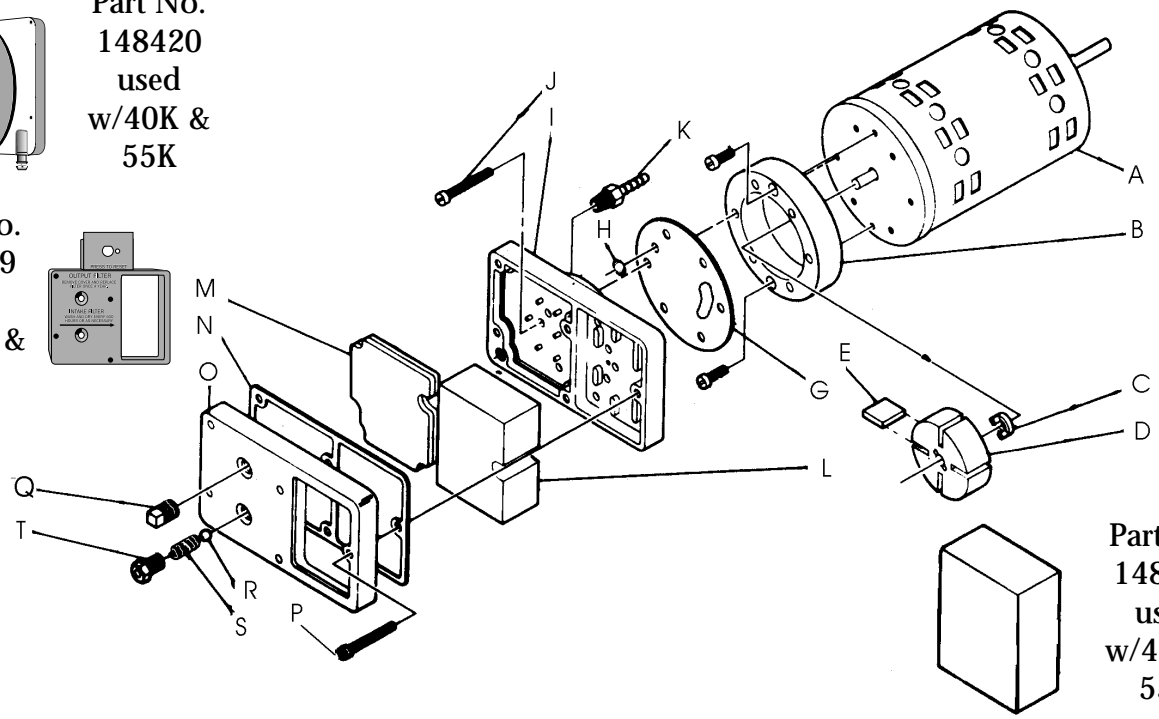
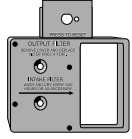
Key No.	Part No.	Description	BTU SIZES			
			40	60	94-97	150
1	154876	Motor (40)	X			
	154369	Motor (60-97,000)		X	X	
	154341	Motor (150)				X
2	147753	Body Ring 1/2"		X	X	
	147003	Body Ring 5/8"	X			X
3	73-6430	Insert	X	X	X	X
4	154616	Vane 5/8"	X			X
	154598	Vane 1/2"		X	X	
5	147757	Rotor 1/2"		X	X	
	73-6420	Rotor 5/8"	X			X
6	FHPF3-5C	1/2" Screw		X	X	
	FHPF3-6C	5/8" Screw	X			X
7	154601	Cover Plate	X	X	X	X
8	147693	Gasket	X	X	X	X
9	154467	Filter	X	X	X	X
10	147837	Filter Body	X	X	X	X
11	147014	Elbow	X	X	X	X
12	147009	Plug	X	X	X	X
13	147814	Screw	X	X	X	X
14	147022	Ball	X	X	X	X
15	147021	Spring	X	X	X	X
16	147010	Adjusting Screw	X	X	X	X
17	147778	Pin	X	X	X	X
18	70641	Washer	X	X	X	X
19	148394	Screw	X	X	X	X
20	147790	Filter	X	X	X	X
21	147731	Cover	X	X	X	X
22	147779	Retaining Wire	X	X	X	X

Motor/Compressor Assembly (New Style)

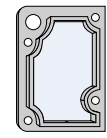


Part No.
148420
used
w/40K &
55K

Part No.
148419
used
w/40K &
55K



Part No.
148442
used
w/40K &
55K



Part No. 154822-Kit
used w/40K & 55K

Key No.	Part No.	Description	BTU SIZES					
			40	55	75	94-97	100	150/220
A	154367	Motor	X	X				
	154369	Motor			X	X	X	
	154341	Motor						X
B	147753	Body Ring 1/2"			X	X		
	147003	Body Ring 5/8"	X	X			X	X
C	73-6430	Insert	X	X	X	X	X	X
D	147757	Rotor 1/2"			X	X		
	73-6420	Rotor 5/8"	X	X			X	X
E	154616	Vane (set of 4) 5/8"	X	X			X	X
	154598	Vane (set of 4) 1/2"			X	X		
G	154797	Backing Plate	X	X	X	X	X	X
H	73-6440	O Ring	X	X	X	X	X	X
I	148234	Filter Housing	X		X	X	X	X
	148420	Filter Housing		X				
J	148394	Screw	X	X	X	X	X	X
K	147052	Adapter	X	X	X	X	X	X
L	147019	Input Filter	X	X	X	X	X	X
M	154003	Output Filter	X		X	X	X	X
	154822	Output Filter		X				
N	147012	Gasket	X	X	X	X	X	X
O	148115	Filter Cover	X	X	X	X	X	X
	148419	Filter Cover	X	X				
P	148233	Screw	X	X	X	X	X	X
Q	147009	Plug	X	X	X	X	X	X
R	147022	Ball	X	X	X	X	X	X
S	147021	Spring	X	X	X	X	X	X
T	147010	Adjusting Screw	X	X	X	X	X	X

Toro/Porta Heat Filter Assembly

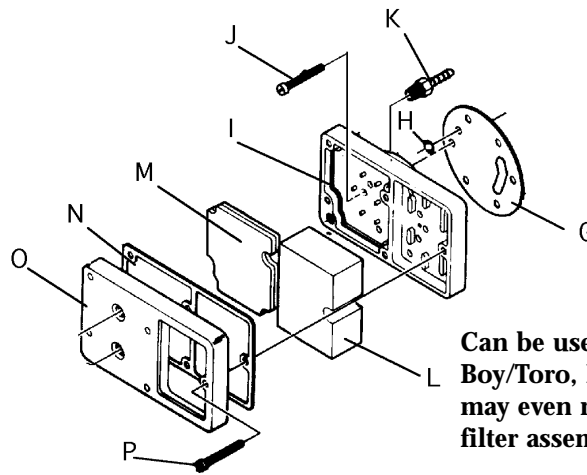
Other brands:

Champion, Gilson, Redline,
Green Line, Arctic Flame,

Filter Assembly Kit No. 154354

Kit includes:

Key No.	Part No.	Description
G	154797	1 Backing Plate
H	73-6440	1 O-Ring
I	148234	1 Filter Housing
J	148394	6 Screw
K	147052	1 Adapter
L	147019	1 Input Filter
M	154003	1 Output Filter
N	147012	1 Gasket
O	148115	1 Filter Cover
P	148233	5 Screw



Can be used on most Lawn Boy/Toro, Low Pressure heaters. It may even replace the older style filter assembly

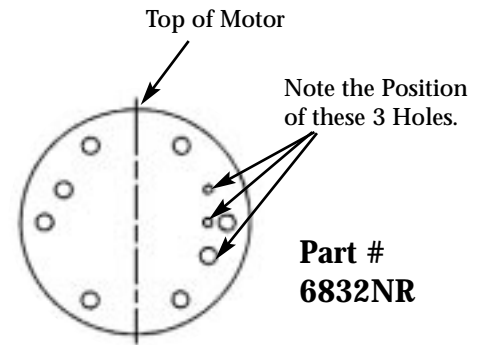
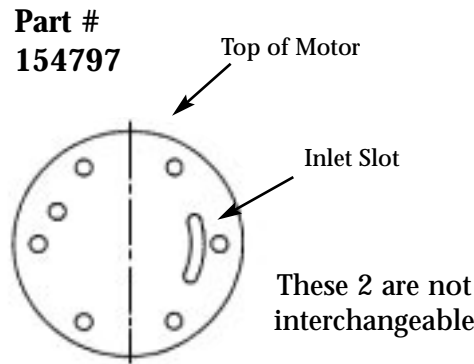
Tune Up Kit Part No. 154891

Kit includes:

1	147080	Spark Plug
1	147082	Nozzle O Ring
1	147012	Gasket
1	147019	Input Filter
1	154003	Output Filter

Position of new backing plate.

Position of old backing plate.

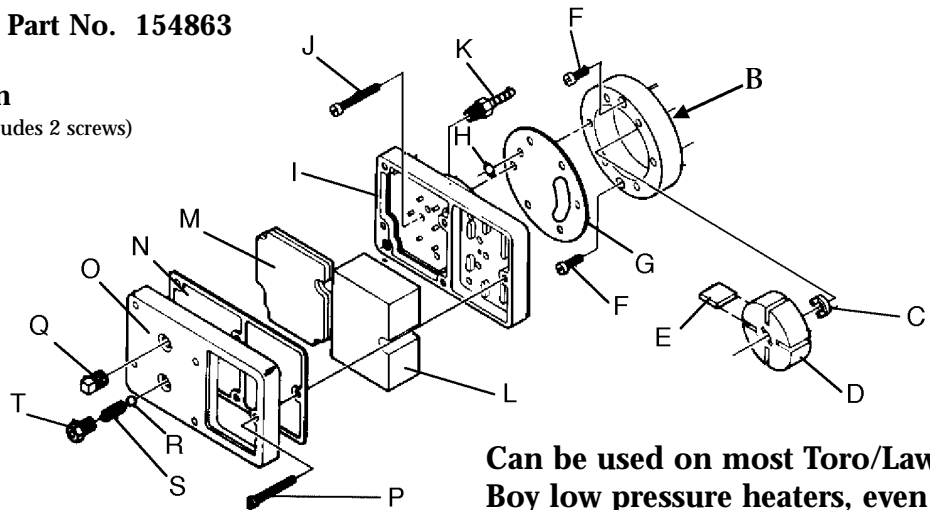


Use w/backing plate #148234

Use w/backing plate #6836NR

Complete Compressor Assembly Part No. 154863

Key No.	Part No.	Description
B	147753	1 Body Ring (includes 2 screws)
C	73-6430	1 Insert
D	147757	1 Rotor
E	154598	4 Vane
G	154797	1 Backing Plate
H	73-6440	1 O Ring
I	154710	1 Filter Housing
J	148394	6 Screw
K	147052	1 Adapter
L	147019	1 Input Filter
M	154003	1 Output Filter
N	147012	1 Gasket
O	148115	1 Filter Cover
P	148233	5 Screw
Q	147009	1 Plug
R	147022	1 Ball
S	147021	1 Spring
T	147010	1 Adjusting Screw



Can be used on most Toro/Lawn Boy low pressure heaters, even the older style.

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Valparaiso, IN 46383

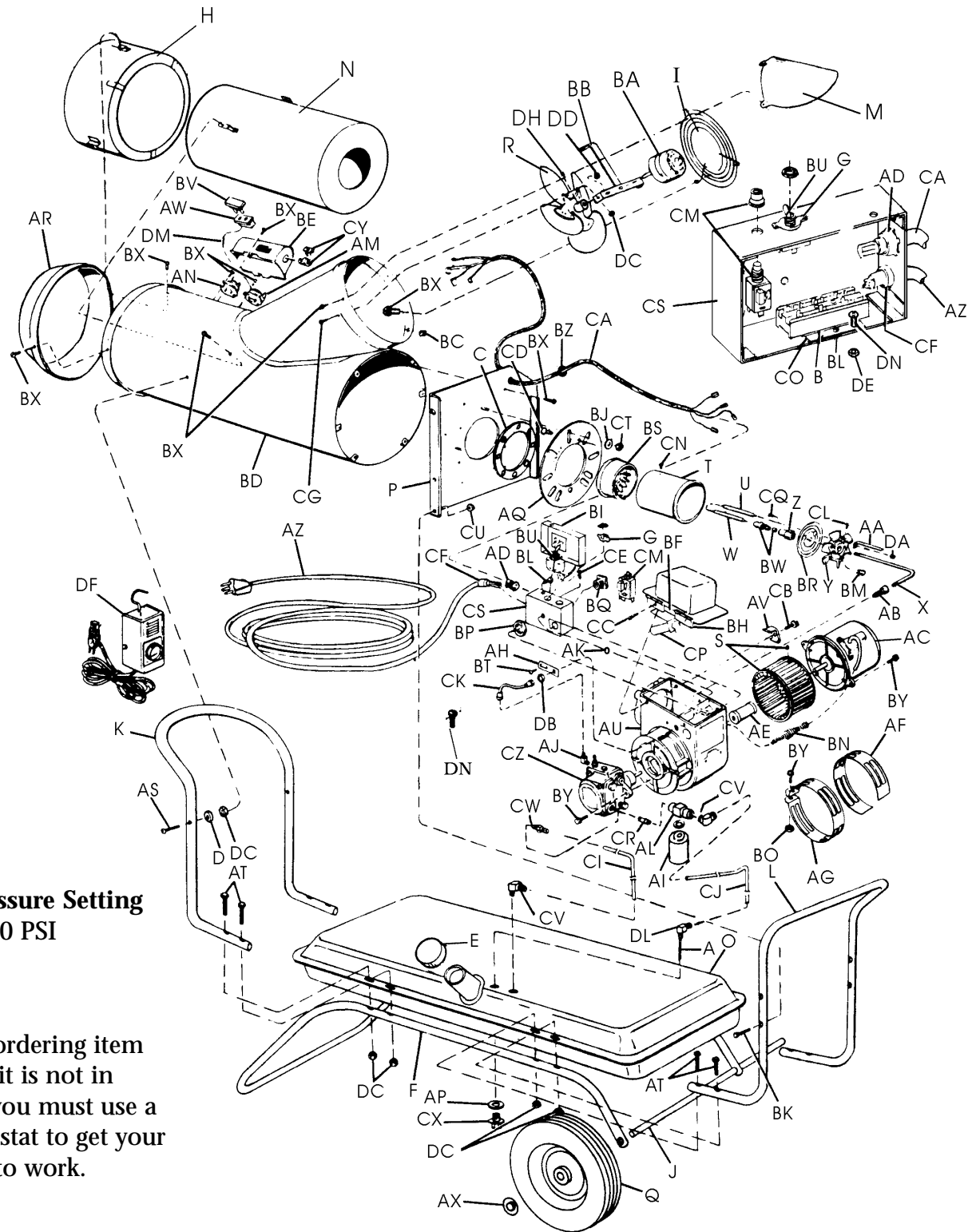


PHP ships through UPS. Our warehouse is located in Valparaiso, Indiana. The map below shows the average delivery time via UPS. If you live on the border of this area, you may get next day or 2nd day service.

Ground Time-in-Transit Map From Valparaiso, IN 46383



120-155-230,000 BTU Forced Air "Old Style" Air Scoop Heater



Pump Pressure Setting
100 PSI

When ordering item #BV, if it is not in stock, you must use a thermostat to get your heater to work.

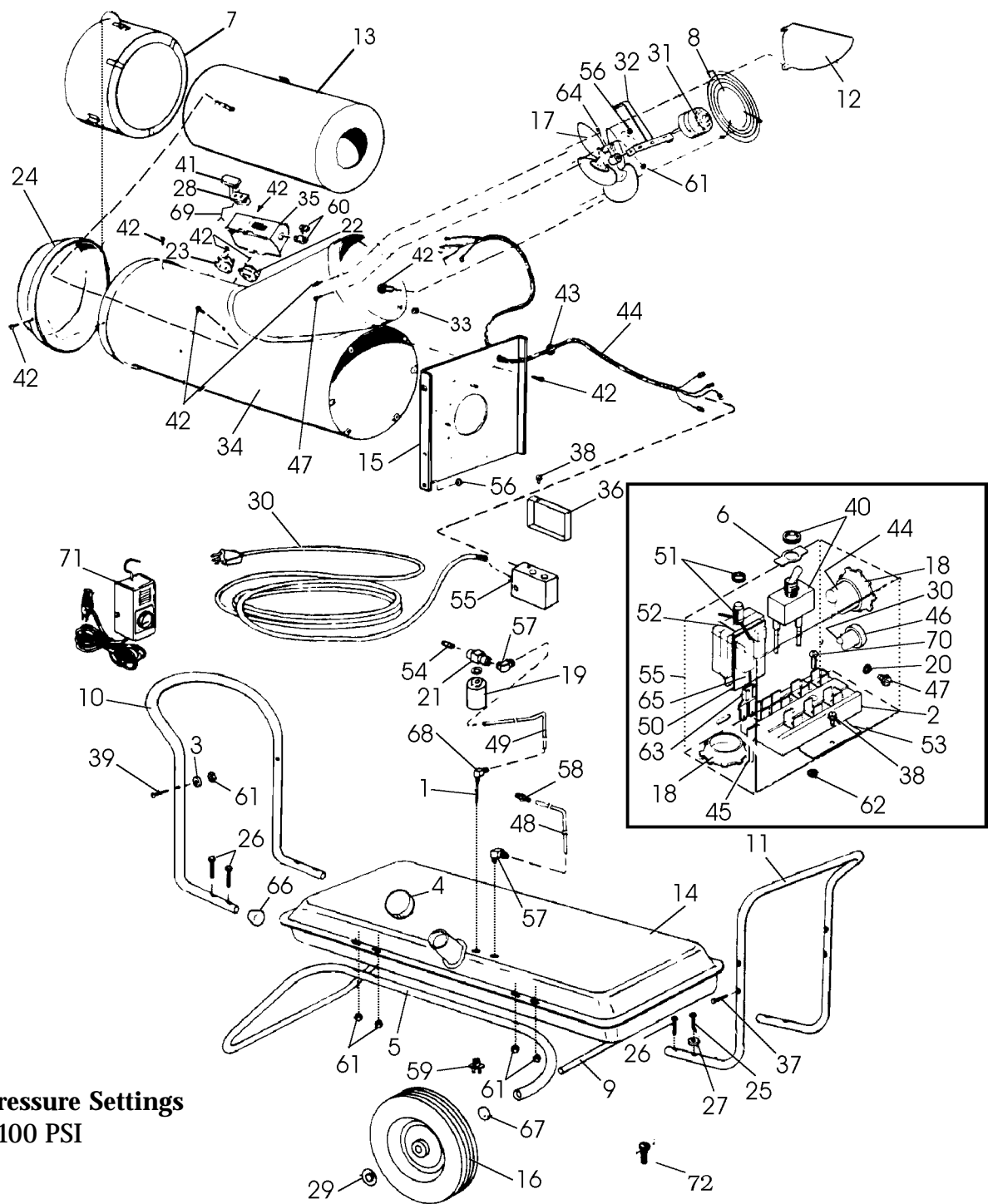
Forced Air "Old Style" Air Scoop Heater Parts Listing

Toro Oil 120-230,000 BTU

Ref No.	New Part#	Description	120 BTU	155 BTU	230 BTU	Ref No.	New Part#	Description	120 BTU	155 BTU	230 BTU
A	154384	Lift Tube Assembly		1		BA	154108	Fan Motor		1	
	154470	Lift Tube Assembly	1				154213	Fan Motor			1
	147463	Lift Tube Assembly			1		154414	Fan Motor	1		
B	147270	Terminal Block			1	BB	154006	Fan Motor Support		1	
C	147782	Burner Mounting Gasket	1	1	1		154215	Fan Motor Support			1
D	147697	Asbestos Washer		2	2		154477	Fan Motor Support	1		
E	154021	Filler Cap	1	1	1	BC	220219	Fan Motor Leads Bushing	1	1	1
F	147228	Tank Support	1	1	1	BD	154288	Outer Housing		1	
G	147329	Switch Plate	1	1	1		154289	Outer Housing			1
H	154415	Radiation Shield	1				221551	Outer Housing	1		
	154847	Radiation Shield		1		BE	147203	Fan/Limit Switch Cover	1	1	1
	154844	Radiation Shield			1	BF	147701	Cell Mounting Bracket	1	1	1
I	147207	Air Intake Grille		1		BH	154588	Transformer	1	1	1
	154205	Air Intake Grille			1	BI	147335	Cover & Label Assembly	1	1	1
	154433	Air Intake Grille	1			BJ	70701	Flatwasher 5/16"	3	3	3
J	147257	Axle		1	1	BK	70104	Capscrew 1/4-20 x 1-1/4	4	4	4
	147803	Axle	1			BL	147164	Screw 6-32 x 3/16	3	3	3
K	147210	Front Handle		1		BM	147912	Insulator Bushing	2	2	2
	221499	Front Handle	1			BN	147899	Burner Motor Cord Cover	1	1	1
	147462	Front Handle			1	BO	147898	Air Band Nut	1	1	1
L	147208	Rear Handle	1	1		BP	220267	Conduit Locknut 1/2"	1	1	1
	147461	Rear Handle			1	BQ	147689	Conduit Nipple 1/2"	1	1	1
M	147209	Air Intake Cover		1		BR	222605	Baffle Plate 3"	1	1	
	148626	Air Intake Cover			1		222606	Baffle Plate 2-1/2"			1
	154070	Air Intake Cover	1			BS	222607	Air Cone 2"	1	1	
N	154081	Combustion Chamber		1			147896	Air Cone 2-1/4"			1
	154204	Combustion Chamber			1	BT	147533	Screw 10-24 x 3/8	1	1	1
	154416	Combustion Chamber	1			BU	154155	Switch	1	1	1
O	154083	Fuel Tank		1		BV	147195	Thermostat Jumper Plug	1	1	1
	154207	Fuel Tank			1	BW	154389	Nozzle .85 x 80°	1		
	221484	Fuel Tank	1				154387	Nozzle 1.10 x 80°		1	
P	154082	Burner Support		1			154388	Nozzle 1.65 x 60°			1
	154208	Burner Support			1	BX	147024	Screw 8 x 1/2 AB	21	25	24
	221509	Burner Support	1			BY	70484	Screw 5/16-18 x 1	5	5	5
Q	154061	Wheel		2	2	BZ	147192	Wire Bushing	1	1	1
	154062	Wheel	2			CA	154109	Wire Assembly	1	1	
R	154116	Fan		1			154111	Wire Assembly			1
	154214	Fan			1	CB	220108	Screw 5/16-18 x 3/4	1	1	1
	154432	Fan	1			CC	700057	Screw 5/16-18 x 1/2	2	2	2
S	154587	Burner Fan, 1725 RPM	1	1	1	CD	221373	Screw 5/16-18 x 3/4 FL	3	3	3
	147625	Burner Fan, 3450 RPM	1	1	1	CE	220268	Screw 10-32 x 1/2	1	1	1
T	222604	Air Tube	1	1	1	CF	147053	Strain Relief	1	1	1
U	154273	Electrode R.H.	1	1	1	CG	147815	Screw 10-24 x 1/2RD	3	3	4
W	154274	Electrode L.H.	1	1	1	CI	227637	Return Line Tube	1	1	1
X	147909	Oil Line Tube	1	1	1	CJ	147732	Suction Line Tube	1	1	1
Y	154589	Air Stabilizer	1	1	1	CK	221370	Fuel Line	1	1	1
Z	147914	Air Stabilizer	1	1	1	CM	154362	Circuit Breaker & PC Brd	1	1	1
AA	154576	Electrode Buss Bar	2	2	2		154361	Printed Circuit Board	1	1	1
AB	147913	Oil Line Fitting	1	1	1		154012	Circuit Breaker	1	1	1
AC	154586	Burner Motor, 1725 RPM	1	1	1	CN	222635	Screw 10-32 x 3/8	2	2	2
	154279	Burner Motor, 3450 RPM	1	1	1	CO	147327	Terminal Block Bracket	1	1	1
AD	147326	Connector 1/2"	1	1	1	CP	13666	Cad Cell	1	1	1
AE	147893	Coupling	1	1	1	CQ	147908	Screw 4-40 x 5/16	1	1	1
AF	147903	Inner Air Band	1	1	1	CR	147182	Nipple 1/4 NPT Close	1	1	1
AG	147902	Outside Adj. Air Band	1	1	1	CS	147762	Junction Box	1	1	1
AH	147901	Oil Line Slot Cover	1	1	1	CT	70549	Hex Keys Nut 5/16-18	3	3	3
*AI	147236	Fuel Filter	1	1	1	CU	147004	Hex Keys Nut 1/4-20	4	4	4
AK	71040	Washer INT Tooth 1/4"	1	1	1	CV	147373	Elbow 1/4NPT x 1/4 CC	2	2	2
AJ	147892	Oil Line Elbow	1	1	1	CW	154239	Fitting 1/4NPT x 1/4CC	1	1	1
*AL	154295	Filter Head	1	1	1	CX	154796	Drain Plug	1	1	1
AM	154102	High Limit Switch	1	1	1	CY	147196	Strain Relief	1	1	1
AN	154103	Fan Motor Switch	1	1	1	CZ	154180	Pump, 1725 RPM 7000 Series	1	1	1
AP	147707	Drain Gasket	1	1	1		154276	Pump, 3450 RPM 7000 Series	1	1	1
AQ	147900	Burner Support Flange	1	1	1	DA	221357	Palnut 5-40	2	2	2
AR	147206	End Ring		1		DB	220143	Hex Jam Nut 7 16-29	1	1	1
	73-6500	End Ring			1	DC	147158	Keps Nut 10-24	13	13	13
	147759	End Ring	1			DD	71133	Keps Nut 8-32		2	
AS	147333	Screw 10-24 x 1-1/4M	2			DF	KT121	Thermostat	(Optional)		
AT	147820	Screw 10-24 x 2-1/4M	8	10	8	DM	154067	Wire Assembly	1	1	1
AU	221185	Fan Housing	1	1	1	DN	147016	Screw	1	1	1
AV	221352	Transformer Hold Clip	1	1	1						
AW	154070	Therm. Jumper Outlet	2	2	2						
AX	154902	Push Nut	2	2	2						
AZ	154423	Power Cord	1	1	1						

*Can be purchased as an assembly, part #154521

155-230,000 BTU Forced Air "New Style" Air Scoop Heater



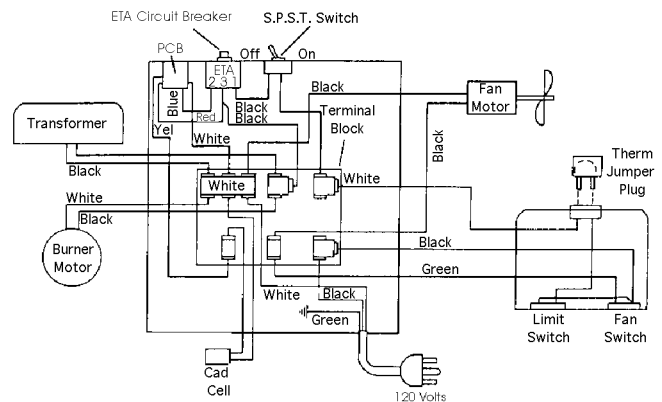
"New Style" Air Scoop Heater Parts Listing

Key No.	Part No.	Description	155,000 BTU	230,000 BTU	Key No.	Part No.	Description	155,000 BTU	230,000 BTU
1	NLA	Lift Tube	X		33	700156	Bushing	X	X
	147463	Lift Tube		X	34	154915	Housing Assembly	X	
2	147270	Terminal Block	X	X		154289	Housing Assembly		X
3	147181	Spacer	X	X	35	154288	Limit Switch Cover	X	X
4	154021	Fuel Cap with gasket	X	X	36	154283	Junction Box Cover	X	X
5	147228	Tank Support	X	X	37	146366*	Screw	X	X
6	147329	Switch Plate	X	X	38	147164	Screw	X	X
7	154847	Radiation Shield	X		39	71121	Screw	X	X
7	154844	Radiation Shield		X	40	154155	On-Off Switch	X	X
8	147207	Intake Grille	X		41	147195	Jumper Plug	X	X
	154205	Intake Grille		X	42	147024	Screw	X	X
9	147257	Axle	X	X	43	147192	Snap Bushing	X	X
10	147210	Front Handle	X		44	154109	Wire	X	
	147462	Front Handle		X		154111	Wire		X
11	147208	Rear Handle	X		45	154113	Wire	X	X
	147461	Rear Handle		X	46	147053	Strain Relief	X	X
12	148624	Air Intake Cover	X		47	147000	Screw	X	X
	148626	Air Intake Cover		X	48	73-6520	Return Hose	X	X
13	154204	Combustion Chamber		X	49	73-6520	Suction Hose	X	X
	154081	Combustion Chamber	X		50	154361	Circuit Board	X	X
14	154083	Fuel Tank	X		51	154012	Circuit Breaker	X	X
	154207	Fuel Tank		X	52	147197	Mounting Tape	X	X
15	154913	Burner Support	X		53	147327	Bracket	X	X
	154208	Burner Support		X	54	147182	Nipple	X	X
16	154061	Air Scoop Wheel	X	X	55	154284	Junction Box	X	X
17	154116	Fan 155	X		56	147004*	Nut	X	X
	154214	Fan 230		X	57	147183	Nylon Elbow	X	X
18	147326	Romex Connector	X	X	58	147184	Nylon Fitting	X	X
19	147236	Filter Cartridge	X	X	59	154796	Drain Plug	X	X
20	147334	Lock Washer	X	X	60	147196	Strain Relief	X	X
21	154295	Filter Head	X	X	61	147158*	Nut	X	X
22	154594	Limit Switch	X	X	62	147324*	Nut	X	X
23	154472	Limit Switch	X	X	63	147171	Terminal	X	X
24	147206	End Ring	X		64	70496	Set Screw	X	X
	73-6500	End Ring		X	65	147198	Cable Tie	X	X
25	147333*	Screw	X	X	66	147179	End Cap	X	X
26	147771*	Screw	X	X	67	700049	Flat Washer	X	X
27	70682	Washer	X	X	68	154074	Fitting	X	X
28	154070	2 Prong Outlet	X	X	69	154067	Wire	X	X
29	147157	Push Nut	X	X	70	147016*	Screw	X	X
30	154423	Cord	X	X	71	HA1210	Thermostat	X	X
31	154108	Motor 155	X		72	NLA	Screw	X	X
	154213	Motor 230		X					
32	154114	Motor Support	X						
	154215	Motor Support		X					

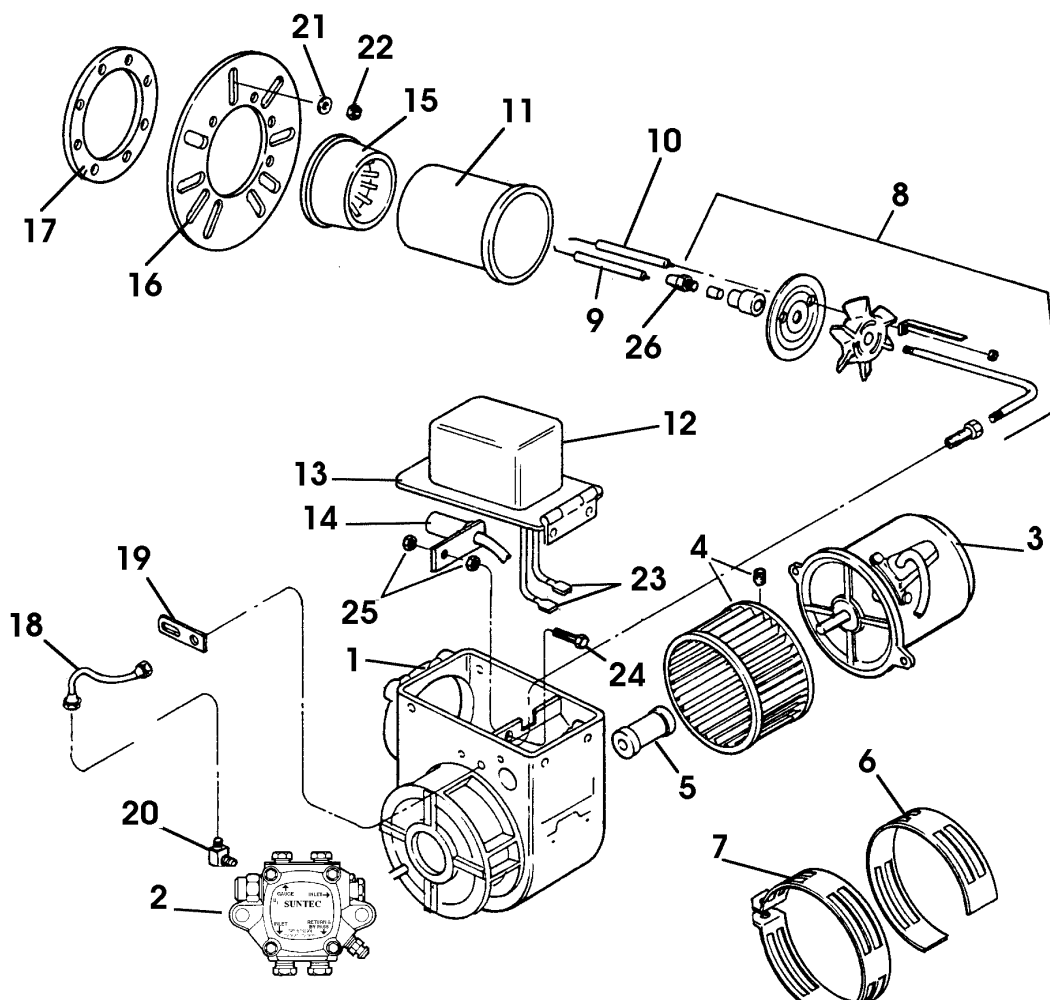
* Common hardware may be purchased locally.

If you are ordering item #41 and we do not have it in stock you must use a thermostat to get your heater to work.

See page 116 for burner assembly part numbers.



155,000 and 230,000 BTU Forced Air "New Style" Air Scoop Heater Burner Assembly Parts Listing



Key No.	Old Part No.	New Part No.	Description	Key No.	Old Part No.	New Part No.	Description
1	240962	154275	Fan Housing	15	240955	73-6540	Air Cone 2"
2		154180	Pump, 1725 RPM (7000 Series)	16	240969	154280	Burner Support Flange
		154276	Pump, 3450 RPM (7000 Series)	17	240965	147627	Gasket Mounting
3	240968	154279	Motor Assembly-Burner	18	240970	154281	Fuel Line Assembly
4		154587	Burner Fan, 1725 RPM	19	240972	147629	Cover Oil Line Slot
	240961	147625	Burner Fan, 3450 RPM	20	240971	147628	Elbow Oil Line
5	240958	147624	Coupling Pump	21	70701	146205	*Washer 5/16 Flat
6	240953	147619	Band Inner Air	22	70549	146259	*Nut 5/16-18 Hd. Plated
7	240954	147620	Band Adjust. Air	23	220207	147527	Terminal Spade
8	240967	154278	Gun Assembly	24	220079	147000	Screw
9	240960	154273	Electrode Assembly L.H.	25	222108	147701	Bracket-Cell Mount
10	240959	154273	Electrode Assembly R.H.	26	222602	154387	Nozzle (155) 1.10 x 80°
11	240957	147623	Air Tube	26	220304	154388	Nozzle (230) 1.65 x 65°
12	240973	154282	Transformer				
13	240963	147626	Fan Housing Cover				
14	13666	13666	Cad Cell Assembly				

* May be purchased at a hardware store.

Pro Temp Oil Fired Heaters

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater. If your model number does not appear in the breakdowns, please call one of our technicians for assistance.

Brand Names Include:
Pro Temp
Heat Hog

If you need technical assistance, feel free to call **PHP at 1-800-362-6951** or e-mail us at **techservice@phpdistribution.com**. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service.

HEATER INDEX

BTU and Description
45-215,000

Fuel Type
Kerosene

Page No.
118-119

Forced Air Pro Temp Oil Fired Heater

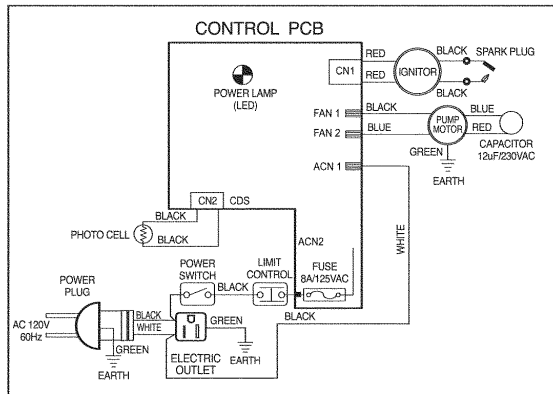
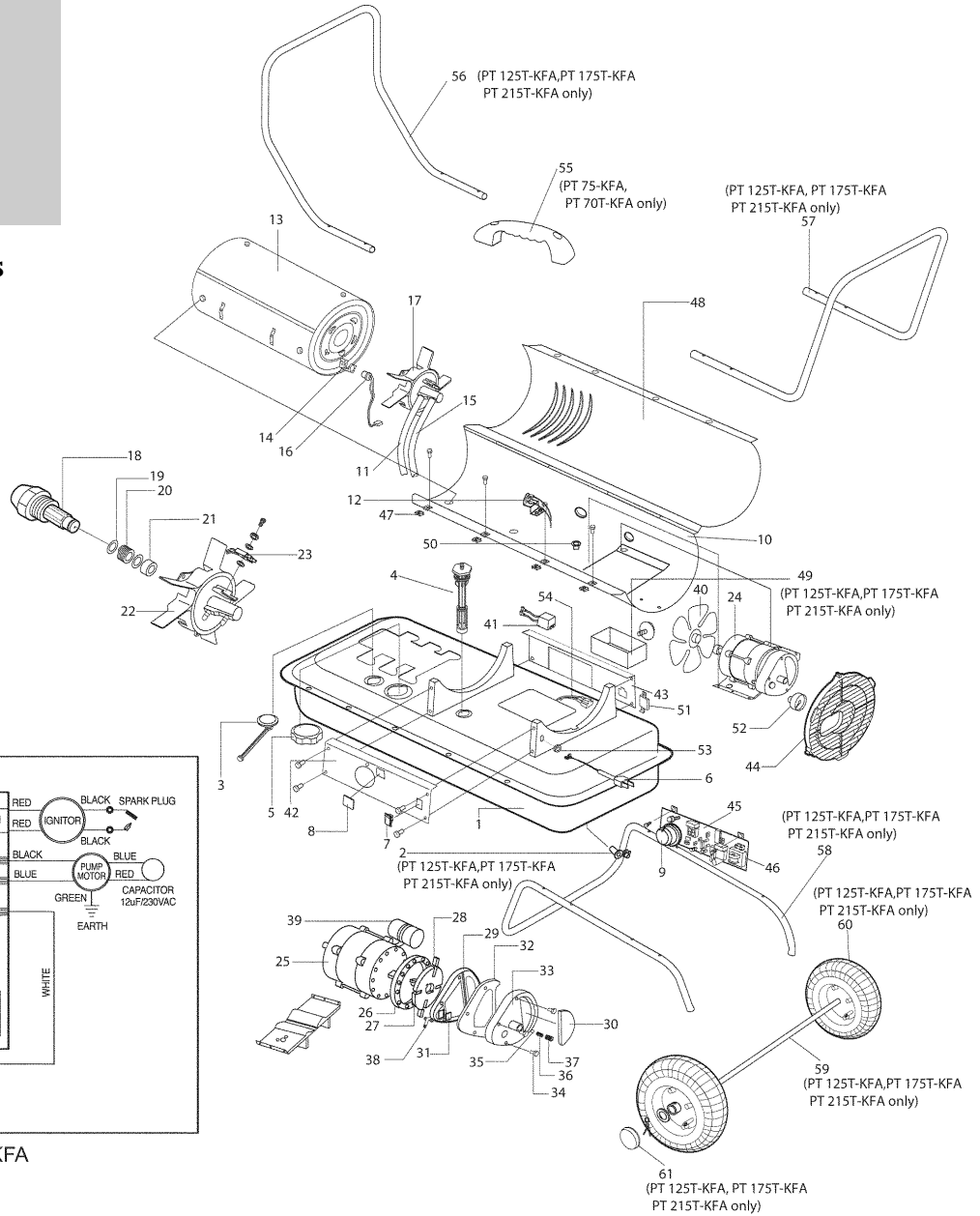
Model Numbers

PT45KFA PT70KFA
 PT125KFA PT175KFA
 PT215KFA

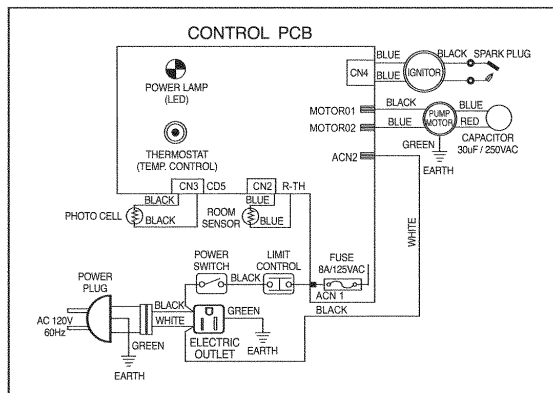
Pump Pressure Settings

BTU	PSI
45	3.0
70	4.0
125	5.0
175	7.5
215	9.0

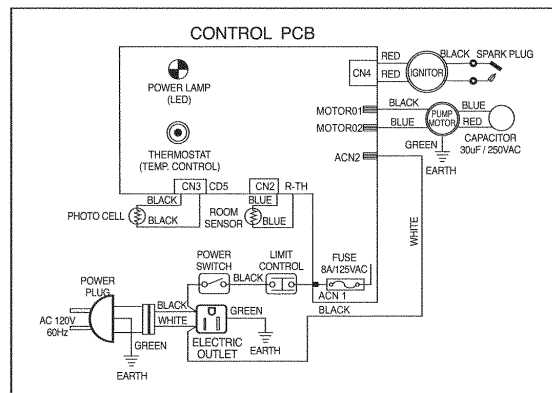
Pro Temp 45-215,000 BTU



Wiring Diagram A Models PT 45-KFA



Wiring Diagram C Model PT 125/175/215T-KFA



Wiring Diagram B Models PT 70T-KFA

Forced Air Pro Temp Oil Fired Heater

Key

No.	Description	PT45KFA	PT70KFA	PT125KFA	PT175KFA	PT215KFA
1	Fuel Tank Assembly	70-002-0100	70-002-0100	70-002-0200	70-002-0300	70-002-0300
2	Drain Plug	-	-	70-002-0105	70-002-0105	70-002-0105
3	Fuel Gauge Assembly	70-007-0100	70-007-0100	70-007-0200	70-007-0200	70-007-0200
4	Fuel Filter Assembly	70-003-0100	70-003-0100	70-003-0200	70-003-0200	70-003-0200
5	Fuel Cap	70-006-0100	70-006-0100	70-006-0100	70-006-0100	70-006-0100
6	Power Cord	70-034-0100	70-034-0100	70-034-0200	70-034-0200	70-034-0200
7	Power Switch	70-038-0100	70-038-0100	70-038-0100	70-038-0100	70-038-0100
8	Window Display	-	-	70-040-0100	70-040-0100	70-040-0100
9	Thermostat Control Knob	-	70-031-0100	70-031-0100	70-031-0100	70-031-0100
10	Lower Shell	70-001-0102	70-001-0102	70-001-0202	70-002-0302	70-002-0402
11	Air Line	70-035-0100	70-035-0200	70-035-0300	70-035-0400	70-035-0500
12	Thermostat Limit Control	70-019-0100	70-019-0100	70-019-0100	70-019-0100	70-019-0200
13	Combustion Chamber	70-010-0100	70-010-0200	70-010-0300	70-010-0400	70-010-0500
14	Photocell Bracket	70-010-0101	70-010-0101	70-010-0101	70-010-0101	70-010-0101
15	Fuel Line	70-036-0100	70-036-0200	70-036-0300	70-036-0400	70-036-0500
16	Photocell Assembly	70-016-0100	70-016-0100	70-016-0100	70-016-0100	70-016-0100
17	Burner Head Assembly	70-014-0100	70-014-0200	70-014-0300	70-014-0400	70-014-0500
18	Nozzle	70-015-0100	70-015-0200	70-015-0300	70-015-0400	70-015-0500
19	Nozzle Seal Washer	70-015-0101	70-015-0101	70-015-0101	70-015-0101	70-015-0101
20	Nozzle Seal Spring	70-015-0102	70-015-0102	70-015-0102	70-015-0102	70-015-0102
21	Nozzle Sleeve	70-015-0103	70-015-0103	70-015-0103	70-015-0103	70-015-0103
22	Burner Head	70-014-0101	70-014-0101	70-014-0301	70-014-0401	70-014-0401
23	Spak Plug	70-052-0100	70-052-0100	70-052-0200	70-052-0200	70-052-0200
24	Motor and Pump Assembly	70-020-0100	70-020-0100	70-020-0300	70-020-0400	70-020-0500
25	Motor	70-021-0100	70-021-0100	70-021-0200	70-021-0300	70-021-0400
26	Pump Body	70-020-0101	70-020-0101	70-020-0101	70-020-0101	70-020-0401
27	Rotor Kit	70-022-0100	70-022-0100	70-022-0100	70-022-0100	70-022-0200
28	Blade	70-022-0102	70-022-0102	70-022-0102	70-022-0102	70-022-0202
29	End Pump Cover	70-020-0102	70-020-0102	70-020-0102	70-020-0102	70-020-0102
30	Filter Kit	70-054-0100	70-054-0100	70-054-0100	70-054-0100	70-054-0100
31	Lint Filter	70-054-0102	70-054-0102	70-054-0102	70-054-0102	70-054-0102
32	Output Filter	70-023-0100	70-023-0100	70-023-0100	70-023-0100	70-023-0100
33	End Filter Cover	70-020-0103	70-020-0103	70-020-0103	70-020-0103	70-020-0103
34	Plug/Pump Adj.Kit	70-055-0100	70-055-0100	70-055-0100	70-055-0100	70-055-0100
35	Ball	70-020-0104	70-020-0104	70-020-0104	70-020-0104	70-020-0104
36	Spring	70-020-0105	70-020-0105	70-020-0105	70-020-0105	70-020-0105
37	Adjust Screw	70-020-0106	70-020-0106	70-020-0106	70-020-0106	70-020-0106
38	Nipple	70-014-0104	70-014-0104	70-014-0104	70-014-0104	70-014-0104
39	Capacitor	70-020-0107	70-020-0107	70-020-0201	70-020-0201	70-020-0201
40	Fan Assembly	70-024-0100	70-024-0200	70-024-0300	70-024-0400	70-024-0400
41	Ignitor	70-037-0100	70-037-0200	70-037-0300	70-037-0400	70-037-0500
42	Right Side Cover	70-008-0100	70-008-0200	70-008-0300	70-008-0400	70-008-0400
43	Left Side Cover	70-009-0100	70-009-0100	70-009-0200	70-009-0300	70-009-0300
44	Fan Guard	70-016-0100	70-016-0100	70-016-0200	70-016-0200	70-016-0200
45	Main PCB Assembly	70-027-0100	70-027-0200	70-027-0300	70-027-0300	70-027-0300
46	Fuse	70-027-0101	70-027-0101	70-027-0101	70-027-0101	70-027-0101
47	Clip Nut	70-001-0105	70-001-0105	70-001-0105	70-001-0105	70-001-0105
48	Upper Shell	70-001-0101	70-001-0101	70-001-0201	70-001-0301	70-001-0301
49	Storage Box	-	-	70-053-0100	70-053-0100	70-053-0100
50	Bushing Gromment	70-017-0100	70-017-0100	70-017-0100	70-017-0100	70-017-0100
51	Socket Cover	70-030-0100	70-030-0100	70-030-0100	70-030-0100	70-030-0100
52	Air Pressure Gauge	70-025-0100	70-025-0100	70-025-0100	70-025-0100	70-025-0100
53	Cord Bushing	70-033-0100	70-033-0100	70-033-0200	70-033-0200	70-033-0200
54	Electric Outlet	70-029-0100	70-029-0100	70-029-0100	70-029-0100	70-029-0100
55	Handle	70-001-0103	70-001-0103	-	-	-
56	Front Handle	-	-	70-042-0100	70-042-0200	70-042-0200
57	Rear Handle	-	-	70-043-0100	70-043-0200	70-043-0200
58	Wheel Support Frame	-	-	70-041-0101	70-041-0201	70-041-0201
59	Wheel Axle	-	-	70-041-0103	70-041-0203	70-041-0203
60	Wheel	-	-	70-041-0102	70-041-0102	70-041-0102
61	Wheel Cap	-	-	70-041-0104	70-041-0104	70-041-0104
62	Hardware Kit	70-056-0100	70-056-0100	70-056-0200	70-056-0200	70-056-0200

Pro Temp 45-215,000 BTU

Gas Heater Service Information

This section is designed to give you the information you will need when you service your customers' heaters. You will find useful information including test procedures and trouble shooting for various heaters.

The information contained in this section has been compiled using techniques that have been proven and tested in the field.

PHP recommends that these tests and procedures be performed by a certified technician or mechanic. Some of the tests and procedures may be dangerous should they be performed inaccurately or carelessly.

Use common sense in handling anything with electrical current or that has exposed moving parts when performing tests or procedures. Always wear proper safety equipment, such as safety glasses and gloves when necessary.

If you have questions, contact the PHP technical service department at **800-362-6951 ext. 2** or email us at **techservice@phpdistribution.com**.

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Gas Fired Heaters

The Three Types of Propane Heaters

Forced Air

These heaters use an internal motor and fan to distribute heat. These are the ones commonly called “torpedo” heaters. Forced air propane heaters are available in sizes ranging from 30,000 BTU’S to 750,000 BTU’S through PHP. The advantages of the forced air heater are as follows. The whole unit does not have to be in the area to be heated (only the discharge end of the unit has to be in the area to be heated). This allows clean air exchanges with outside air. In addition, the forced air heater is also a “directional “ heater. This means heat can be focused on a certain item or place (but never at a propane cylinder). The forced air heater usually has multiple safety features. These usually consist of high limit switches, sail switches, air proving switches, tip switches (usually found on older L.P. units), spark plugs, igniter electrodes, ignition control boards, valves, and even thermocouples. In addition, some of the forced air heaters can use a thermostat for temperature control. Moreover, a few models may even be ducted. As with all heating systems, there are a few disadvantages associated with forced air units. The first disadvantage is the fact that electricity is required for operation. Another disadvantage is that forced air is more of a complex unit to troubleshoot and repair. Lastly, forced air units rely on three components to work properly. Those components are the timed delivery of air, spark, and fuel (in that order).



Radiant

These heaters work on the principle of transferring heat from one object to another without heating the space in between. For instance, the roof of a black car that has been sitting in the sun on a cool 60 degree day is much warmer than the surrounding air. Therefore, the radiant heat from the sun heated the roof of the car without heating the space in between. That is the concept of radiant heat. As with all heating systems, there are advantages as well as disadvantages. The first advantage is that most radiant heaters require no external electricity. The second advantage of radiant heat is that the ground level is heated first, this way you do not waste as many BTU’s as in other heating sources. The third advantage is that the most popular radiant heaters are in the 100,000 BTU range, making them ideal for using the standard 100 pound propane cylinder. The disadvantages are few. First, very few models have a thermostatic gas valve (meaning not thermostat capable). Second, there are relatively few BTU sizes available, mainly 100,000 BTU and 250,000 BTU units.



Convection

These heaters work on the principle of heat stratification. Heat stratification means heating the topmost areas first, then forcing the heat down in layers until it reaches the comfort zone (usually from ground level to 6’ off the ground). The main advantage of convection heaters is that they are the least expensive heaters to purchase (in other words, the most BTU’S for the buck!). The disadvantages of convection heaters are twofold. First, since convection heaters work on the theory of heat stratification, most of your fuel dollars quickly rise with the heat to the ceiling and away from the comfort zone. Second, with very little difference in price between the 80,000 BTU models and the 200,000 BTU models, people usually buy the most BTU’s for the buck. What people do not realize is the fact that the 200,000 BTU model needs two or three 100 pound cylinders manifolded together to attain full fire in most heating applications. In general, people who buy these heaters plan to use their 20-pound barbeque cylinders as their fuel source. For an explanation on why the 20 pound cylinder will not work properly, please see the “BOILING PROCESS”. A good majority of the technical issues related to these heaters is fuel supply related.



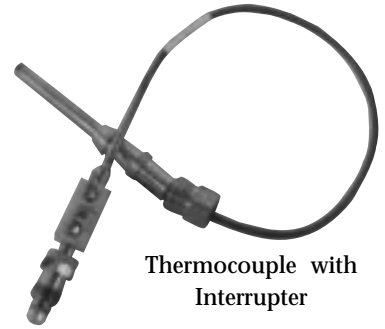
Gas Heater Service Info.

Gas Fired Heaters

Component Description and Operation

Thermocouple

The thermocouple is a safety feature that works with a thermoelectric gas valve to allow or interrupt the flow of fuel. The thermocouple works on a principle of two dissimilar metals, that generates D.C. electricity, when heated. Because of this technology, it is important that the thermocouple's sensing bulb is in the hottest portion of the flame pattern to work properly. The D.C. electricity is rated in millivolts. The D.C. electricity passes down the thermocouple until it reaches the power coil located inside of the thermoelectric gas valve. The thermocouple needs to generate and send at least 17 millivolts of D.C. electricity to the thermoelectric gas valve to keep the power coil compressed or energized, and let allows gas to pass through. A thermocouple may also have an electrical interrupter connection. An electrical interrupter connection is an electrical interrupter located between the tip of the thermocouple and the nut that threads into the gas valve. The purpose of this interrupter is that it allows the manufacturer to install a safety feature on the thermocouple to break the D.C. circuit in case of a unit malfunction. The most common use of the interrupter connection is to install a high limit switch. For example, if your heater has a high limit switch attached to the interrupter, and the switch gets too hot, the limit switch will open up contacts and break the polarity between the thermocouple and power coil, thereby shutting down the flow of fuel.

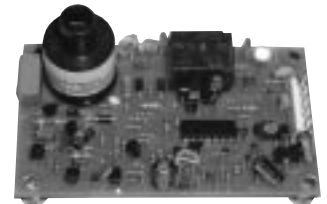


Thermocouple with Interrupter

D.S.I. Control

Some people call this part the "brain box" of the heater. Actually, D.S.I. stands for Direct Spark Igniter. However, this part controls a lot more than ignition. It controls the following circuits.

- Ignition - The board produces the secondary voltage during the ignition process.
- Flame sensing - The board monitors the flame through a spark plug, electrode, or flame rod.
- Electronic delay timer (pre-ignition purge cycle).
- Supplies the solenoid circuit with power.



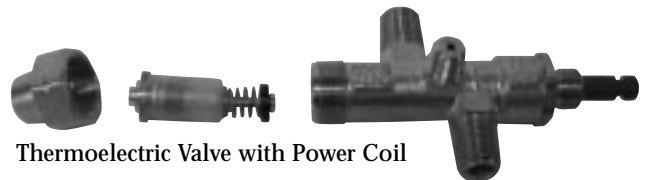
The most common brand names for D.S.I. controls are:

- Ram controls - Ram controls have come in three different colors, blue, white, or gray.
- Gaslighter controls - Gaslighter boards have usually been black in color.
- Fenwall controls - Fenwall controls are usually gray in color.

The last point to mention about D.S.I. controls is that if you have one in your heater, two things are true. 1) your heater can use a thermostat, and 2) your heater will not have a thermocouple.

Gas Valves

Gas Valves are used for two main purposes. The first is to shut off the flow of fuel in case of malfunction, the second is to determine manifold gas pressure.

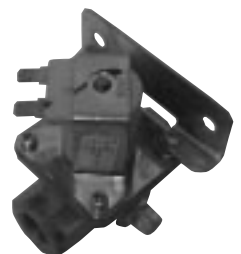


Thermoelectric Valve with Power Coil

There are two different types of gas valves (thermoelectric & solenoid) used in portable heaters.

Thermoelectric - Thermoelectric gas valves work on the principle of D.C. voltage being generated by a thermocouple. Thermoelectric valves are sometimes known as the "push button" valves. The thermoelectric valve receives the D.C. voltage generated by the heated thermocouple and then energizes (magnetizes) the power coil located inside of the valve body. The power coil needs this voltage to stay compressed (magnetized) to allow gas to flow through to the burner. The minimum voltage required to keep the power coil energized is 17 millivolts of D.C. electricity.

Solenoid valves - Solenoid valves require A.C. voltage (usually 120 volts) to electronically close, and to physically open. When the solenoid valve closes, it is actually electronically closing (magnetizing) the coil to allow gas to flow thru. Power to the solenoid valve never comes directly from the cord. It usually passes through a D.S.I. control first. By passing through the D.S.I. first, it allows the D.S.I. to shut off the voltage to the solenoid if it senses a problem such as an open electrical circuit, lack of flame sensing, or lack of fuel to name a few.



Solenoid Valve

Gas Fired Heaters

Component Description and Operation

High Limit Switch

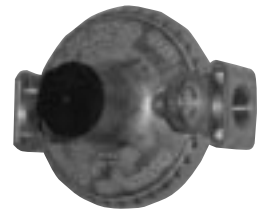
High limit switches are switches that are normally electronically closed, but will open electrical contacts at a certain temperature. It accomplishes this with a bi-metal sensing element. A bi-metal is a temperature sensitive metal that expands with heat. Therefore, as the heater runs, and as the bi-metal gets warm, it begins to warp. When it reaches a certain temperature it will open up the electrical contacts. The temperature varies from switch to switch, and is listed on each switch. For example, if the markings on a limit switch read L240, then the limit switch opens up electronically at 240 degrees and will lead to an open circuit shutdown.



Various High Limit Switch Examples

Regulator

A regulator, by definition, is a means to adjust to a standard rate and /or to adjust to make your work accurate. A regulator takes tank pressure and breaks that down to give you a known and consistent lower pressure out of the regulator's outlet. Every propane heater, regardless of how big or small, has to have at least one pressure regulator. Each propane heater should indicate the inlet pressure ratings on the specification plate to assist in selecting the appropriate regulator(s) for your application. For the purposes of this manual, there are three basic types of regulators: the first stage regulator, the second stage regulator, and the appliance regulator. Your heater may need to use any or all three of these regulators, depending on your heater and your application. Again, if you have any questions about regulators, please call your local propane dealer or you can contact PHP anytime.



Tank Connectors

Tank connectors are the devices used to connect the first stage regulator to the vapor withdraw propane cylinder. While all tank connectors serve the same function, the current industry standard is to use certain connectors with certain applications only (certain applications meaning capable BTU output, whether or not there is an excess flow valve, and whether it has left hand or right hand pipe threads). While there are many types of tank connectors on the market, we are going to discuss just a few of the more popular ones only. The most popular tank connector is the soft nose P.O.L., followed by the Acme tank connector.



Soft nose P.O.L. - The soft nose P.O.L. fitting is the fitting that most service people are familiar with and is still in use today on all vapor withdraw cylinders over 40 pounds. The soft nose P.O.L. consists of the following component parts: The right hand thread P.O.L. nipple which actually goes into the L.P. vapor withdraw valve on the top of the cylinder, the 7/8" hex nut (G1643) which tightens the nipple into the withdraw valve, the o-ring (G1653-3) to help maintain a tight seal inside the valve, and lastly, the excess flow valve which will shut off the flow of fuel to the unit if there is a cut or rupture of the gas supply hose. The excess flow valve is the only non- replaceable part in the P.O.L. assembly. Soft nose P.O.L. fittings vary by BTU output as well as thread type, so it is important to use the correct part number listed on the heater's breakdown.

Acme Tank Connector - The Acme tank connector has become more popular because of the new code requiring the O.P.D. (overflow protection device) withdraw valve on cylinders of 40 pounds and under. The Acme tank connector has a spring assembly mounted on the inside of the fitting itself to measure backpressure. The Acme tank connector will allow only a limited amount of propane to pass through it until the gas hose is pressurized. Once the hose is pressurized, the backpressure on the spring assembly will compress and allow the proper amount of propane needed for the burn to pass through. In order to get this tank connector to compress the spring assembly and allow the proper amount of fuel through, you need to close all the gas connections past the supply hose. Then turn the propane cylinder on, and let the unit set until the fuel supply hose pressurizes. This pressurization can take anywhere from 15 seconds to an hour. The Acme tank connector is actually available as a whole unit only, with no user serviceable components. If any part of the Acme tank connector ever breaks or fails, then the fitting needs to be replaced. This fitting also has an excess flow valve that will shut down the flow of fuel to the unit if there is a cut or rupture of the gas supply line. Acme tank connectors come in two different varieties. The black handled Acme is rated for outputs of 71,000 BTU's or less, while the green handled Acme is rated from 71,000 BTU's to 200,000 BTU's.



Gas Fired Heaters

Component Description and Operation

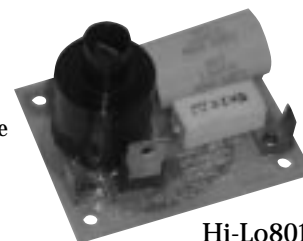
Spark Igniter

Spark igniters are small, self-contained controls whose sole purpose is to provide secondary voltage to the spark plug/electrode. You can look at spark igniters as the spark generators. These controls are found on propane forced air heaters that use thermoelectric gas valves but do not have push button (Piezo) ignition. If the unit has a thermoelectric gas valve, then the heater will automatically have a thermocouple. Spark igniters are continuous ignition, generating a constant spark at up to 25,000 volts. If the heater has a spark igniter and a thermoelectric gas valve, then the heater cannot use a thermostat. There are two different spark igniters being used in the industry today. The first one is the Eaton spark igniter, and the second one is the Hi-LO 801. Both of these igniters have no user serviceable parts.



Eaton Spark Igniter

Eaton Spark Igniter - Both Desa (Master, Reddy, Remington, etc) and Scheu Products (National Riverside, All Pro, and Universal) use the Eaton spark igniter. They are blue in color and have four wire connections consisting of an ignition lead, a hot wire, a common wire, and a ground wire. The Eaton is an enclosed spark igniter with only the 1/4" electrical connections exposed.



Hi-Lo801 Spark Igniter

Hi-Lo 801 spark igniter is used by Scheu Products exclusively. The Hi-Lo 801 is an open spark igniter with the resistors and diodes visible. The Hi-LO 801 is also a four-wire spark igniter. The Hi-LO 801 has one exception to the application rule listed earlier. The exception is that the HI-LO 801 was actually used on National Riverside forced air heaters made from 1978 to 1991 that could use a thermostat. At different times during that period those heater model numbers included the 80FA, the 150FA, and the 3500FA.



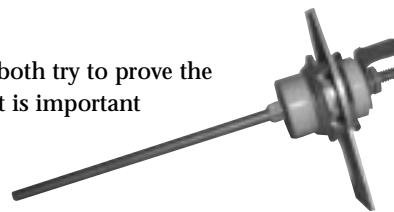
Piezo Igniter with Nut

Piezo Igniter - The Piezo igniter is what is commonly referred to as the "push button" igniter. Piezo igniters are found on both Desa and Scheu heaters. The Piezo is also found on all three types of propane heaters: radiant, convection, and forced air models. The Piezo igniter generates a spark when an internal spring-mounted piece of metal is pushed across a crystal when the "push button" is depressed. There are no user serviceable parts inside a Piezo igniter. There is one rule of thumb when it comes to Piezo igniters; if the heater has a Piezo igniter, then it also has a thermoelectric gas valve, a thermocouple. If a heater has these components, it cannot use a thermostat.

Flame Rods/Sensors

Flame rods and flame sensors are parts that work to prove the existence of flame. Although they both try to prove the existence of flame, flame rods and flame sensors go about accomplishing this in different ways. It is important to note that there are no user serviceable parts on either of these parts.

Flame Rod - The flame rod is a metal probe that protrudes into the area of combustion. The flame rod conducts the current from the ions that are naturally occurring. Ions are the static electricity that is in the air. The explosions from the combustion process straighten out the ions and the burner becomes negatively charged, and the flame rod becomes positively charged. It delivers the charge to the control board to prove the existence of combustion. Because flame rods vary by manufacturer, it is important to use the factory authorized replacement only. In addition, flame rods usually have only one wiring post.



Flame Sensors - Like the flame rod, the flame switch is also a probe that protrudes into the combustion chamber. However, that is where the similarity ends. The flame switch is not usually all metal, for there is a sensing element located inside of the metal probe. The flame switch is a normally electronically open, but when the unit is exposed to heat, the sensing element expands to close the circuit. Unlike the flame rod, the flame switch has two wiring posts attached to them. Since flame switches vary by manufacturer, by temperature, by length, and by application, it is important to use the factory authorized replacement only.

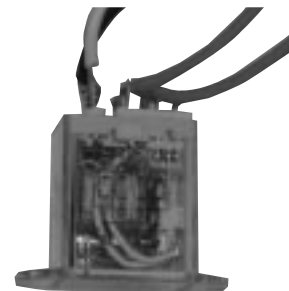


Gas Fired Heaters

Component Description and Operation

Control Relay

The control relay is a safety feature added to some of the newer forced air propane heaters that use a thermocouple and a thermoelectric valve. Two of the major propane heater manufacturers mentioned in this manual use control relays. What the control relay's purpose is to allow the D.C. electric circuit (the thermocouple, the high limit switch, and the thermoelectric gas valve) and the A.C. electric circuit to interface with each other. In other words, if the high limit switch opens contacts, then the whole unit will shut down.



Fan Blades

(Forced Air Heaters Only) The fan blade in the propane forced air heater plays an extremely important role in the operation of the entire heating system. It has many purposes. First, its job is to pull air in through the back of the unit to cool the internal components. Next, (and most importantly) the fan blade circulates air around and thru the combustion chamber. Not only is the fan blade responsible for producing the hot, forced air, but also it is extremely important in determining WHERE the burn takes place in the combustion chamber. Since a propane forced air heater has no nose cone, the air movement delivered by the fan blade is of extreme importance in determining where the combustion takes place. All of your safety components in your forced air heater rely on the burn occurring at a particular place in the combustion chamber for proper monitoring and proving.

Pilot Orifice

(Radiant and Convection Models Only) The pilot orifice is used on radiant and convection heaters that utilize a thermoelectric (push button) gas valve. There are two main purposes of the pilot orifice. The first (and most important) reason is to heat the thermocouple for safety monitoring. The second reason is so that every time you want heat, you do not have to go through the ignition process. Since the pilot orifice requires the least amount of propane, and has the smallest diameter, it is usually the first place to become restricted or obstructed during normal operation.

Burner Orifice

All propane heaters have a burner orifice. Whether the burner orifice is a single-port (having one gas opening and a flame deflector) or a multi-port (having six or more smaller openings and may or may not have a flame deflector), they both serve the same purpose. That purpose is to deliver propane into the area of combustion in a way to allow for safe, even, and proper combustion. All burner orifices have a certain outlet size that is determined by the manufacturer and should NEVER be altered.



Motor

The motor in a forced air propane heater has a multitude of functions. One of the motor's responsibilities is to bring fresh air around and through the combustion chamber for combustion and equal distribution of heat. The motor also cools down the heater's internal components with that same inlet air. By turning the fan blade, the motor has as much to do with where the burn takes place in the combustion chamber as any other component in the heater.

Gas Fired Heaters

Introduction to Natural Gas Heaters

Natural gas heaters will have distinct advantages and disadvantages when compared to the propane heaters mentioned earlier. The main advantage of using natural gas heaters is the availability of fuel supply. Natural gas is available in most communities, as well as in most industrial situations. With the fuel supply already on site and always available, natural gas may be the best alternative. As the availability for natural gas increases, so will the natural gas heater's share of the portable heater market. However, natural gas does have some disadvantages. First, natural gas is not available in all areas. Second, the portability of natural gas heaters is limited by the gas pressure, as well as by the length and diameter of the fuel supply hose. Next, it is important to maintain the proper volume of natural gas. The last two disadvantages of natural gas heat are that there are not many heating applications where high pressure (pounds of pressure) natural gas is available, and that there are not as many different model numbers available for natural gas as there are for propane. However, there will be situation where the best heater option is to use natural gas.

Technical Issues with Natural Gas Heaters

The number one technical issue with natural gas heaters is the ability to get the proper natural gas volume. Most natural gas heaters usually do not come with a fuel supply hose because the inside diameter (I.D.) of the hose size will vary depending on the available gas supply pressure. That happens to be the number one technical issue with natural gas heaters: having the correct natural gas volume.

The Three Types of Natural Gas Heaters

Forced Air

These heaters are heaters that use an internal motor and fan to distribute heat. Forced air heaters are commonly called "torpedo" heaters. Forced air natural gas heaters range in size from 150,000 BTU'S to 750,000 BTU'S through PHP. The advantages of the forced air heater are many. The whole unit does not have to be in the area to be heated; only the discharge end of the unit has to be in the area to be heated. This allows clean air exchanges with outside air. In addition, the forced air heater is also a "directional" heater. This means heat can be focused on a certain item or place. The forced air heater usually has multiple safety features. These usually consist of high limit switches, sail switches, air proving switches, tip switches (normally found on older units), spark plugs, igniter electrodes, ignition control boards, valves, and even thermocouples. In addition, forced air heaters that do not have a thermocouple can use a thermostat for temperature control. As with all heating systems, there are a few disadvantages associated with forced air units. The first disadvantage is the fact that electricity is required for operation. Another disadvantage is that forced air is more of a complex unit to troubleshoot and repair. Lastly, forced air units rely on three components to work properly: the timed delivery of air, spark, and fuel (in that order).

Radiant

These heaters work on the principle of transferring heat from one object to another without heating the space in between. For instance, the roof of a black car that has been sitting in the sun on a cool 60 degree day is much warmer than the surrounding air. Therefore, the radiant heat from the sun heated the roof of the car without heating the space in between. That is the concept of radiant heat. As with all heating systems, there are advantages as well as disadvantages.

The first advantage is that most radiant heaters require no external electricity. The second advantage of radiant heat is that the ground level is heated first, maximizing the BTU efficiency more so than other heating sources. The third advantage is that the most popular radiant heaters are in the 100,000 BTU range, making them ideal for using standard residential natural gas pressure. The disadvantages are few. First, very few models have a thermostatic gas valve which means you cannot use a thermostat. Second, there are relatively few BTU sizes available, mainly low pressure 100,000 BTU models and high pressure 250,000 BTU models.

Convection

These heaters work on the principle of heat stratification. Heat stratification means heating the topmost areas first, then forcing the heat down in layers until it reaches the comfort zone (usually from ground level to 6' off the ground). The main advantage of convection heaters is that they are the most inexpensive heaters to purchase, providing the most BTU'S for the buck! The disadvantages of convection heaters are twofold. First, since convection heaters work on the theory of heat stratification, most of the fuel dollars quickly rise with the heat to the ceiling and away from the comfort zone. Second, with very few convection models available for natural gas, large heating applications are not usually practical.

Various Ignition Control Boards (D.S.I.'s)

RAM-1M5-01

The 7499NR (Ram1M5-01) was used by Scheu exclusively. This ignition control does flame sensing thru the 1/4" male spade connection located on top of the board via the electrode (or spark plug) and ignition lead. It has individual wires running to 1/4" male spade connections on the side of the unit.



RAM-1

Desa, Scheu, L.B. White, and even Toro used the Ram-1 control extensively in heaters. This control unit required a wiring harness that attached to the side of the unit. This ignition control does flame sensing thru the top (base stud) of the board via the electrode (or spark plug) and ignition lead.

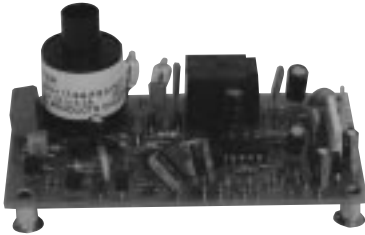


RAM-3MC2-01

The 08810 is a control board that is used by L.B. White exclusively. This board is a diagnostic board. That means that the board is capable of sending an electrical pulse signal to a small light (L.E.D.) that will flash for a certain amount of times, depending on what is wrong with the heater. This board monitors and delivers 24 volts to the gas valve, 120 volts to the motor, and it generates and delivers approximately 15,000 volts to the electrode for the ignition sequence. This board also utilizes a base stud located on top of the board to attach the ignition lead.



Gas Heater Service Info.



The 7801NR was the Scheu replacement for the 7499NR Ram. This ignition control was the first control to eliminate the second common wire. In other words, instead of having a 120 volt return and a valve return, you just have the one common (white) return. This board requires a wiring harness for operation. This ignition control does flame sensing thru the top of the board via the electrode (or spark plug) and ignition lead. The 7808NR listed to the right is the direct replacement for this control unit.

MARK10DN-117-3-8.5-8.5-P0062



The 7808NR (or the 110287-01), Made by Gasliter, is the most common ignition control unit used by both Scheu and Desa for heater production at the time of this printing (though they use different wiring harnesses). This control is a "potted" control. The term "potted" means that the board has a jell coating to give a degree of moisture resistance. This control requires a wiring harness for operation. This ignition control does flame sensing thru the 1/4" male spade located on top of the board, via the electrode (or spark plug) and ignition lead. 7808NR is the replacement for the 7801NR.



The Fenwal 7808NR is the same as the Gasliter 7808NR to the left except that at the time of printing, Scheu is the only company using it.

10DN-117-3-8.5-8.5-Q011



The M51605-01 control was used by Desa only. What makes this control stand out from the other Gasliters is that it does not do flame monitoring thru the ignition lead, and the ignition lead connection is only an 1/8" male spade connection. The flame monitoring is accomplished thru a 1/4" male spade located on the front of the board itself (on the terminal labeled "SENS") which will attach to the flame sensor.

The M51605-02 (or 7219NR) was once the most common control board used by both Desa and Scheu. This was the first Gasliter board that did the flame sensing thru the ignition post located on the top of the board. In addition, this was the first Gasliter to include all of the individual control wires.



10DN-117-3-8.5-8.5-Q012

The 05549 control was used by L B White exclusively. This control was used for a few select heater models (some of the 292's and 296's mainly).

This control also utilizes the base stud to attach the ignition lead.



MARK10X-117-3-7-7-Q010

The 22301 from L B White works the same way as the 08810 listed on top right.



24VAC 1016-400 SERIES

Propane Hoses

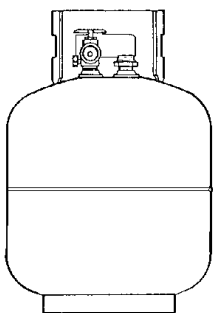
Part No.	Description	Where Used
2510LH	1/4" X 10' w/Left Hand 9/16" x 18 fittings	Sure Flame Torches, L.B. White Heaters
2510LHFTG	Fitting to connect 2510LH or 2525 LH hoses together	
2510	1/4" x 10' w/1/4" MPT x 1/4" Female Flair Swivel	3500FA, 250, 250A, BLP375 TC250, TC275
2525	1/4" x 25' w/1/4" MPF x 1/4" Female Flair Swivel	Same as above
2525LH	1/4" x 25 w/Left Hand	Torches
2525FTG	Fitting to connect 2510's or 2525 together	
3810	3/8" x 10' w/3/8" MPT x 3/8" Female Flair Swivel	BLP80, BLP150,150FA, 80FA,150FAS
381050	3/8" X 10' w/3/8" MPT x 1/2" Female Swivel	BLP155
382550	3/8" x 25' 1/2" FFIR swivel insert	
3825	3/8" X 25' w/3/8" MPT 3/8" Female Flair Swivel	Optional Hose for LP Heaters up to 150,000 BTU's
3850	3/8" x 50' x 3/8" MPT	
3810FTG	Fitting to connect 3810's, 3825's or 3850's together	
5010	1/2" x 10' w/1/2" MPT x 1/2" MPT	
5025	1/2" x 25' w/1/2" MPT x 1/2" MPT	
5050	1/2" X 50' w/1/2" MPT x 1/2" MPT	
54	1/2" x 1/2" Swivel Connector	
7510P	3/4" x 10' w/3/4" MPT each end with Female Swivel Adapter	Optional Hose for Heaters over 375,000 BTU's
7525P	3/4" x 25' w/3/4" MPT each end with Female Swivel Adapter	Optional Hose for Heaters over 375,000 BTU's
7550P	3/4" x 50' x w/3/4" MPT each end with Female Swivel Adapter	

ALL HOSES MEET OR EXCEED O.E.M. SPECIFICATIONS. ALL HOSES UL APPROVED.

1/2" Hoses should be used with low pressure Natural Gas Heaters.

3/4" Hoses should be used with high pressure Natural Gas Heaters.

Propane Tanks



Part#	Description	BTU Content	Wt.
C5	5# Tank	108,000	5
C10	10# Tank	215,000	10*
C20	20# Tank	430,000	20*
C30	30# Tank	645,000	28*
C40	40# Tank	860,000	37*
C50	50# Tank	1,080,000	45
C60	60# Tank	1,300,000	55

* With O.P.D.

All tanks will ship UPS.

OPD Valves

- In accordance with the April 1, 2002 National Fire Safety Standards
- All propane cylinders 4# to 40# are now required to contain overfill protection devices

We listed the total BTU content so you could determine approximately how long a heater or any other appliance would last. For example, if you operate a 150,000 BTU heater on 2-100 lb tanks the heater should operate over 14 hours, however, only 90% (approximate) of the contents can be used, so the heater will operate 13+ hours.

Propane Supplies

Part No. HR1053P

Adjustable High Pressure Regulator

Capacity: 7,500,000 BTU/HR Propane

Outlet Pressure Range: 5-50 PSIG

Color: Red

This tee handle adjustable regulator is used on high pressure gas heaters over 1,000,000 BTU's and as a main supply when several small heaters are run off of one tank.



Part No. HR1053P

Part No. LV4403TR4

First Stage High Pressure Regulator

Reduces LP tank pressure to 5-10 P.S.I.

Outlet Pressure: 2,500,000 BTU/hr Propane

Connections: 1/2" Female NPT Inlet and Outlet

Color: Red

Factory set outlet pressure: 10 PSIG



Part No. LV4403TR4
Part No. LV4403B4

Part No. 230-00

Marshall 230 Regulator

11" W.C. Outlet Pressure

1/4" x 3/8" E.P.T.

This regulator is used on

National Riverside Models:

150FA, 150FAS, 150FAST, 80VC, 80FA, 100RA.

Master, Reddy Models:

BLP45, RLP45, BLP80, RLP80, BLP150, BLP155, BLP155

T.

REGULATOR CAP (230-00)

Part No. 100-22B Blue



Part No. 230-00

Part No. 130-00

Marshall 130 Regulator

1/4 x 1/4 FPI Replaces Marshall 300

This regulator is used on

National Riverside Models: 250, 250A.

Master/Reddy Models:

TC250, RC250, TC250A, RC250A, TC275, RC275.

REGULATOR CAP: Part No. 100-22R Red



Part No. 130-00

Part No. 597FB

Torch Regulator

This handle adjustable regulator is widely used on Propane Torches

and High Pressure Gas Heaters under 1,000,000 BTU's.

Capacity: 820,000 BTU/HR Propane

Outlet Pressure Range: 5-25 PSIG

Connections: 1/4" Female NPT Inlet and Outlet

Color: Red



Part No. 597FB

Propane Supplies

Single Tank Vaporization

Lbs. Of LP in Cylinder	Maximum Continuous Draw in BTU Per Hour at Various Temperatures in Degrees F.							
	70 F	60 F	40 F	20 F	0 F	-5 F	-10 F	-15 F
100	300,000	277,000	214,000	167,000	113,000	85,000	57,000	28,000
90	277,000	247,000	200,000	152,000	104,000	78,000	52,000	26,000
80	236,000	214,000	180,000	137,000	94,000	71,000	47,000	23,500
70	214,000	199,000	160,000	122,000	83,000	62,000	42,000	21,000
60	192,000	176,000	140,000	109,000	75,000	56,000	38,000	19,000
50	167,000	154,000	125,000	94,000	64,000	48,000	32,000	16,000
40	141,000	131,000	105,000	79,000	55,000	41,000	28,000	14,000
30	118,000	107,000	85,000	66,000	45,000	34,000	23,000	11,000
20	92,000	83,000	68,000	51,000	36,000	27,000	18,000	9,000
10	66,000	60,000	49,000	38,000	28,000	21,000	14,000	7,000

2+ Cylinders Vaporization

Lbs. Of LP In Cylinder	Maximum Continuous Draw in BTU per Hour in Degrees F.					
	0 F/1 Tank	20 F/1 Tank	0 F/2 Tanks	20 F/2 Tanks	0 F/3 Tanks	20 F/3 Tanks
100	113,000	167,000	248,000	367,000	545,000	807,000
90	104,000	152,000	228,000	334,000	501,000	734,000
80	94,000	137,000	206,000	301,000	400,000	662,000
70	83,000	122,000	182,000	268,000	363,000	589,000
60	75,000	109,000	165,000	239,000	310,000	453,000
50	64,000	94,000	141,000	206,000	280,000	382,000
40	55,000	79,000	121,000	174,000	217,000	319,000
30	45,000	66,000	99,000	145,000	181,000	266,000
20	36,000	51,000	79,000	112,000	174,000	246,000
10	28,000	38,000	62,000	84,000	136,000	184,000

Propane Supplies



T-Block Manifold Part No. P400

Inlet Connection: Male POL
Outlet Connection: Female POL
For multiple tank connections



Flame Control Tester Part No. 0402NR

Use to test DSI boards

- Easy to connect to almost any board
- Tests & proves operation of: gas valve, spark & flame sensing
- Save hundreds of dollars on replacment flame contorl boards!

Propane Supplies

POL Pigtail's Part No. 1662

30" Long x 1/4" O.D. Tubing

Part No. 1630RU

30" Rubber Hose

Part No. 1648RU

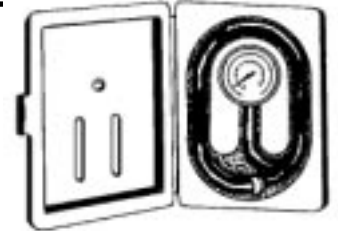
48" Rubber Hose

CONNECTION: POL X POL



Gas Pressure Test Set Part No. G24507

This test set employs a 2 1/2" dial. Fig. 83K gauge with a dual scale of 0 to 20 ounces and 0 to 35 inches water column. The gauge is mounted securely in a polyethylene box with a hinged cover and gray finish.



Propane Test Gauge - Low Pressure Part No. G24503

0-15 IN. W.C. Low Pressure Gauge

Utilizes highly effective diaphragm sensing to give accurate indication in low pressure applications. 2 1/2" dial, 1/8" NPT lower mount connection.

Recommended for use on Sure Flame Models SL11B, S1500, S1505 and S2000. Can be used on any Low Pressure Gas Portable Heater.



Gas Fired Service Manual

New service manual! Gives an understanding of gas fired heaters, parts description & photos and troubleshooting. It also covers three manufacturers of gas fired heaters: Desa, Scheu and L.B. White.

Part No. GM70103



Part No. HV1027P

0-30 High Pressure Gauge

Part No. TTS8

Brushable Teflon Sealant

This is what our service people use.
Not Suitable for oxygen.

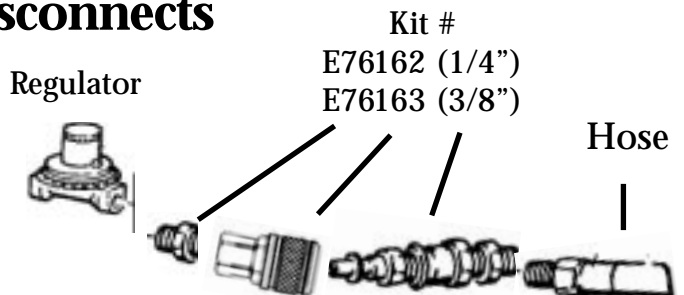


Propane Quick Disconnects

E76163 = 3/8" Quick Connect Kit

E76162 = 1/4" Quick Connect Kit

Kit consists of a fitting to attach quick connect to regulator, and a male quick plug that you connect to hose.



Enerco Gas Fired Heaters

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater. If your model number does not appear in the breakdowns, please call one of our technicians for assistance.

Brand Names Include:

Enerco
Mr. Heater
HeatStar

If you need technical assistance, feel free to call **PHP at 1-800-362-6951** or e-mail us at techservice@phpdistribution.com. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service.

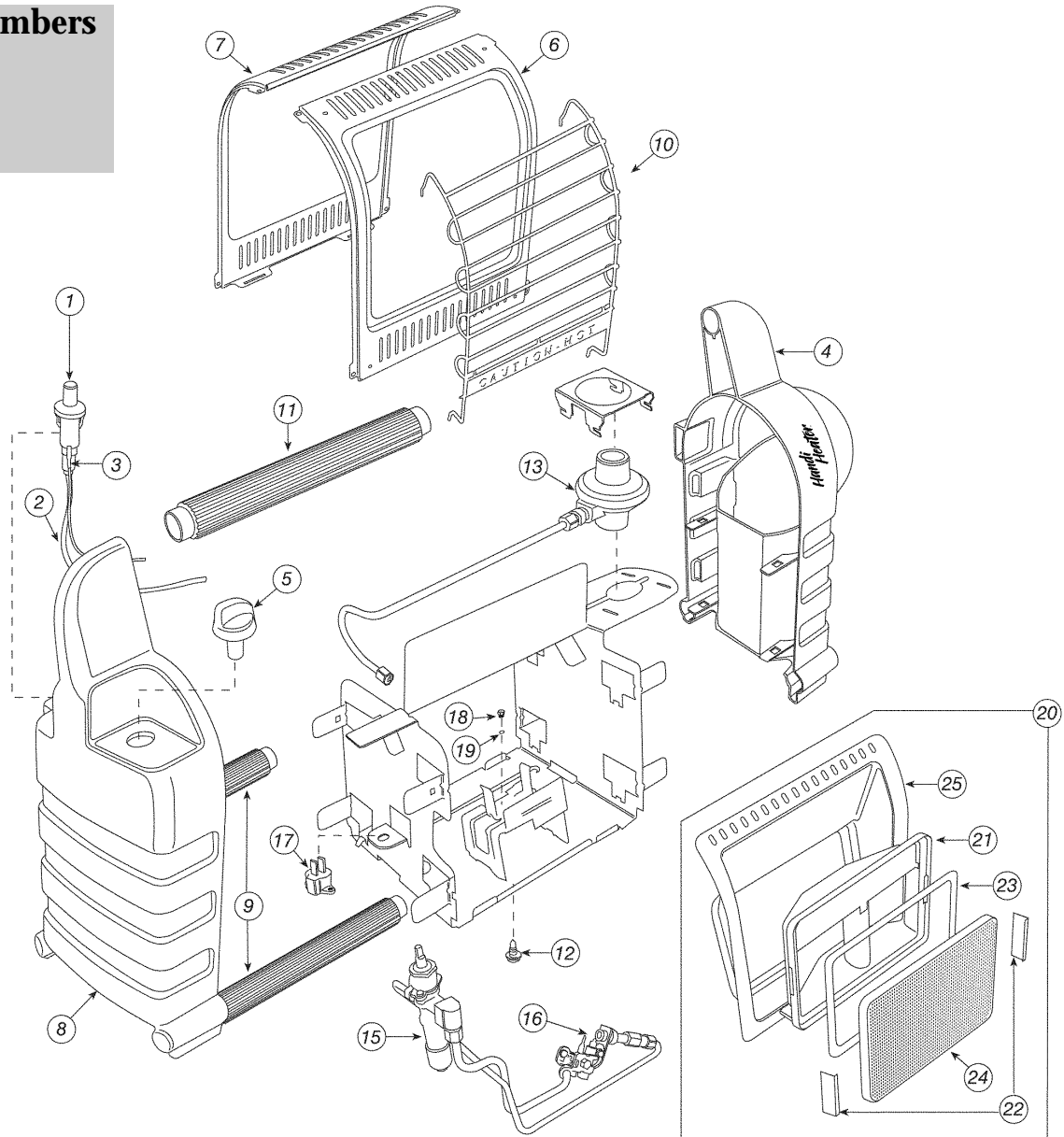
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4,000 & 9,000 Scheu Propane Handi-Heater

Model Numbers

SPC9
MH9B



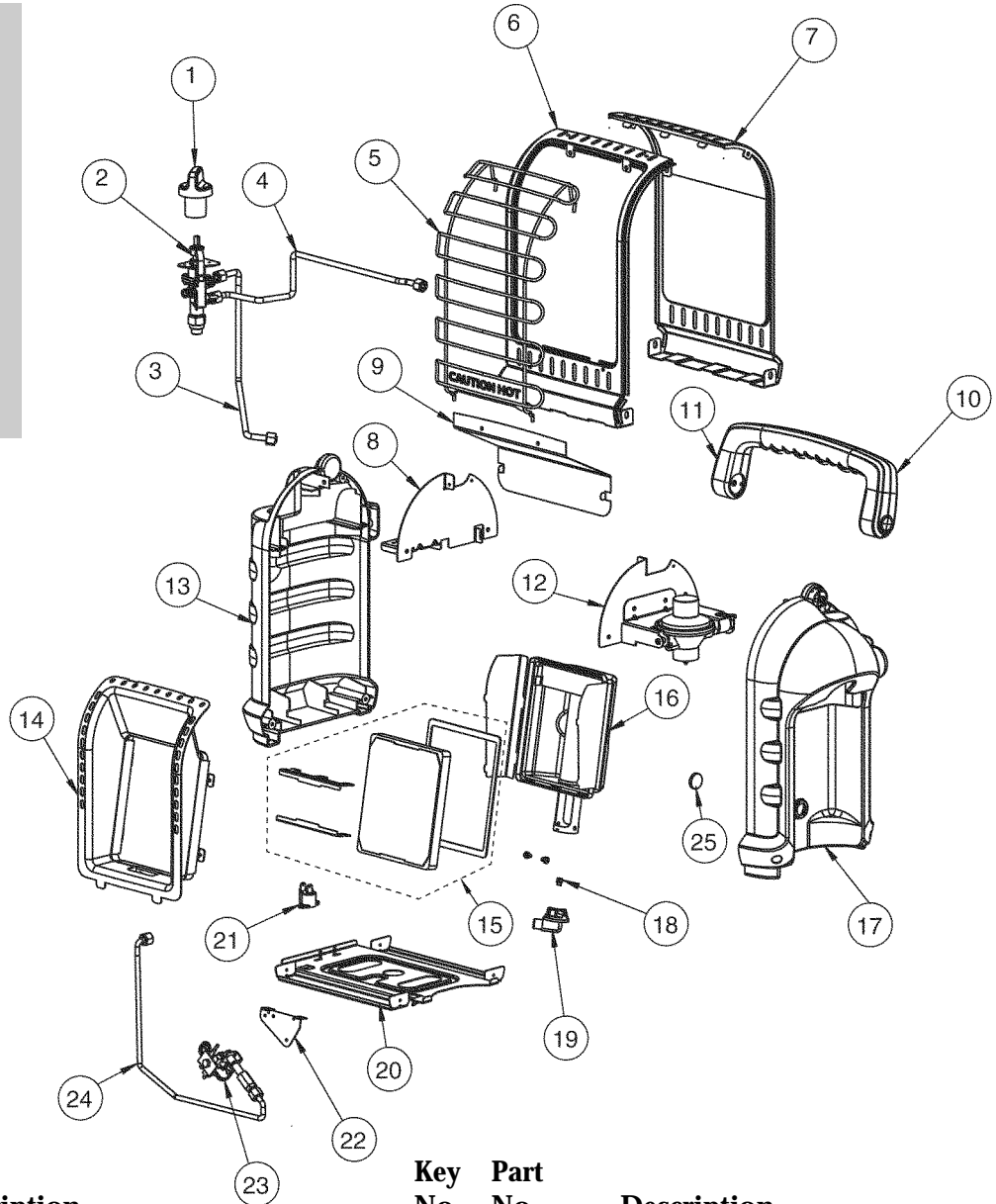
Enerco LP 9,000 BTU

Key No.	Part No.	Description	Key No.	Part No.	Description
1	E73234	PIEZOIGNITER	14	E73432	OWNER'S MANUAL (Required when ordering parts.)
2	E73236	WIRE,IGNITER	15	E73416	CONTROL VALVE
3	E73237	WIRE,GROUND	16	E73404	PILOT ASSEMBLY
4	E73405	COVER,RHPLASTIC	17	E73403	TIP SWITCH
5	E73418	KNOB,FUEL CONTROL	18	E73413	ORIFICE,BURNER
6	E73423	COVER,FRONT	19	E71113	O-RING,BURNERORIFICE
7	E73424	COVER,REAR	20	E73446	COMPLETEBURNER ASSEMBLY (Includes assembled items 21- 25)
8	E73426	COVER,LHPLASTIC	21	E73458	PLENUM,BURNER
9	E73428	BASESUPPORT TUBES (qty. 2)	22	E73429	CLIP, BUNER TILE (qty. 2)
10	E73449P	GUARD, WIRE	23	E73433	GASKET,BURNER TILE
11	E73452	HANDLETUBE	24	E73439	BURNERTILE
12	E98959	SCREW, BURNER MT.	25	E73460	REFLECTOR,BURNER
13	E11410	REGULATOR	*	E73702	12' Accessory Gas Hose

4,000 & 9,000 Mr. Heater Propane Handi-Heater

Model Numbers
MH9BX

Starting Serial#
EZ-320000001001
EZ-320100001001
EZ-320200001001
EZ-320400001001
EZ-320600001001



Key No.	Part No.	Description
1.	32017	Knob, Valve, Safety, Red
	32019	Knob, Valve, Safety, Green
2.	32054	Valve, Assy, Control
3.	32056	Tube, Burner, Main
4.	32053	Tube, Inlet, Assy
5.	32051	Guard, Wire
	32061	Guard, Wire, Heavy
6.	33092	Panel, Front, Metal, Red
	33094	Panel, Front, Metal, Yellow
	33093	Panel, Front, Metal, Green
7.	75191	Panel, Back, Metal, w/32004, Red
	75194	Panel, Back, Metal, w/32004, Yellow
	75196	Panel, Back, Metal, w/32004, Green
8.	32027	Brkt, Valve
9.	32028	Heat, Shield
10.	32015	Handle, Back, Plastic, Gray
	32074	Handle, Back, Plastic, Black
11.	32014	Handle, Front, Plastic, Gray
	32072	Handle, Front, Plastic, Black

Key No.	Part No.	Description
12.	75198	Assy, Regulator, w/Support
13.	32080	Housing, Left, Plastic, Gray
	32085	Housing, Left, Plastic, Black
14.	32021	Reflector, Metal
15.	33088	Tile, Replacement Kit, MH9BX
16.	32032	Burner, Assy
17.	33090	Housing, Right, Plastic, Gray
	33091	Housing, Right, Plastic, Black
18.	32068	Orifice, Assy with O-Ring
19.	32052	Orifice, Holder
20.	32023	Floor, Panel, Metal
21.	73403	Switch, Tipover
22.	32046	Brkt, ODS (Oxygen Depletion Sensor)
23.	73404	ODS, Pilot, Assy
24.	32057	Tube, Pilot, Assy
25.	32067	Magnet, Tank

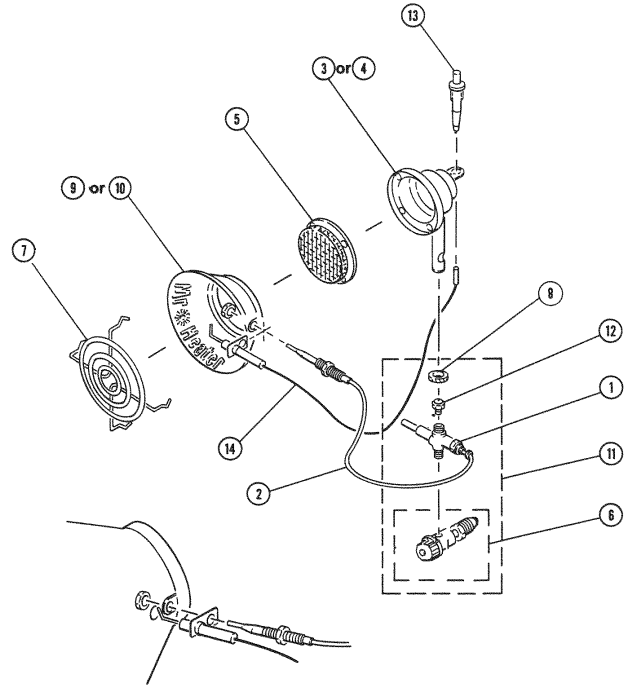
Enerco LP 9,000 BTU

12,000 BTU Infrared Enerco Propane Heater

Model Numbers

MH12T
MH12TS

Key No.	Part No.	Description
1	F273116	Replacement Safety Shutoff with Orifice Assembly
2	F273117	Thermocouple Lead - 12" Long
3	73122	Plenum Assembly (MH12T only)
4	73107	Plenum Assembly (MH12TS only)
5	F273164	Grid Screen Assembly
6	F273606	Replacement Regulator with Soft Nose POL
7	75102	Wire Faceguard
8	75113	Knurled Lock Nut
9	75128	Reflector (MH12T only)
10	75128S	Reflector (MH12TS only)
11	73120	Repl. Reg. H-M-L w/S.S. Tank Union T/C and Orifice
12	75784	Orifice - .018
13	73235	Sparklite Assembly (MH12TS only)
14	73233	Electrode Assembly (MH12TS only)



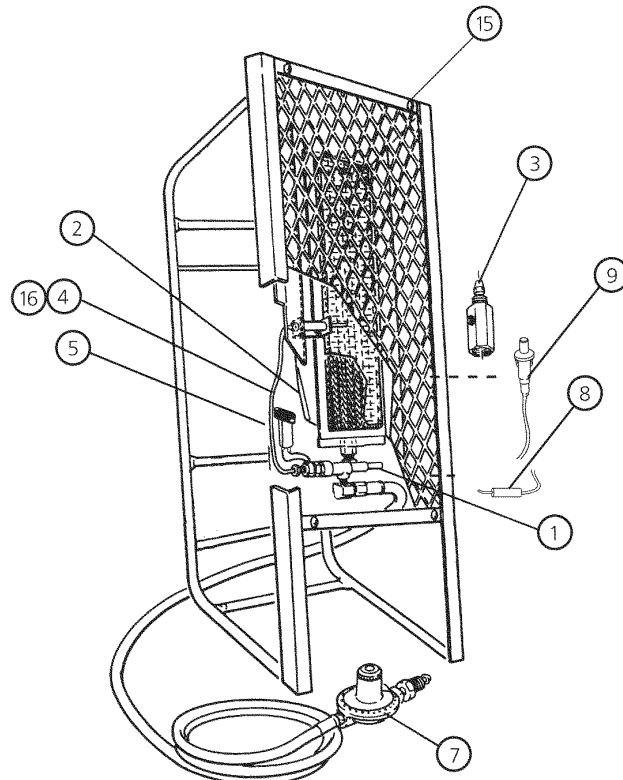
35,000 BTU Enerco Infrared Propane Heater

Model Numbers

HS35LP

Serial Numbers:
270700-09001001

Key No.	Part No.	Description
1	23525	CONT M-N SS PORT 3/8MPXI/4MP
2	23526	BURNR/LTFR PORTABLES/D1096
3	23527	ORIFICE/BURNER #55 DRILL
4	23513	THERMOCOUPLE ASSY/18"
5	21920	TIP-OVER SWITCH 6" LEAD(PORT)
7	11663	REC.L/P 21" WC OUT
8	23531	IGNITOR, MODEL#35
9	20735	PIEZO, MODEL#35
15	70722	MAIN FRAME LOWER ASSEMBLY
16	14504	THERMOCOUPLE BRACKET



Enerco LP 12-35,000 BTU

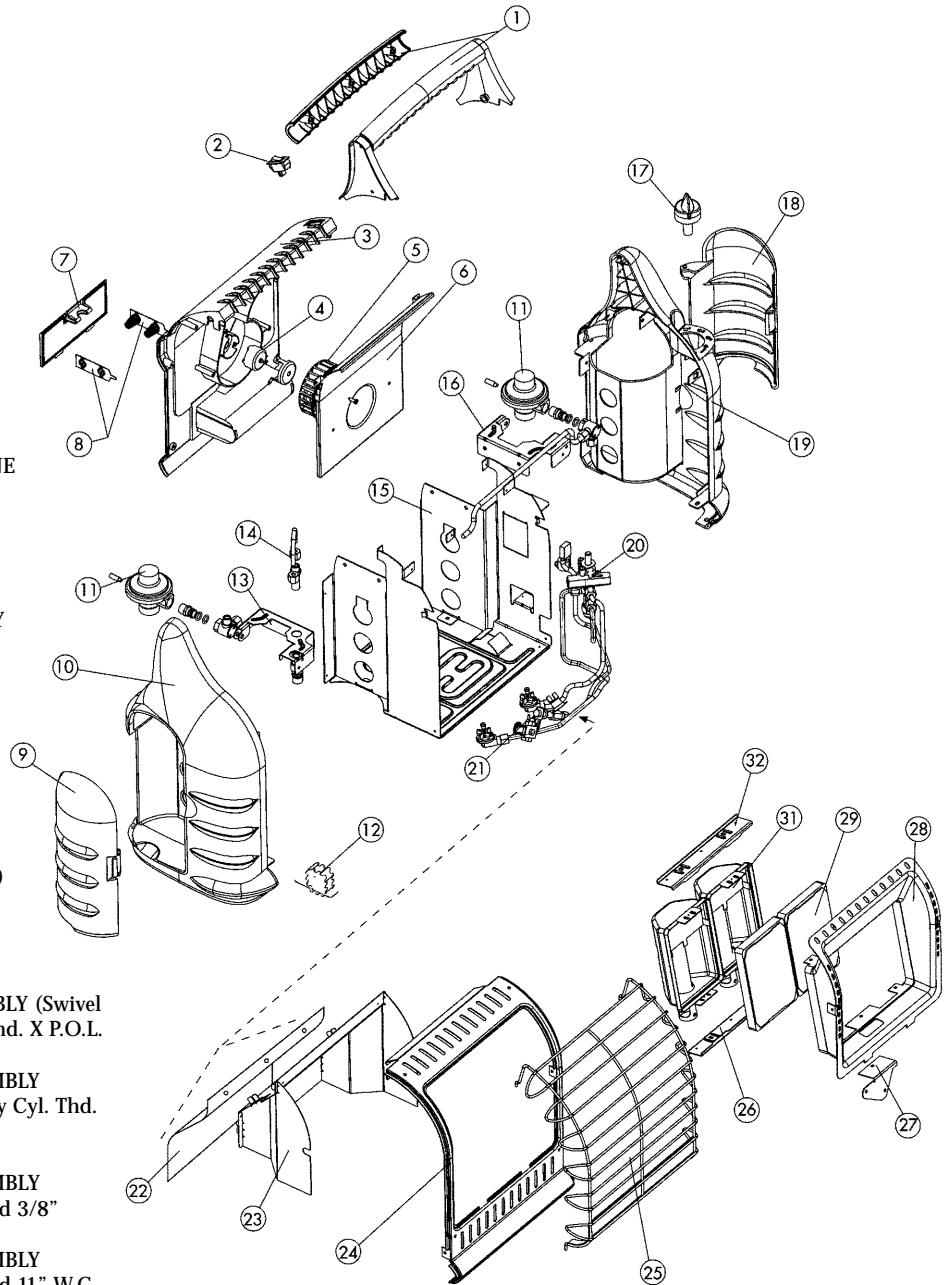
24,000 BTU Enerco Propane Heater "Big Buddy"

Model Numbers
MH18B

Key No.	Part No.	Description
1	78402	HANDLE, ASSEMBLY
2	78403	FAN, SWITCH
3	78404	BACK, FAN, COVER
4	78405	FAN, MOTOR
5	78406	FAN, BLOWER, WHEEL
6	78407	FAN, INTAKE, COVER
7	78408	DOOR, BATTERY, COVER
8	78409	BATTERY, TERMINALS
9	78410	DOOR LEFT SIDE COVER
10	78411	LEFT, SIDE, COVER
11	78412	(2) REGULATORS, MH18B
12	78413	TIE, WRAPS
13	78414	BRACKET, LEFT, SIDE, REG.
14	78415	LEFT, SIDE, GAS, SUPPLY, LINE
15	78416	FRAME, ASSEMBLY
16	78417	BRACKET, RIGHT, SIDE, REG.
17	78418	KNOB, CONTROL
18	78419	DOOR, RIGHT, SIDE, COVER
19	78420	RIGHT, SIDE, COVER
20	78421	VALVE, CONTROL, ASSEMBLY
21	78422	PILOT, ASSEMBLY
22	78423	SHIELD, HEAT, BACK
23	78424	SHIELD, HEAT, FRONT
24	78425	COVER, FRONT
25	78426	GUARD, WIRE, FACE
26	78427	BRACKET, BOTTOM
27	78428	PILOT, BRACKET
28	78429	REFLECTOR
29	73439	TILE
30	73433	TILE, GASKET (NOT SHOWN)
31	78431	PLENUM, BODY
32	78432	BRACKET, TOP

Accessories

- F273701 5 ft. PROPANE HOSE ASSEMBLY (Swivel 1"-20 Male Throwaway Cyl. Thd. X P.O.L. w/Handwheel)
- F273702 12 ft. PROPANE HOSE ASSEMBLY (Swivel 1"-20 Male Throwaway Cyl. Thd. X P.O.L. w/Handwheel)
- F273699 Fuel Filter (Replace Annually)
- F271802 12 ft. PROPANE HOSE ASSEMBLY w/quick disconnect fittings and 3/8" female flare fitting
- F271803 12 ft. PROPANE HOSE ASSEMBLY w/quick disconnect fittings and 11" W.C. regulator w/Acme nut.



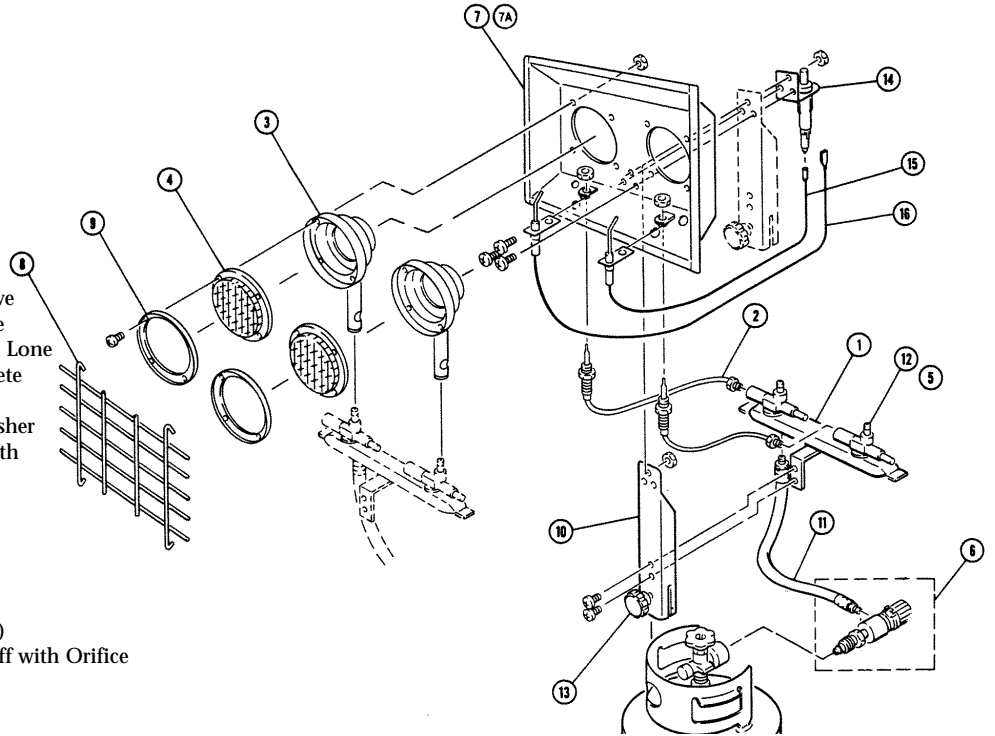
Enerco LP 24,000 BTU

24,000 & 42,000 BTU Enerco Infrared Propane Heater

Model Numbers

MH24TS

Key No.	Part No.	Description
1	73610	Manifold Assembly, 2 Valve Orifice and Thermocouple
2	F273117	Thermocouple Lead – 12" Lone
3	73122	Plenum Assembly Complete
4	F273164	Grid Screen Assembly
5	73214	Bolt – 1/-20 with Seal Washer
6	F273606	Replacement Regulator with Soft Nose POL
7	75603	Reflector (MH24T Only)
7A	75603S	Reflector (MH24TS) only
8	75602	Wire Face Guard
9	75607	Metal Ring
10	75628	Collar Mounting Bracket
11	73658	Hose Assembly (11" Long)
12	73213	Replacement Safety Shutoff with Orifice
13	75613	Locking Knob
14	73234	Igniter/Sparklite
15	73233	Spark Electrode/Bottom
16	73231	Spark Electrode/Side

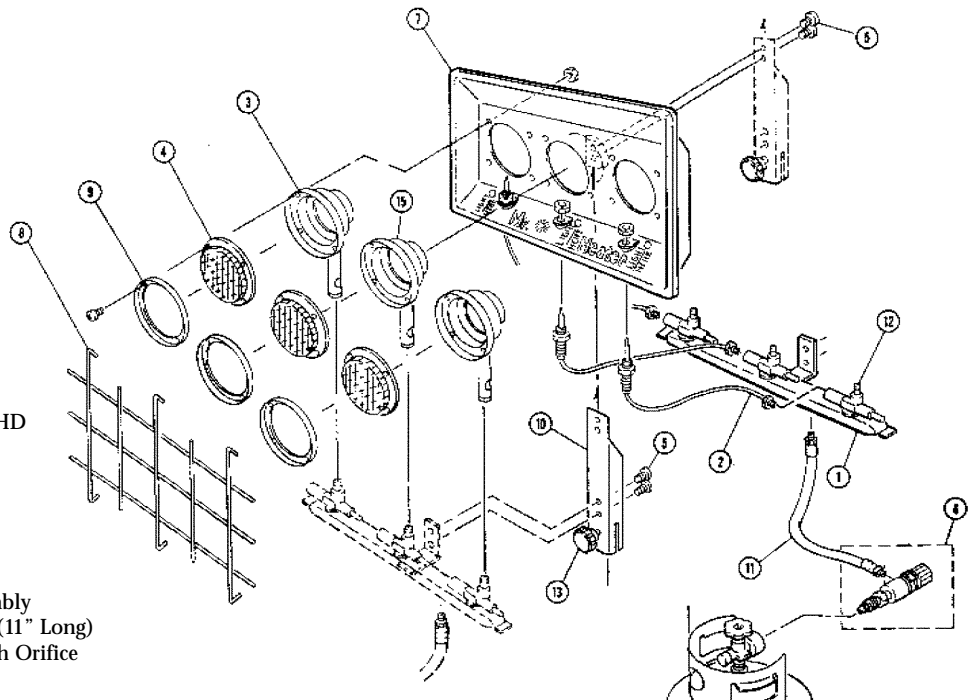


42,000 BTU Enerco Infrared Propane Heater

Model Numbers

MH42T

Key No.	Part No.	Description
1	73960	Manifold with safety shutoffs and orifices
2	F273117	12 inch thermocouple lead
3	73122	Plenum Assembly, Complete
4	F273164	Screen Assembly
5	73941	Bolt set (#10-32 x 1/4 Phillips HD Mach Screws)
6	F273606	Replacement Regulator with Soft Nose POL
7	73743	Reflector
8	73742	Wire Guard
9	75607	Metal Ring
10	73938	Collar Mounting Bracket Assembly
11	73658	Hose Assembly/Less Regulator (11" Long)
12	73213	Replacement Safety Shutoff with Orifice
13	75613	Locking Knob
14	73214	Bolt – 1/-20 with Seal Washer
15	73322	Plenum Assembly with Clip –Center Only



Enerco LP 24-42,000 BTU

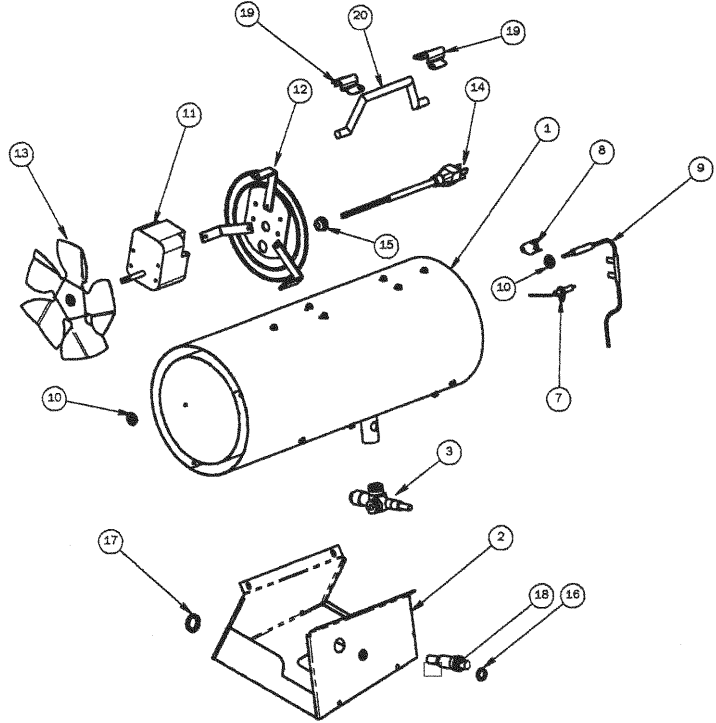
35,000 BTU Enerco Forced Air Propane Heater

Model Numbers

MH35FA

Key No.	Part No.	Description
1	10720	Heater Body Kit
2	2100	Control Box Assy
3	8079	Valve w/Thermocouple
*	1007	Hose & Regulator Assembly
*	2130	Wire Assembly
7	8080	Electrode
8	6168	High Limit Switch 240oF (116oC)
10	8091	Nut Hex M8 x 1 Fine Thd Thermocouple (qty. 2)
11	8076	Motor 0.74 A
12	2101	Grille Assembly
13	8077	Fan Blade, 6.75 x .75 Pitch
14	2113	Power Cord Assembly
15	8136	Bushing Strain Relief
16	8116	Nut Hex 5-28 TE Valve (qty. 2)
17	7161	Nut, Piezo
18	6473	Piezo Ignitor
19	7094	Clip Handle (qty. 2)
20	7095	Handle
*	M8494	Label, Model Warnings
*	70036	Label, Operating Instructions
*	8649	Manual, Operating Instructions/Parts List
*	M8497	Label, Model
*	8204	Label, Hang Tag, LP

* Not shown on exploded view



35,000 BTU Enerco Forced Air Propane Heater

Model Numbers

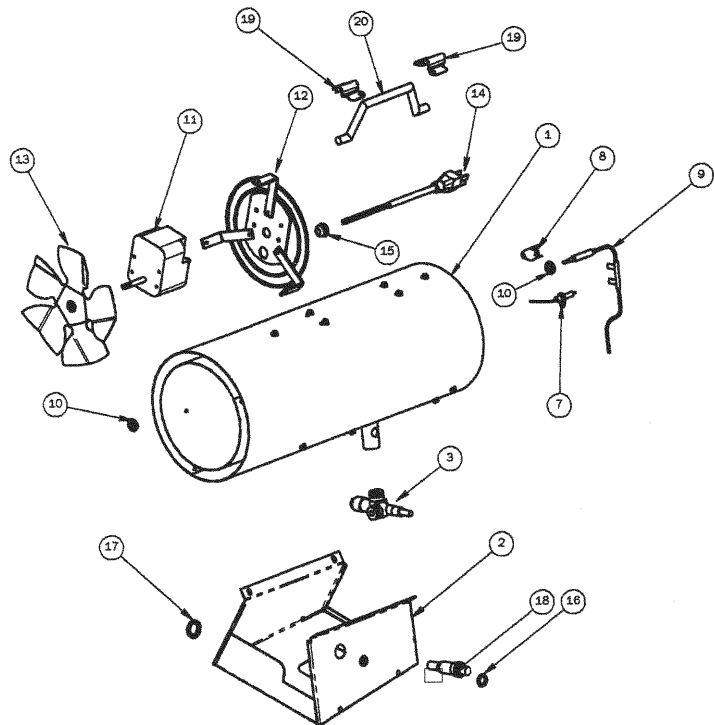
HS/MH/PA35FA

Starting Serial #

MHC-700350034202

Key No.	Part No.	Description
1	10720	Heater Body, MH/HS
	28084	Heater Body, PA
2	22100	Control Box Assy 1
3	28081	Valve 1
*	21007	Hose & Regulator Assembly 1
*	21007-20	Hose & Regulator Assembly, 20' 1
*	22130	Wire Assembly 1
7	28080	Electrode 1
8	26168	High Limit Switch 240oF (116oC) 1
9	28082	Thermocouple 1
10	28091	Nut Hex M8 x 1 Fine Thd Thermocouple 2
11	28076	Motor 0.74 A 1
12	22101	Grille Assembly 1
13	28077	Fan Blade, 6.75 x .75 Pitch 1
14	22113	Power Cord Assembly 1
15	82136	Bushing Strain Relief 1
16	28116	Nut Hex 5-28 TE Valve 2
17	27161	Nut, Piezo 1
18	26473	Piezo Ignitor 1
19	28074	Clip Handle 2
20	28075	Handle, plastic 1
*	28494	Label, Model Warnings 1
*	28495	Label, Operating Instructions 1
*	70036	Manual, Operating Instructions/Parts List 1
*	28497	Label, Model 1
*	28204	Label, Hang Tag, LP 1

* Not shown on exploded view

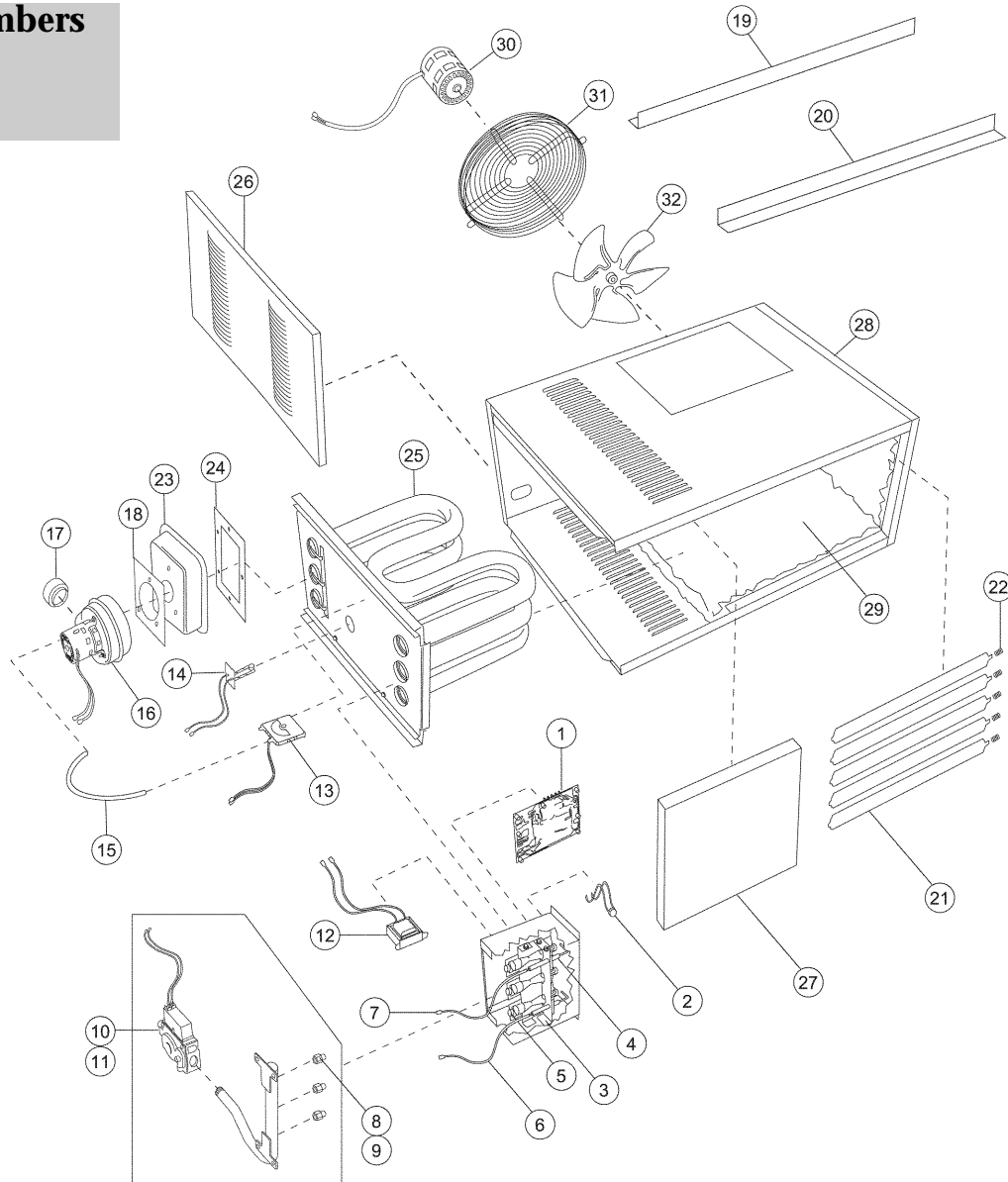


Enerco LP 35,000 BTU

45,000 & 75,000 BTU Enerco Propane Unit Heater

Model Numbers

MHU45
MHU75



Key

No.	MHU45	MHU75	Description
1	60105	60105	CIRCUIT BOARD
2	60015	60015	LIMIT SENSOR
3	60035	60035	ELECTRODE IGNITER
4	60040	60040	ELECTRODE SENSOR
5	60050	60050	BURNER
6	60045	60045	IGNITION LEAD
7	60046	60046	SENSOR LEAD
8	60049	60049	ORIFICE (NAT)
9	60056	60056	ORIFICE (LP)
10	02812	02812	GAS VALVE (NAT)
11	02811	02811	GAS VALVE (LP)
12	60025	60025	TRANSFORMER
13	60030	60030	PRESSURE SWITCH
14	60022	60022	HI LIMIT SENSOR HEAT EXCH.
15	60031	60031	PRESSURE SWITCH TUBE
16	60020	60020	INDUCED DRAFT MOTOR

Key

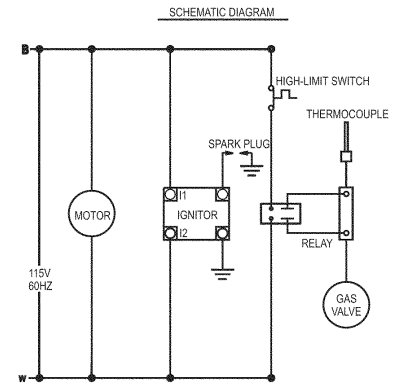
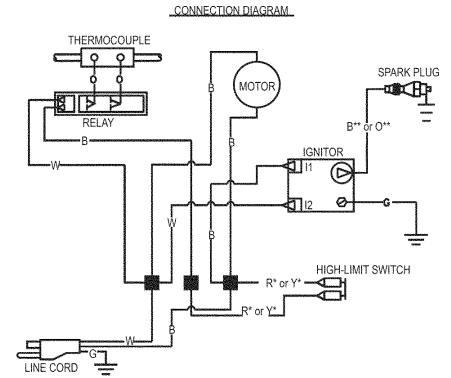
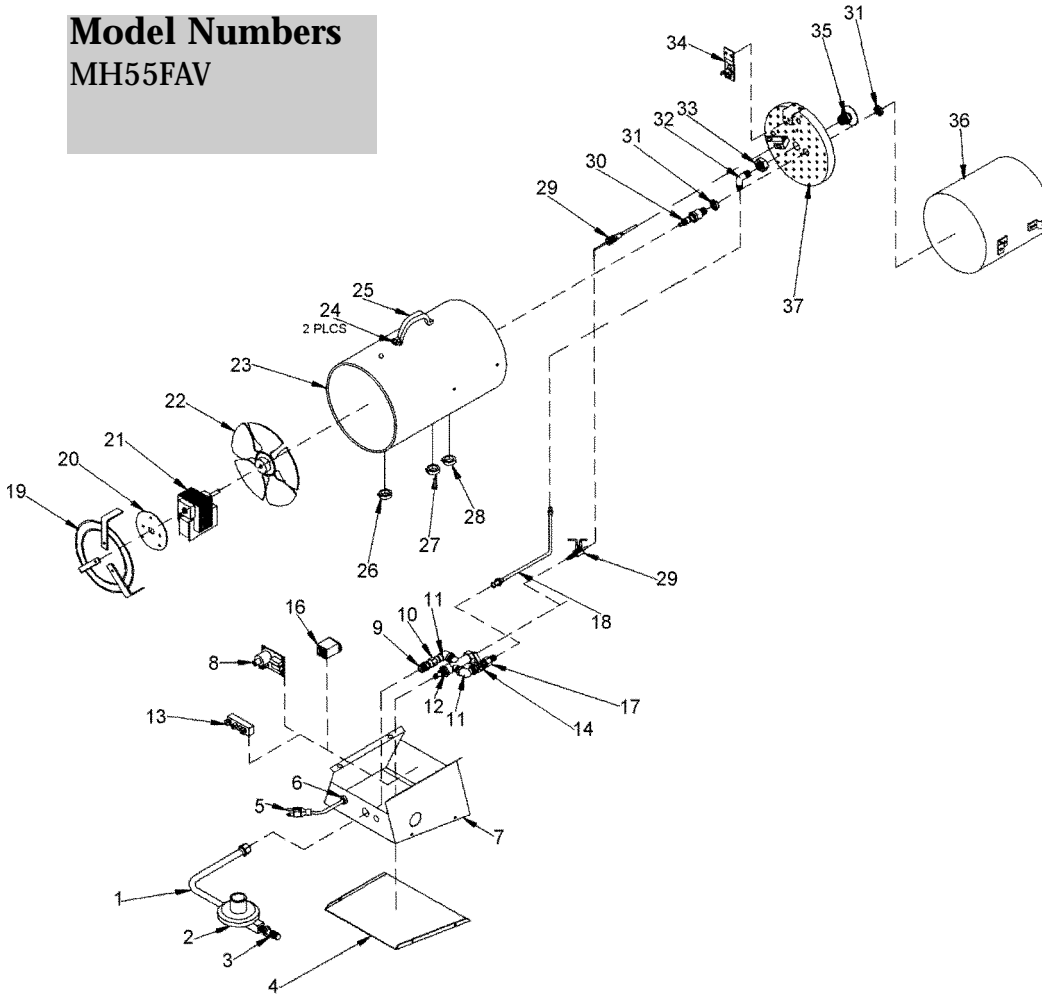
No.	MHU45	MHU75	Description
17	60130	60140	VENT ADAPTER
18	60135	60135	INDUCED DRAFT MOTOR GAS SKET
19	60075	60075	BACK BRACKET
20	60080	60080	FRONT BRACKET
21	60100	60100	LOUVERS
22	60103	60103	LOUVER SPRING
23	60085	60087	FLUE BOX
24	60090	60092	FLUE BOX GAS SKET
25	60065	60068	HEAT EXCHANGER
26	60070	60072	ACCESS DOOR
27	60095	60097	FRONT
28	60110	60112	SIDE DOOR
29	60115	60117	WRAPPER
30	60055	60054	FAN MOTOR
31	60120	60122	FAN GUARD
32	60125	60127	FAN ASSEMBLY

Enerco LP 45-75,000 BTU

55,000 BTU Enerco Forced Air Propane Heater

Model Numbers

MH55FAV



Key No.	Part No.	Description
1	6152	Hose Assy, LP
2	6257	Regulator 28" WC
3	6433	POL Excess Flow 1/4 MPT
4	3955	Panel, Bottom
5	1036	Power Cord Assy
6	6223	Strain Relief Bushing
7	1904	Control Box Assy
8	3275	Ignitor HYLO 801
9	6127	Ftg, Male Connector
10	6133	Ftg, Coupling (qty. 2)
11	6265	Ftg, Elbow Street (qty. 2)
12	7285	Thermoelectric Valve
13	6641	Terminal Board
14	7431	Ball Valve
*	6189	Terminal "Y" (qty. 2)
16	1811	Relay Assembly
17	3141	Ftg., Female Connector
18	1935	Fuel Tube Assy
19	1654	Motor Grille Assy
20	3676	Brkt, Motor Mounting
21	1652	Motor Assy
22	6086	Fan, 7"
23	1729	Outer Cylinder Assy
24	7094	Clip Handle Mounting (qty. 2)
25	7095	Handle

Key No.	Part No.	Description
26	6225	Snap Bushing, 5/8
27	6226	Universal Bushing
28	6224	Snap Bushing 1/2
29	6654	Thermocouple 13" Lg w/J.B.
30	1082	Spark Plug
31	3037	Spark Plug Nut (qty. 2)
32	6121	Ftg, Male Elbow
33	3038	Orifice Nut Mtg
34	1751	High Limit Control Assy
35	1930	Orifice Assy, LP
36	1651	Middle Cylinder Assy
37	1931	Flame Holder Assy
*	70056	Manual, Operating Instructions
*	M8733	Label, Model
*	7783	Label, Operating Instructions
*	6374	Label, Electrical Grounding
*	7651	Label, Fuel
*	7503	Label, Wiring Diagram
*	6373	Label, Fan Rotation
*	1667	Hose & Regulator Assembly
*	8203	Label Hang Tag, LP
*	7709	Label, Fuel
*	7704	Label, Warning

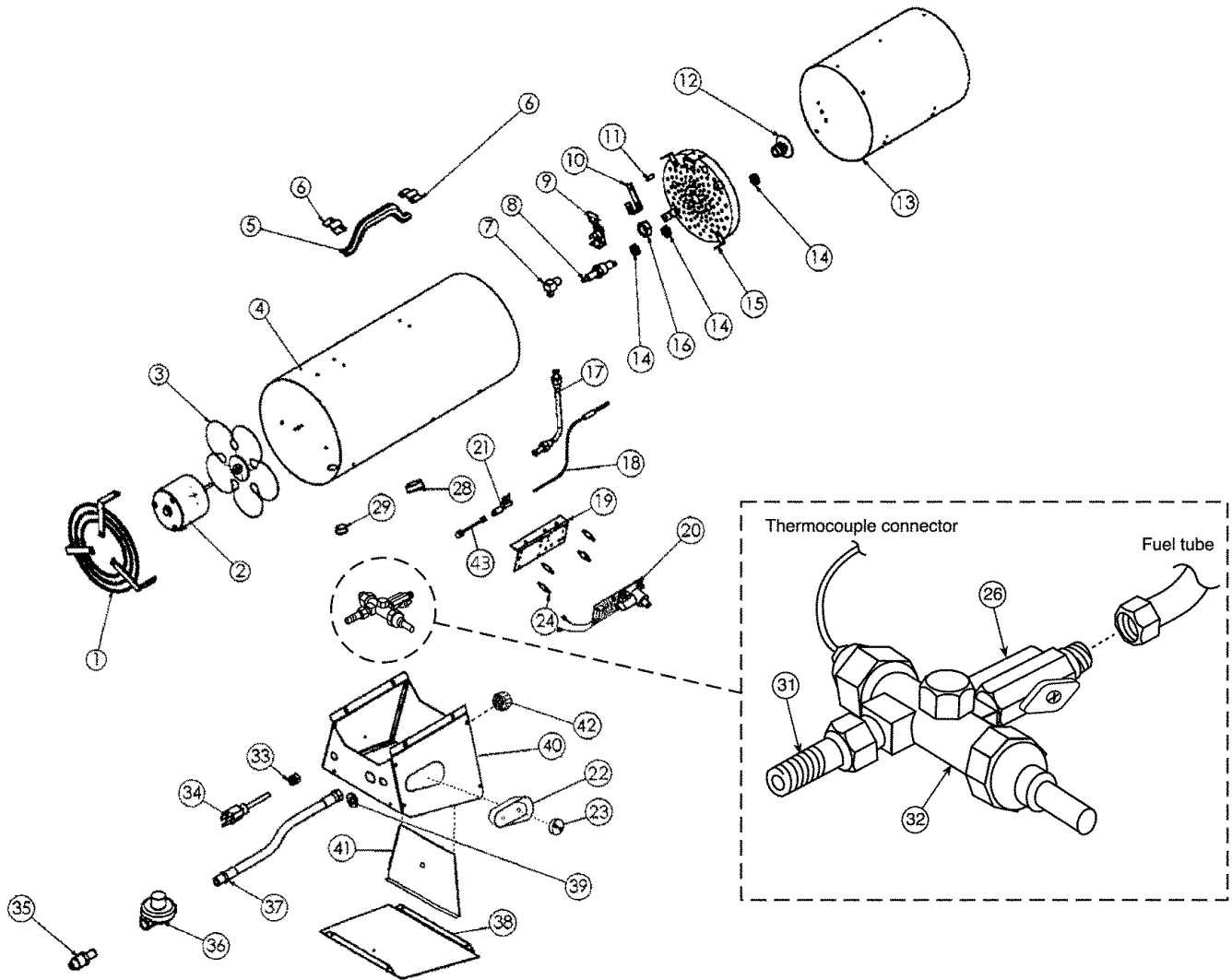
* Not shown on exploded view

Enerco LP 55,000 BTU

55, 85, 125,000 BTU Enerco Forced Air Propane Heater

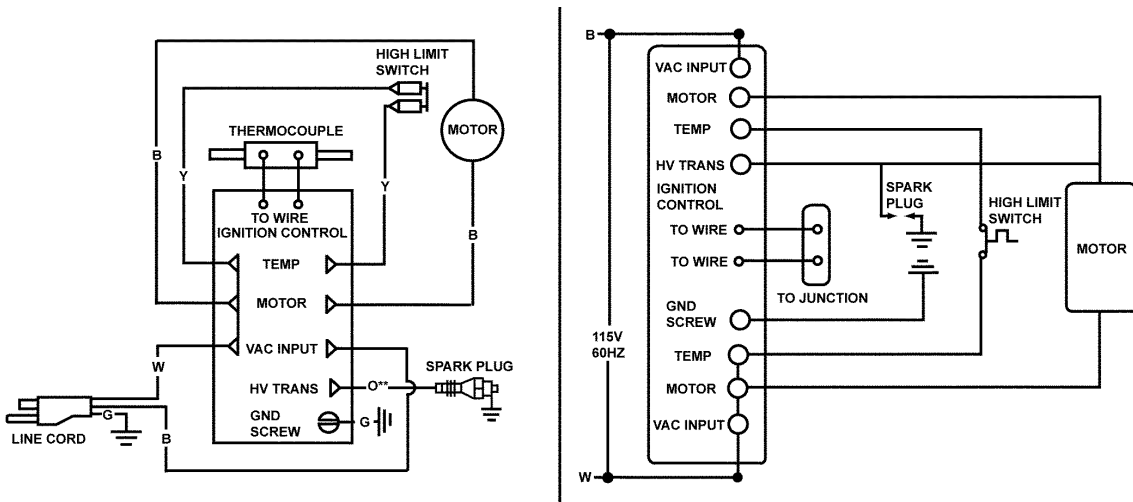
Model Numbers

HS55FAV
HS85FAV
HS125FAV



Enerco LP 55-125,000 BTU

55, 85, 125,000 BTU Enerco Forced Air Propane Heater



Key

No.	55FAV	85FAV	125FAV	Description
1	21654	21671	21671	Motor Grille Assy 1
2	21652	21551	21551	Motor Assy 1
3	26086	26086	27898	Fan 1
4	21729	21670	21998	Outer Shell 1
	21730	21672	21999	Outer Shell - Model TS 1
5	28075	28075	28075	Handle, plastic 1
6	28074	28074	28074	Clip Handle Mounting, 2
7	26121	27433	27433	Ftg. Male Elbow 1
8	21082	21083	21083	Spark Plug 1
9	21751	21751	22003	High Limit Control Assy 1
10	---	23036	23036	Bracket Thermocouple 1
11	---	23787	23787	Spacer Thermocouple 1
12	21930	21673	22002	Orifice Assy, LP 1
13	21651	21674	22001	Middle Cylinder Assy 1
14	23037	23037	23037	Spark Plug Nut (2-55FAV) 3
15	21931	21750	22004	Flame Holder Assy 1
16	23038	23038	23038	Orifice Nut Mtg 1
17	21941	21655	21655	Fuel Tube Assy 1
18	26655	26655	26655	Thermocouple 10" Lg w/JB. 1
19	23045	23045	23045	Bracket Ignition / Relay 1
20	23276	23276	23276	Ignition / Relay Module 1
21	26134	26134	26134	Compression Block, Relay 1
22	27093	27093	27093	Cover, Cup, Valve 1
23	25027	25027	25027	Knob, Variable Rate 1
24	26079	26079	26079	Spacer PC Standoff 3
26	27422	27414	27418	Variable Rate Valve 1
28	26225	---	26227	Snap Bushing 1
29	26224	---	27158	Snap Bushing, 1/2 1
31	26127	26127	26127	Ftg. Male Connector 1

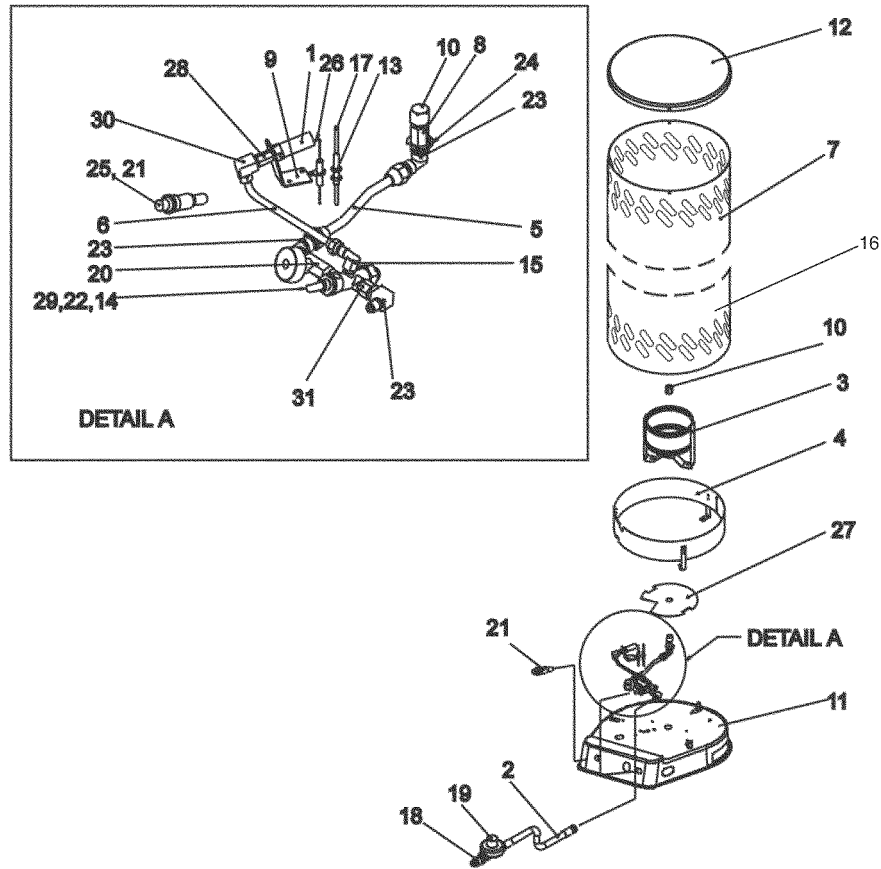
Key

No.	55FAV	85FAV	125FAV	Description
32	27285	27285	27285	Thermoelectric Valve 1
33	26223	26223	26223	Strain Relief Bushing 1
34	21036	21036	21036	Power Cord Assy 1
35	26433	26433	26433	POL Excess Flow 1/4 MPT 1
36	26257	26257	26257	Regulator 28" WC W/POL 1
37	26152	26152	26152	Hose Assy, LP, 12' 1
*	26152-20	-----	-----	Hose Ass'y, 20' 1
*	21667	21667	21667	Hose & Regulator Ass'y 1
38	24017	24019	24019	Panel, Bottom 1
40	24020	24022	24022	Control Box Assy 1
41	24023	24025	24025	Elevation Plate 1
42	25026	25026	25026	Elevation Knob 1
43	26656	26656	26656	Thermocouple, connector 1
*	26189	---	---	Terminal "Y" 2
*	23676	---	---	Brkt, Motor Mounting 1
*	26226	---	---	Universal Bushing 1
*	70056	70056	70056	Manual, Operating Instr 1
*	28733	28507	28510	Label, Model 1
*	27783	28784	28784	Label, Operating Instr. 1
*	26374	26374	26374	Label, Electrical Grounding 1
*	27709	27709	27709	Label, Fuel 1
*	27503	27503	27503	Label, Wiring Diagram 1
*	26373	26373	26373	Label, Fan Rotation 1
*	28203	28203	28203	Label Hang Tag, LP 1
*	27704	27704	27704	Label, Warning 1
*	26375	26375	26375	Label Elevation Adjustment 1
*	26376	26376	26376	Label Btu/hr Adjustment 1
*				Not shown on exploded view

Enerco LP 55-125,000 BTU

80,000 BTU Enerco Convection Propane Heater

Model Numbers
MH80CV



Key No.	Part No.	Description
1	8634	Pilot LP Ass'y
2	6152	Hose Ass'y
3	8635	Burner Ring
4	8636	Ring Shield
5	8637	Fuel Tube Ass'y
6	8638	Pilot Tube Ass'y
7	2239	Upper Shell
8	8639	Orifice Adapter
9	8640	Bracket, Pilot Mounting
10	8641	Orifice, LP
11	8642	Base
12	4223	Cap
13	6045	Clip, TC
14	6104	TE Valve
15	6137	Ftg., Elbow Female 1/4 FLRx1/8 FPT
16	2237	Lower Shell
17	8643	Thermocouple
18	6433	POL Excess Flow
19	6255	Regulator
20	8654	Valve, Ball
21	6473	Piezo Ignitor
22	6503	Nut Hex 1/2-28 TE Valve
23	7172	Ftg., Elbow Female 1/4 FPTx 3/8 FLR (qty. 3)
24	8162	External Retaining Ring
25	7161	Piezo Nut

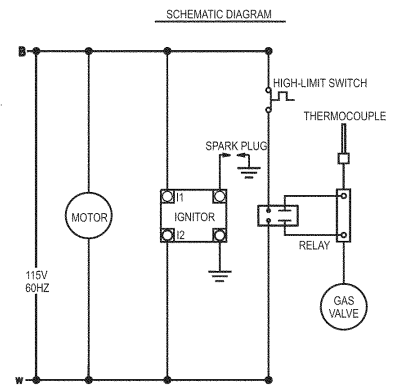
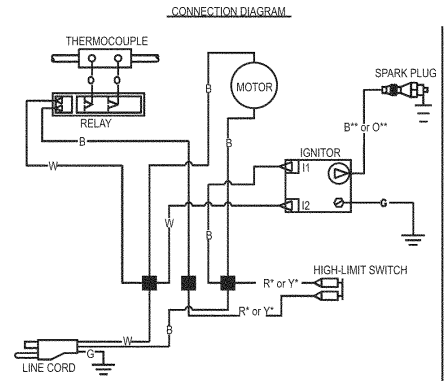
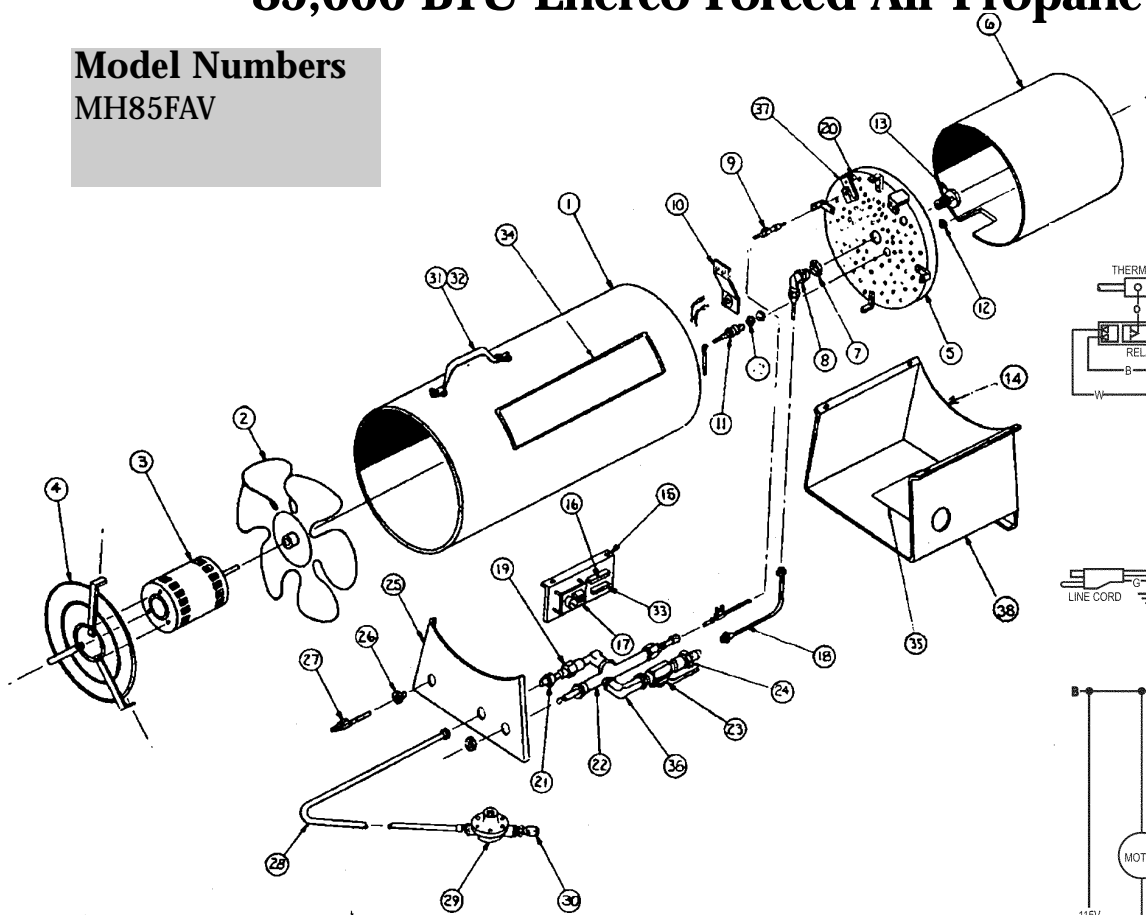
Key No.	Part No.	Description
26	7652	Electrode w/7" wire
27	4293	Heat Shield
28	8644	Pilot Orifice
29	6689	Washer, Flat 1/16 SAE
30	8187	Ftg., Elbow 1/8 FPT x 1/4 CPSN
*	6568	Fitting Adapter 1/4 FPTx1/4 MPT
*	8018	Fitting Adapter 1/8 FPT x 1/4 MPT
*	70486	Manual, Operating Instructions
*	M8760	Label, Model
*	8758	Label, Safety Precautions
*	8759	Label, Safety Precautions
*	8757	Label, Installation
*	8502	Label, Warning
*	8679-80	Label, BTU
*	8206	Hang Tag
*	8651	Ball Valve Knob
*	8655	Ball Valve Knob Insert

* Not shown on exploded view

Enerco LP 80,000 BTU

85,000 BTU Enerco Forced Air Propane Heater

Model Numbers
MH85FAV



Key No.	Part No.	Description
1	1670	Cylinder, Outer Assembly
2	6086	Fan, 7"
3	1551	Motor Assembly, 80-FAS
4	1671	Grille, Motor Mtg/Inlet Assy.
5	1750	Flame Holder Assembly
6	1674	Cylinder, Middle Assembly
7	3038	Nut, Orifice Mounting 3/4-16
8	7433	Fitting, Male Elbow
9	26654	Thermocouple
10	1751	High Limit Control Assembly
11	1083	Spark Plug, 1/8 Gap
12	3037	Nut-Spark Plug (qty. 3)
13	1673	Orifice Assembly
14	1752A	Control Box Assembly
15	3044	Ignition Relay Bracket
16	6641	terminal Board
17	3275	Spark Ignition, 115V
18	1668	Fuel tube Assembly
19	6133	Fitting, Coupling
20	3787	Spacer, TC Bracket
21	6127	Fitting, Male Connector
22	7285	TE Valve
23	7404	Ball Valve, Variable Rate
24	7405	Fitting, Female Connector
25	3690	Control Panel Assembly

Key No.	Part No.	Description
26	6223	Strain Relief Bushing
27	1036	Power Cord
28	6152	Hose Assembly
29	6257	Regulator, 28" W.C.
30	6433	POL Excess Flow
31	7094	Clip Handle Mounting, 3 pcs. (qty. 2)
32	7095	Handle, 3 pcs.
33	1811	Relay
35	7503	Label, Wiring
36	6265	Fitting Elbow (qty. 2)
37	3036	Bracket, TC
38	3775	Side Panel
*	70056	Label, Model
*	M8507	Label, Operating Instructions
*	6374	Label, Electrical Grounding
*	6373	Label, Fan Rotation
*	8203	Label Hang Tag, LP
*	7709	Label, Fuel
*	7704	Label, Warning
*	8508	Label, Operating Instructions
*	7432	Label, BTU Rating (qty. 2)

* Not shown on exploded view

Enerco LP 85,000 BTU

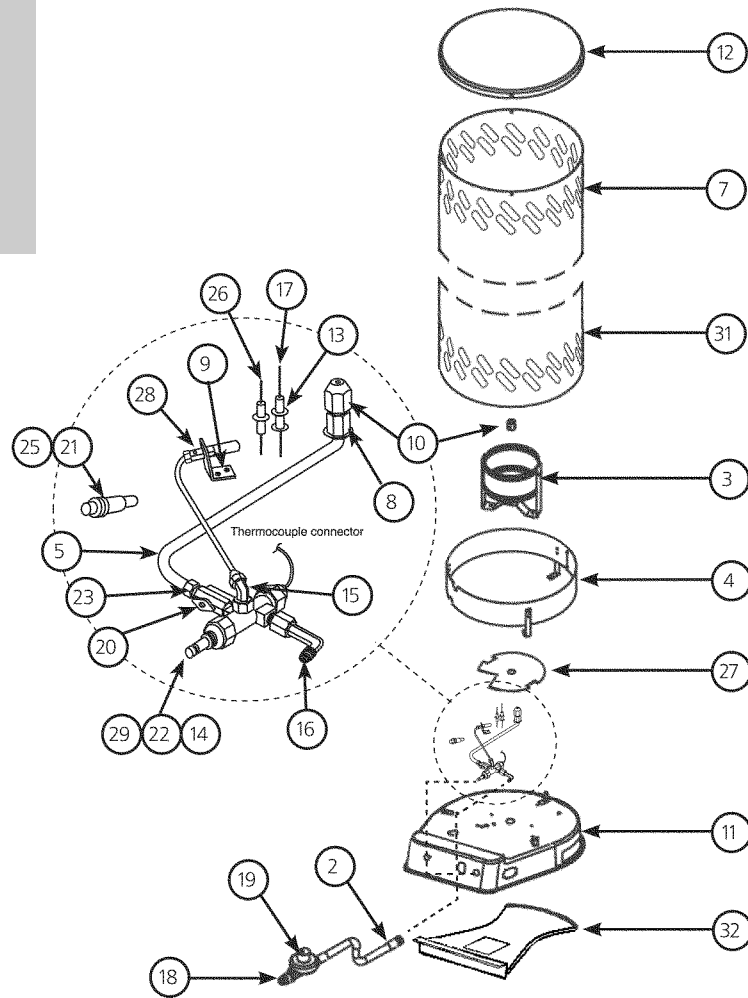
80,000 BTU Enerco Convection Propane/Natural Gas Heater

Model Numbers

MH80CV
HS80CV

Starting Serial #

MHC-7048000334063



Key No.	Part No.	Description
1	28634	Pilot Lp Ass'y 1
2	26152	Hose Ass'y 1
3	28635	Burner ring 1
4	28636	Ring Shield 1
5	28656	Fuel, Tube, Assembly, 80CV, 200CV, Lp/NG, 2008 1
6	28638	Pilot Tube Ass'y 1
7	22239	Upper Shell 1
8	28633	Adapter, Orifice, 80CV, 200CV, 2008 1
9	28640	Bracket, pilot Mounting 1
10	28652	Orifice, Lp, 80CV, 2008 1
	28658	Orifice, NG, 80CV, 2008 1
11	28653	Base, 80CV, 200CV, 2008 1
12	24223	Cap 1
13	26045	Clip, TC 1
14	26104	TE Valve (Safety Valve) 1
15	26137	Ftg., Elbow female 1/4 flrx1/8 fpT 1
16	26657	Ftg., Elbow 90°, 200CV, 2008 1
17	28643	Thermocouple 1
18	26433	POL Excess flow 1
*	26568	Fitting Adapter 1/4 fpTx1/4 MpT 1
*	28018	Fitting Adapter 1/8 fpT x 1/4 MpT 1
*	70486	Manual, operating Instructions 1
19	26255	Regulator 1
20	21894	Valve, Main burner 80CV, 2009 & New 1

Key No.	Part No.	Description
21	20735	Piezo Ignitor 1
22	26503	Nut Hex 1/2-28 TE Valve 1
23	27142	Ftg., Elbow 90°, 80CV, 200CV, 2008 1
25	27161	Piezo Nut 1
26	27652	Electrode w/7" wire 1
27	24293	Heat Shield 1
28	28674	Pilot, Orifice, 80CV, Lp, 2008 1
	28677	Pilot, Orifice, 80CV, NG, 2008 1
29	26689	Washer, flat 1/16 SAE 1
31	22237	Lower Shell 1
32	28165	Cover, bottom 1
*	28760	Label, Model 1
*	28758	Label, Safety precautions 1
*	28759	Label, Safety precautions 1
*	28757	Label, Installation 1
*	28502	Label, Warning 1
*	28132	Label, bTu 1
*	28206	Hang Tag 1
*	21911	Main burner Valve Knob 1
*	28655	Main burner Valve Knob Insert 1

* Item not shown

200,000 BTU Enerco Convection Propane Heater

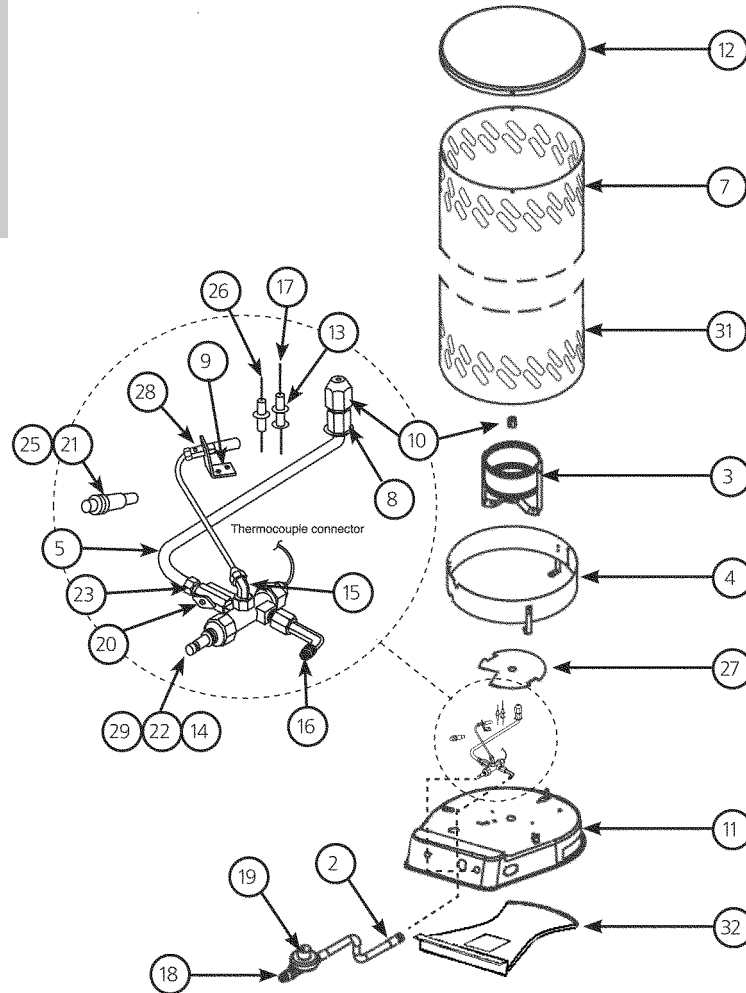
Model Numbers

MH200CV

HS200CV

Starting Serial

MHC-706000026059



Key No.	Part No.	Description
1	28645	Pilot Lp Assembly 1
2	21591	Hose Ass'y, Lp 1
3	28635	Burner ring Assembly 1
4	28636	Ring Shield 1
5	28656	Fuel, Tube, Assembly, 80CV, 200CV, Lp/NG, 2008 1
6	28638	Pilot Tube Assembly 1
7	22240	Upper Shell 1
8	28633	Adapter, Orifice, 80CV, 200CV, 2008 1
9	28640	Bracket, pilot Mounting 1
10	28632	Orifice, Lp, 200CV, 2008 1
11	28653	Base, 80CV, 200CV, 2008 1
12	24223	Cap 1
13	26045	Clip, TC (Safety Valve) 1
14	26104	TE Valve (Safety Valve) 1
15	26137	Ftg., Elbor female 1/4 fLrx1/8 fpT 1
16	26657	Ftg., Elbow 90°, 200CV, 2008 1
17	28643	Thermocouple 1
18	26252	POL Excell flow 1
19	26256	Regulator 1
20	21895	Valve, Main burner 80CV, 2009 & New 1
21	20735	Piezo Ignitor 1
22	26503	Nut, Hex 1/2-28 TE Valve 1

Key No.	Part No.	Description
23	27142	Ftg., Elbow 90°, 80CV, 200CV, 2008 1
24	28162	External retaining ring 1
25	27161	Piezo Nut 1
26	27652	Electrode w/7" Wire 1
27	24293	Heat Shield 1
28	28677	Pilot, Orifice, 200CV, Lp, 2008 1
29	26689	Washer, flat 9/16 SAE 1
30	28187	Fitting, Elbow 1/8 fpTx1/4 CpSN 1
31	22238	Lower Shell 1
32	28165	Cover, bottom 1
*	70486	Manual, operating Instructions 1
*	28758	Label, Safety precautions 1
*	28759	Label, Safety precautions 1
*	28757	Label, Installation 1
*	28756	Label, Model 1
*	28502	Label, Warning 1
*	28502	Label, bTu 1
*	28204	Hang Tag 1
*	21911	Main Burner Valve Knob 1
*	28655	Main Burner Valve Knob Insert 1

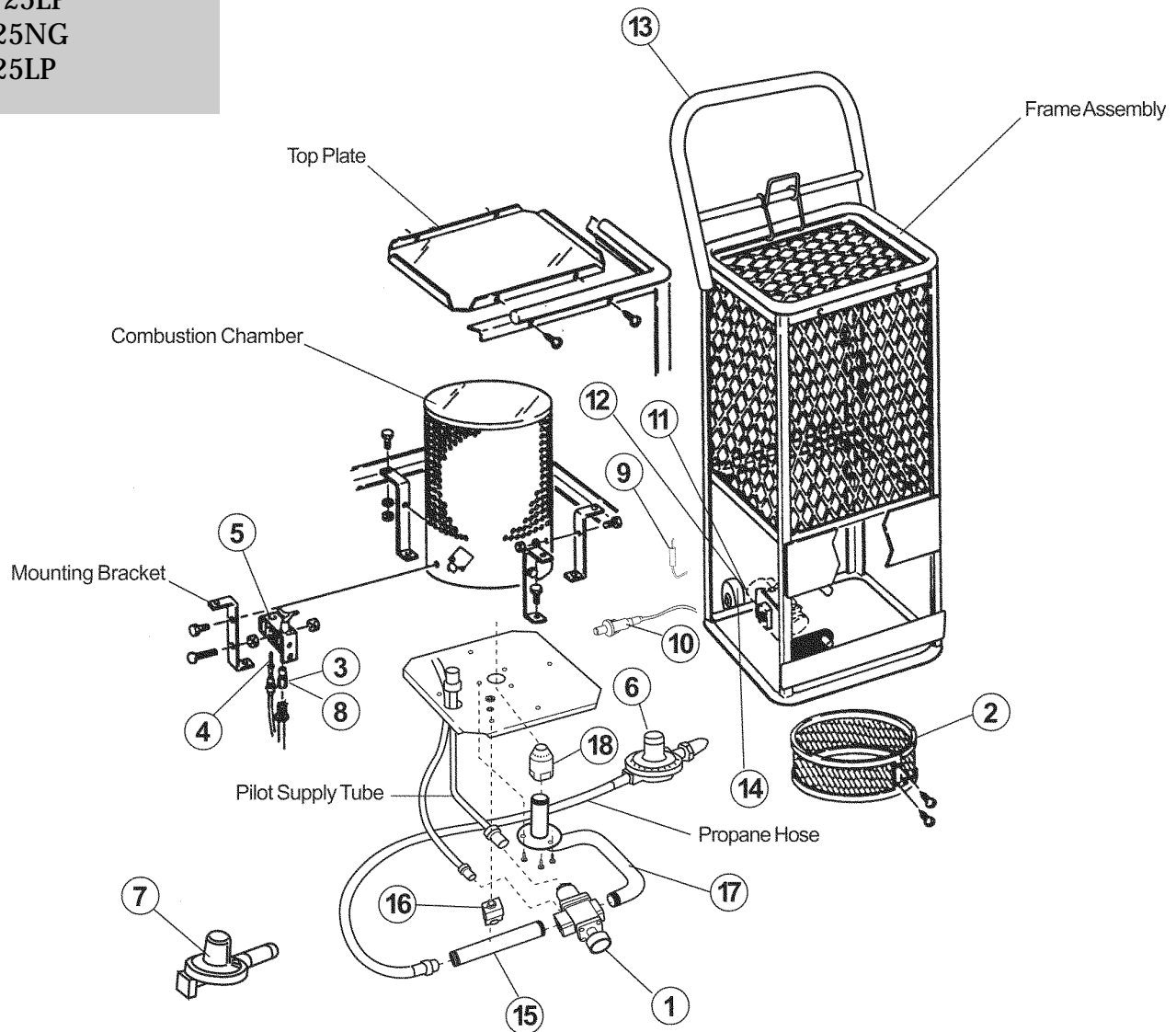
* Items not shown

Enerco LP 200,000 BTU

125,000 BTU Enerco Infrared Propane/Natural Gas Heater

Model Numbers

MH125LP
HS125NG
HS125LP



Key No.	Part No.	Description
1	23510	Manual Control Valve
2	23511	Knob Control Valve
3	04466	Filter/Diffuser
4	23512	Orifice Pilot (MH125LP/HS125LP)
5	23513	Thermocouple
6	23514	Pilot Burner
7	11663	Regulator (MH125LP/HS125LP)
8	11666	Regulator (HS125NG)
9	05374	Orifice Pilot (HS125NG)
10	23515	Ignitor
11	20735	Piezo

Key No.	Part No.	Description
12	23523	Axle With Brackets
13	23517	Handle
14	23518	Wheel
15	23519	Valve Supply Tube
16	23520	Valve Supply Tube Clamp
17	23521	Burner Manifold
18	23522	Burner
19	11412	Hose Assembly 12'
20	11420	Hose Assembly 20'

Enerco LP/NG 125,000 BTU

125,000 BTU Enerco Infrared Propane/Natural Gas Heater

2009 - 2010 Model Year

Model Numbers

HS125NG

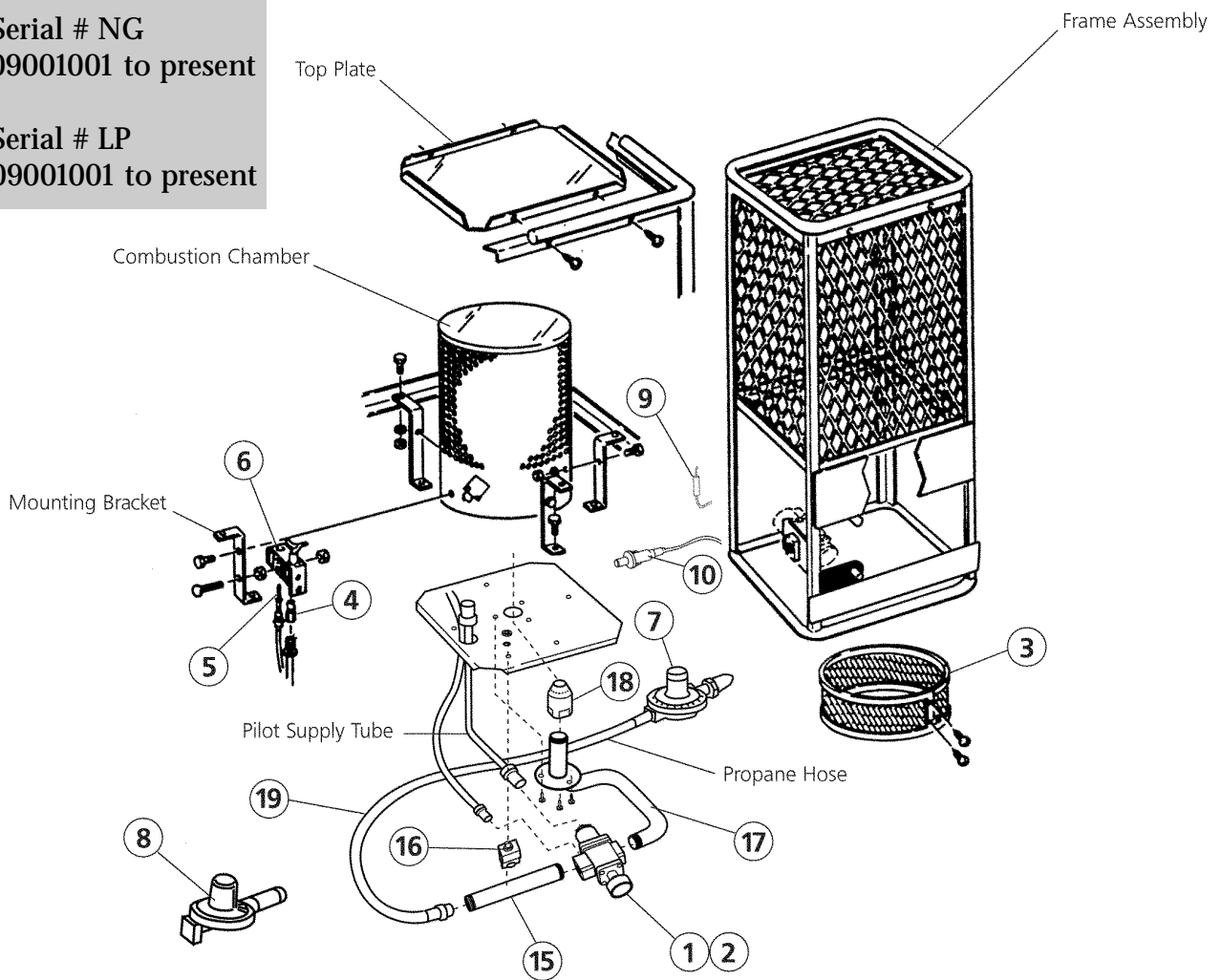
HS125LP

Starting Serial # NG

170950-09001001 to present

Starting Serial # LP

170800-09001001 to present



Key No.	Part No.	Description
1	23510	manual Control Valve
2	2351	Knob Control Valve
3	04466	filter/Diffuser
4	23512	Orifice Pilot (HS125LP)
*4a	05374	Orifice Pilot (HS125NG)
5	21925	Thermocouple, 13"
6	23514	Pilot Burner
7	26255	Regulator (HS125LP)
8	11666	Regulator (HS125NG)
9	23515	Ignitor
10	20735	Piezo

Key No.	Part No.	Description
15	23519	Valve Supply Tube
16	23520	Valve Supply Tube Clamp
17	23521	Burner manifold
18	23522	Burner (L/P)
*18a	29025	Burner (NG)
*19	11412	Hose Assembly 12'
*19a	11420	Hose Assembly 20'

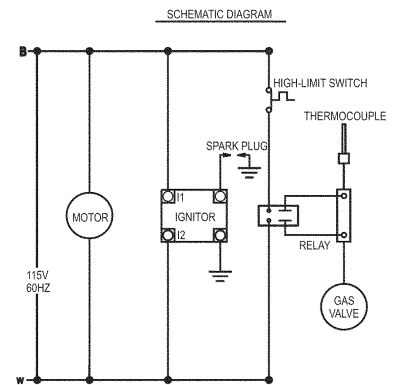
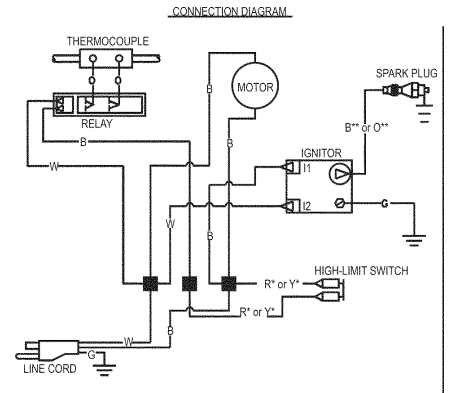
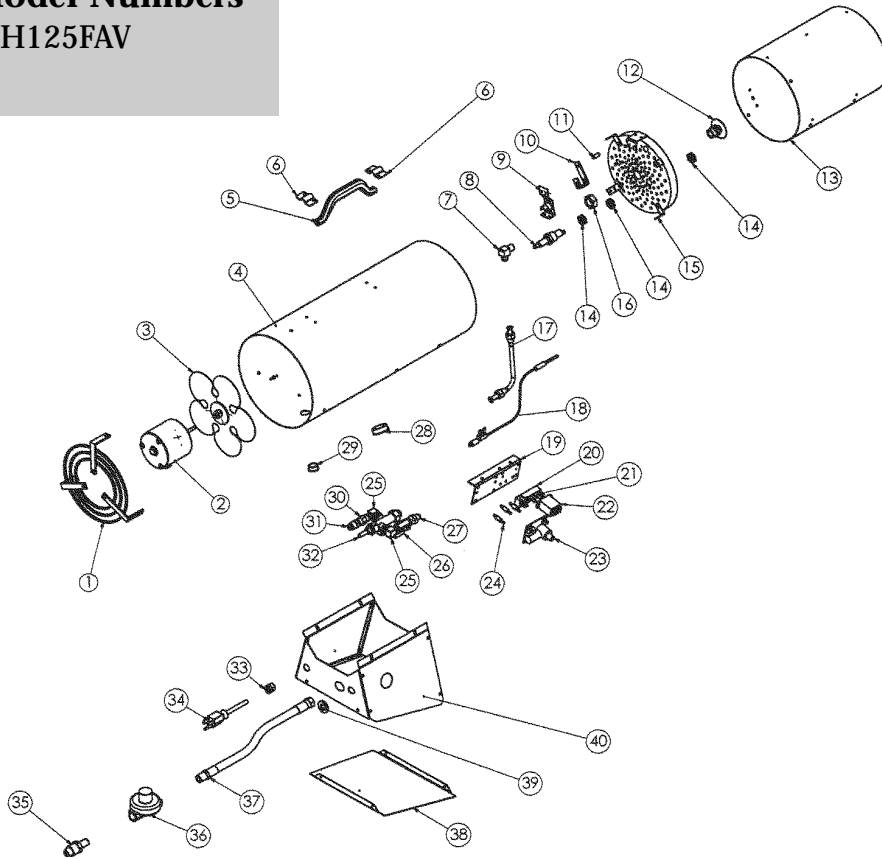
* Not Shown Figure 2

Enerco LP/NG 125,000 BTU

125,000 BTU Enerco Forced Air Propane Heater

Model Numbers

MH125FAV



Key No.	Part No.	Description
1	1671	Grille, Motor Mtg/Inlet Assy.
2	1551	Motor Assembly, 80-FAS
3	7898	Fan, 8"
4	1998	Cylinder, Outer Assembly
5	7095	Handle
6	7094	Clip Handle Mounting, 3 pcs. (qty. 2)
7	7433	Fitting, Male Elbow
8	1083	Spark Plug, 1/8 Gap
9	2003	Control, High Limit Switch Assy.
10	3036	Bracket, Thermocouple
11	3787	Spacer, TC Bracket
12	2002	Orifice, LP Assembly
13	2001	Cylinder, Middle Assembly
14	3037	Nut-Spark Plug (qty. 3)
15	2004	FLame Holder Assembly
16	3038	Nut, Orifice Mounting 3/4-16
17	1668	Fuel tube Assembly
18	26654	Thermocouple
19	3044	Ignition Relay Bracket
20	6641	terminal Board
21	6065	Spacer, Steel
22	1811	Relay
23	3275	Spark Ignition, 115V
24	6079	Spacer, PC Standoff Nylon
25	6265	Fitting Elbow (qty. 2)
26	7897	Ball Valve, Variable Rate
27	7405	Fitting, Female Connector

Key No.	Part No.	Description
28	6227	Snap Bushing, 1-1/4 Nylon
29	7158	Snap Bushing, 3/4 Nylon
30	6133	Fitting, Coupling
31	6127	Fitting, Male Connector
32	7285	TE Valve
33	6223	Strain Relief Bushing
34	1036	Power Cord
35	6433	POL Excess Flow
36	6257	Regulator, 28" W.C.
37	6152	Hose Assembly
38	4019	Bottom Control Box
39	7843	Washer, Flat
40	2005	Control Box Assembly
*	70056	Label, Model
*	6374	Label, Electrical Grounding
*	6373	Label, Fan Rotation
*	8784	Label, Operating Instructions
*	8371	label, BTU Rating (qty. 2)
*	7503	Label, Wiring
*	M8510	Label, Model
*	8203	Label Hang Tag, LP
*	7709	Label, Fuel
*	7704	Label, Warning
*	09054	Hose (Duct) Clamp

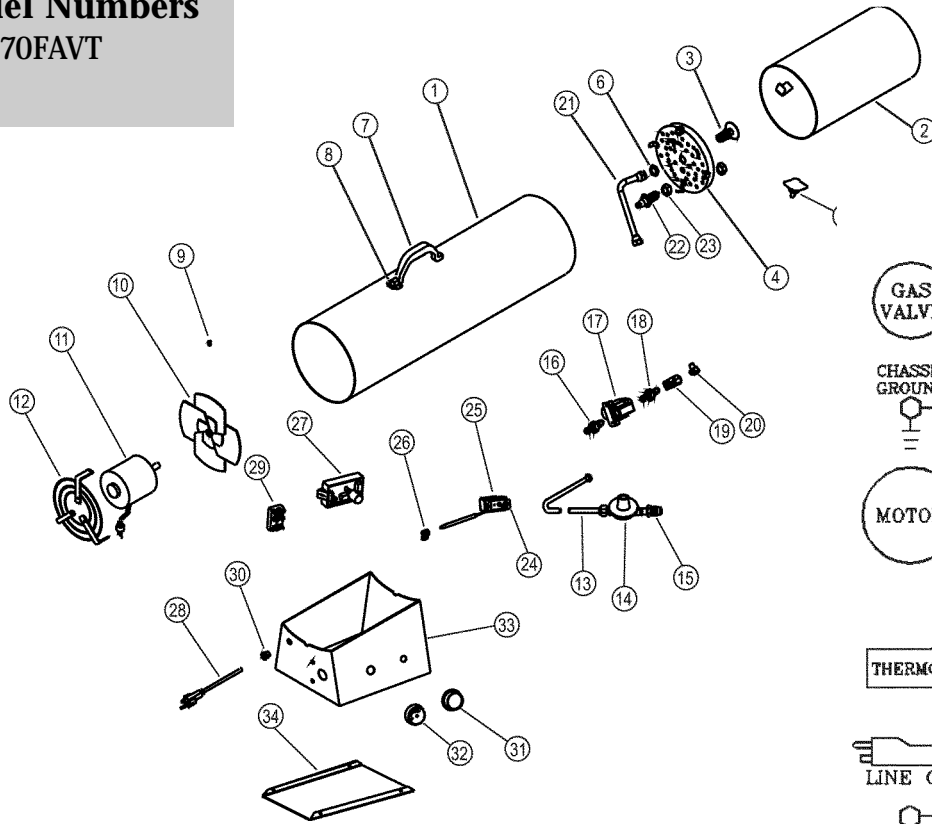
* Not shown on exploded view

Enerco LP 125,000 BTU

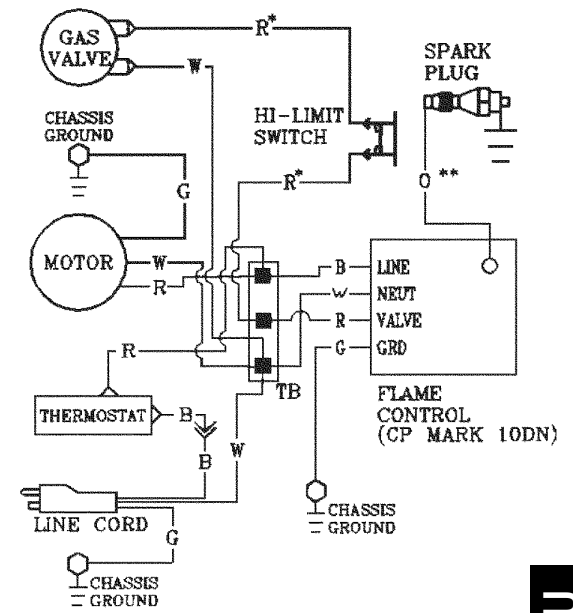
170,000 BTU Enerco Forced Air Propane Heater

Model Numbers

MH170FAVT



CONNECTION DIAGRAM



Key No.	Part No.	Description
1	22248	Outer Shell
2	2272	Outer Shell - Model TS
3	22249	Middle Cylinder
4	22250	Orifice Assembly
5	21146	Flame Holder Assembly
6	26168	High Limit Switch
7	23038	Orifice Nut
8	27095	Handle
9	27094	Handle Mounting Clips (qty. 2)
10	26010	Set Screw, Nyloc
11	26074	Fan
12	22251	Motor Assembly
13	22252	Grille, Inlet/Motor Mounting
14	26152	Hose Assembly
15	26257	Regulator, 28" WC
16	26433	POL Excess Flow Valve
17	26122	Male Fitting Conn. 3/8MPT x 3/8SAE FLR
18	26101	Solenoid Valve, Goyen
19	28775	Fitting Close Nipple
20	28777	Burn Rate Adjustment Valve
21	28776	Fitting, Elbow 3/8MPT x 1/2 SAE FLR
22	22253	Fuel Tube Assembly
23	28774	Spark Plug, Flame Sensor
24	23037	Spark Plug Nut
25	24340	Thermostat Mounting Bracket

Key No.	Part No.	Description
25	22254	Thermostat Assembly
26	26070	Loop Clamp, 5/16
27	27808	Flame Control, Potted
28	21036	Power Cord Assembly
29	28771	Terminal Board
30	26223	Bushing Strain Relief
31	28772	Knob, Thermostat
32	28773	Knob, Burn Rate Adjustment
33	22255	Control Box
34	22273	Base, Control Box
*	22274	Elevation Plate
*	22275	Elevation knob
*	26375	Label, Elevation Adjustment
*	28769	Label, Safety Precautions
*	28755	Label, General Hazard Warning
*	28733	Label, Model
*	28731	Label, Operating Instructions
*	26410	Label, Thermostate Warning
*	27704	Label, Warning Massachusetts
*	26374	Label, Warning Electrical
*	27789	Label, Wiring Schmatic
*	28203	Label, Hang Tag
*	28679	Label, BTU 170,000
*	70176	Manual, Operating Instructions
*	26225	Snap Bushing, 5/8 (qty. 2)

* Not shown on exploded view

Enerco LP 170,000 BTU

170,000 BTU Enerco Forced Air Propane Heater

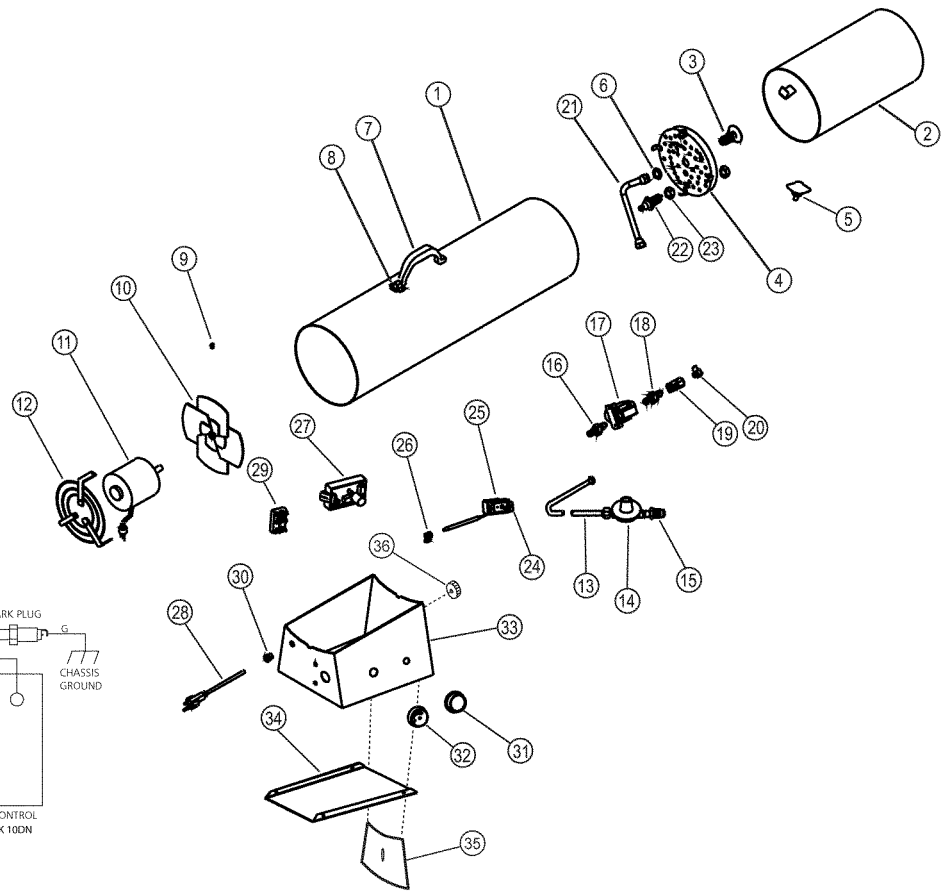
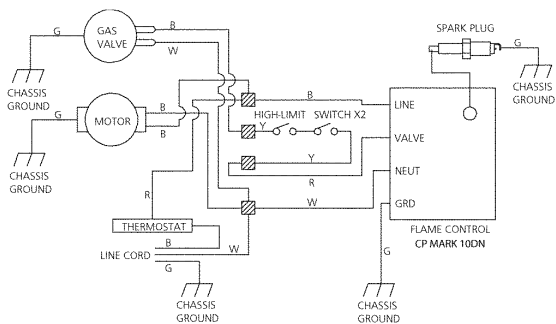
Model Numbers

HS/MH/PA170FAVT

(with thermostat)

STARTING SERIAL#:

MHC-701700029861



Key Part No.

Key No.	Part No.	Description
1	22248	Outer Shell 1
2	22272	Outer Shell - Model TS 1
2	22249	Middle Cylinder 1
3	22250	Orifice Assembly 1
4	21146	Flame Holder Assembly 1
5	26168	High Limit Switch 1
6	23038	Orifice Nut 1
7	28075	Handle, plastic 1
8	28074	Handle Mounting Clips 2
9	26010	Set Screw, Nyloc 1
10	26074	Fan 1
11	22251	Motor Assembly 1
12	22252	Grille, Inlet/Motor Mounting 1
13	26152	Hose Assembly 1
*	26152-20	Hose Assembly, 20' 1
14	26257	Regulator, 28" WC 1
15	26433	POL Excess Flow Valve 1
16	26122	Male Fitting Conn. 1 3/8MPT x 3/8SAE FLR
17	26101	Solenoid Valve, Goyen 1
18	28775	Fitting Close Nipple 1
19	28777	Burn Rate Adjustment Valve 1
20	28776	Fitting, Elbow 3/8MPT x 1/2 SAE FLR 1
21	22253	Fuel Tube Assembly 1
22	28774	Spark Plug, Flame Sensor 1
23	23037	Spark Plug Nut 1

Key Part No.

Key No.	Part No.	Description
24	24340	Thermostat Mounting Bracket 1
25	22254	Thermostat Assembly 1
26	26070	Loop Clamp, 5/16 1
27	27808	Flame Control, Potted 1
28	21036	Power Cord Assembly 1
29	28771	Terminal Board 1
30	26223	Bushing Strain Relief 1
31	28772	Knob, Thermostat 1
32	28773	Knob, Burn Rate Adjustment 1
33	22255	Control Box 1
34	22273	Base, Control Box 1
35	22274	Elevation Plate 1
36	22275	Elevation knob 1
*	26375	Label, Elevation Adjustment 1
*	28769	Label, Safety Precautions 1
*	28755	Label, General Hazard Warning 1
*	28733	Label, Model 1
*	28731	Label, Operating Instructions 1
*	26410	Label, Thermostate Warning 1
*	27704	Label, Warning Massachusetts 1
*	26374	Label, Warning Electrical 1
*	27789	Label, Wiring Schmatic 1
*	28203	Label, Hang Tag 1
*	28679	Label, BTU 170,000 1
*	70176	Manual, Operating Instructions 1
*	26225	Snap Bushing, 5/8 2

* Item not shown on exploded view

Enerco LP 170,000 BTU

170,000 BTU Enerco Forced Air Propane Heater

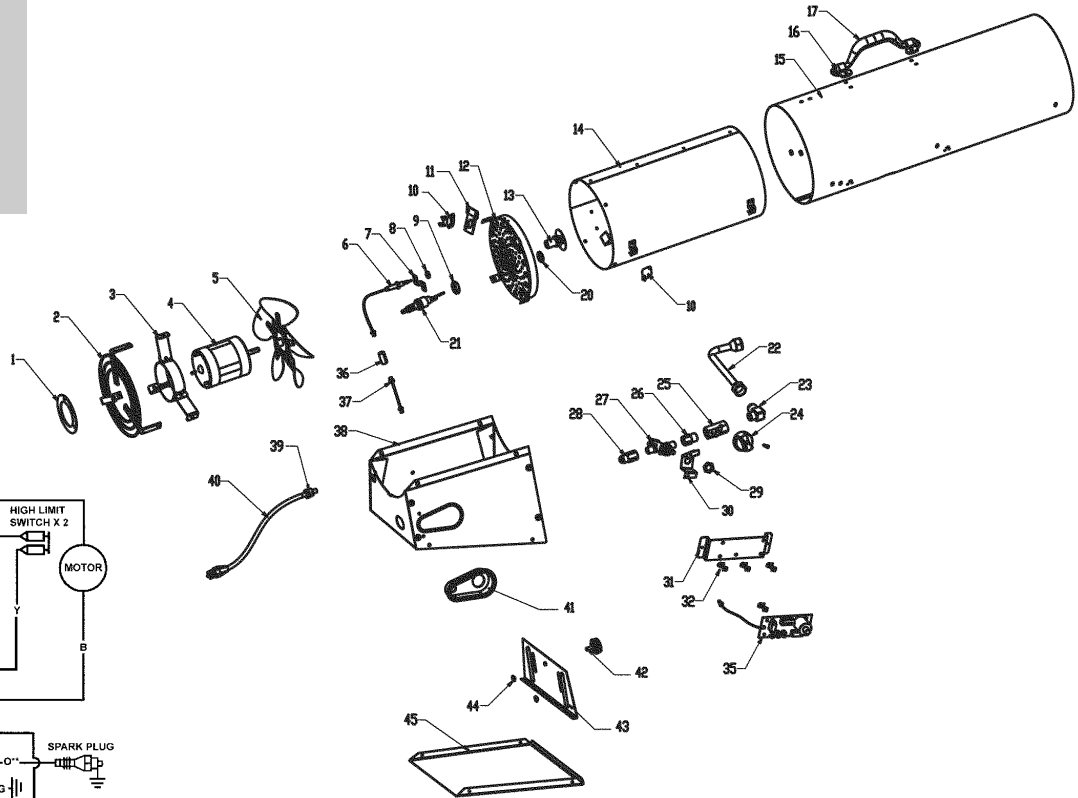
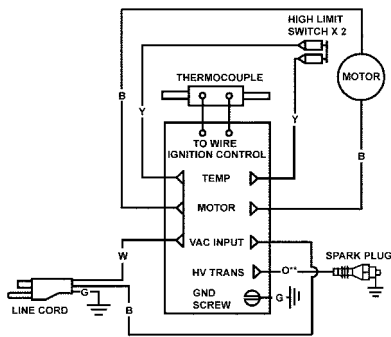
Model Numbers

TS170FAV

(without thermostat)

STARTING SERIAL#:

MHC-701700029861



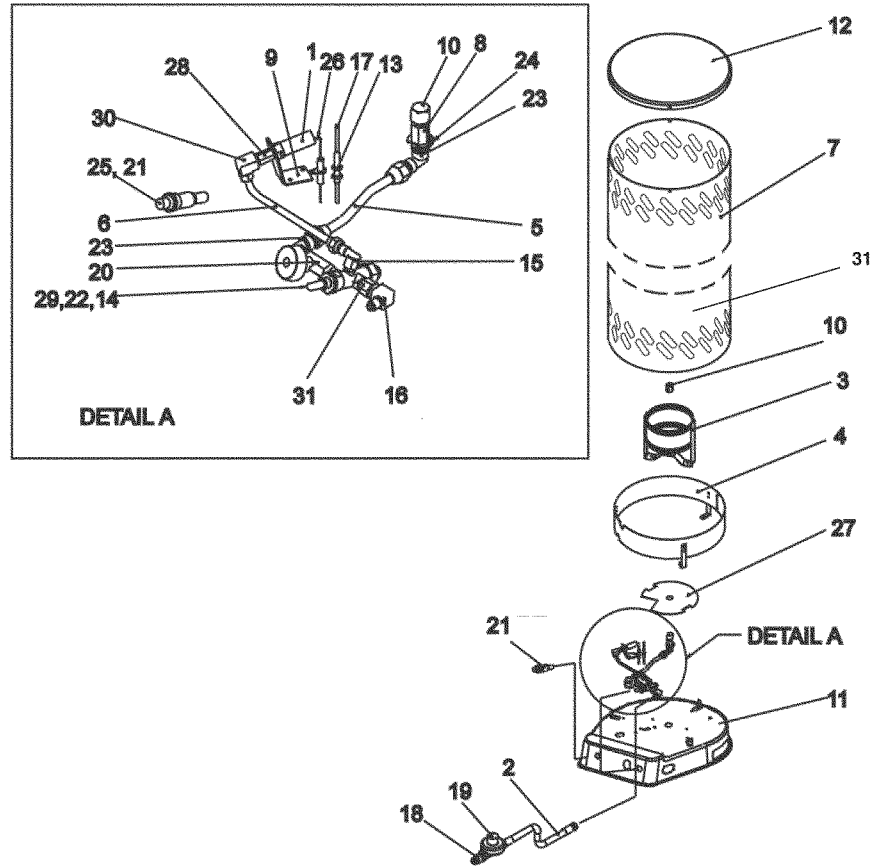
Key No.	Part No.	Description
1	21898	Motor Support Ring 1
2	22252	Grill, Inlet/Motor Mounting 1
3	21899	Support, Motor Stabilizer 1
4	22251	Motor 1
5	26074	Fan 1
6	26655	Thermocouple, 10" w/JB 1
7	23036	Bracket, Thermocouple 1
8	21900	Nut, Thermocouple 1
9	23038	Nut, Orifice 1
10	26168	High Limit Switch 2
11	21901	Bracket, High Limit Switch 1
12	21146	Flame Holder Assembly 1
13	21902	Orifice Assembly 1
14	22249	Middle Cyl. Assembly 1
15	22272	Outer Shell TS 1
16	28074	Clips, Handle Mounting 2
17	28075	Handle, Plastic 1
20	23037	Nut, Spark Plug 1
21	28774	Spark Plug/Flame Sensor 1
22	21903	Flame Tube Assembly 1
23	28776	Elbow, Flame Tube 1
24	25027	Knob, Variable Rate 1
25	28777	Valve, Variable Rate 1
26	21905	Ftg. Connector 1
27	27285	Valve, Thermoelectric 1
28	26127	Ftg. Male Connector 1
29	21906	Nut, TE Valve Retainer 1

Key No.	Part No.	Description
30	21907	Bracket, ThermoValve Mt. 1
31	23045	Bracket, Ignition/Relay 1
32	26079	Spacer, Standoff 4
35	23276	Ignition/Relay Module 1
36	26134	Compression Block, Relay 1
37	26656	Thermocouple, Connector 1
38	21908	Control Box Assembly 1
39	26223	Strain Relief Bushing 1
40	21036	Power Cord Assembly 1
41	21912	Cover, Cup, Valve 1
42	25026	Knob, Elevation 1
43	22274	Plate, Elevation 1
44	21909	Nut, Elev. Plate Retaining 2
45	22273	Base, Control Box 1
*	26375	Label, Elevation Adjust. 1
*	28769	Label, Safety Precautions 1
*	28755	Label, General Hazard Warning 1
*	28733	Label, Model 1
*	28784	Label, Operating Inst. 1
*	27704	Label, Warning Massachusetts 1
*	26374	Label, Electrical Grounding 1
*	21910	Label, Wiring Diagram 1
*	28203	Label, Hang Tag 1
*	26373	Label, Fan Rotation 1
*	27709	Label, Fuel Button 1
*	70176	Manual, Operating Inst. 1
*	26225	Snap Bushings, 5/8" 2

Enerco LP 170,000 BTU

200,000 BTU Enerco Convection Propane Heater

Model Numbers
MH200CV



Key No.	Part No.	Description
1	8645	Pilot LP Assembly
2	1591	Hose Ass'y, LP
3	8635	Burner Ring Assembly
4	8636	Ring Shield
5	8637	Fuel Tube Assembly
6	8638	Pilot Tube Assembly
7	2240	Upper Shell
8	8639	Orifice Adapter
9	8640	Bracket, Pilot Mounting
10	8646	Orifice, LP
11	8642	Base
12	4223	Cap
13	6045	Clip, TC
14	6104	TE VALVE
15	6137	Ftg., Elbor Female 1/4 FLRx1/8 FPT
16	6138	Ftg., Elbow Female 1/4 FPTx1/4 FLR
17	8643	Thermocouple
18	6252	POL Excell Flow
19	6256	Regulator
20	8654	Valve, Ball
21	6473	Piezo Ignitor (225-VCA/VCB Only)
22	6503	Nut, Hex 1/2-28 TE Valve
23	7172	Ftg., Elbow Female 1/4 FPTx3/8 FLR (qty. 2)
24	8162	External Retaining Ring
25	7161	Piezo Nut

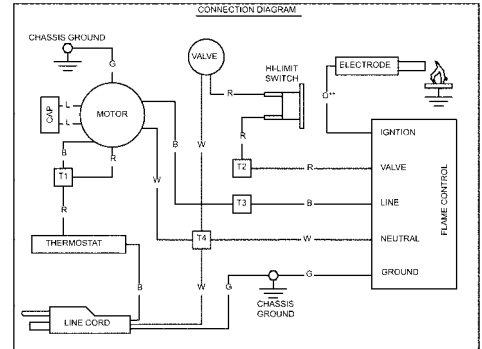
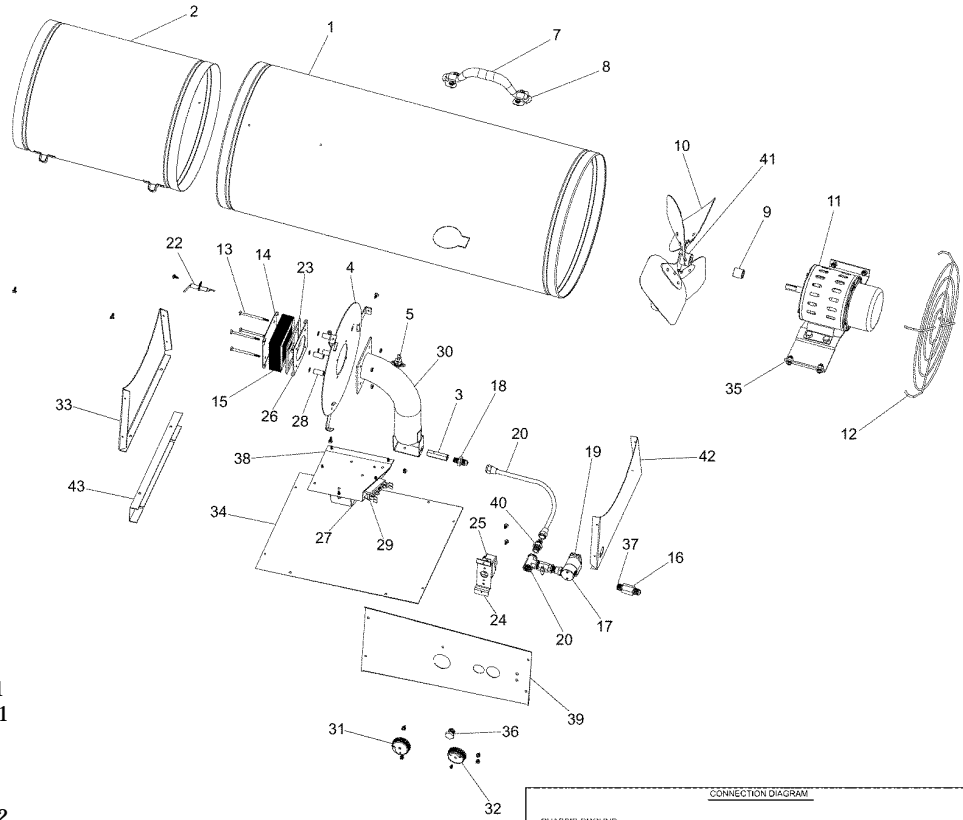
Key No.	Part No.	Description
26	7652	Electrode w/7" Wire
27	4293	Heat Shield
28	8647	Pilot Orifice
29	6689	Washer, Flat 9/16 SAE
30	8187	Fitting, Elbow 1/8 FPTx1/4 CPSN
31	2238	Lower Shell
*	70486	Manual, Operating Instructions
*	8758	Label, Safety Precautions
*	8759	Label, Safety Precautions
*	8757	Label, Installation
*	M8756	Label, Model
*	8502	Label, Warning
*	8679-200	BTU
*	8204	Hang Tag
*	8651	Ball Valve knob
*	8655	Ball Valve Knob Insert

* Not shown on exploded view

400,000 BTU Enerco Forced Air Propane Heater

Model Numbers

MH400FAVT
HS400FAVT



Key No.	Part No.	Description
1	20100	Outer Shell 1
2	20102	Middle Cylinder 1
3	20104	Orifice (2.35 mm port) 1
4	20106	Flame Holder Assembly 1
5	26168	High Limit Switch 1
6	20108	Orifice Screw, Type F 1
7	27095	Handle 1
8	27094	Handle Mounting Clips 2
9	20110	Fan Spacer, Nylon 2
10	20112	Fan 1
11	20114	Motor Assembly 1
12	20116	Grille, Inlet 1
13	20118	Machine Screw, Burner SS 4
14	20120	Burner, Outer Plate 1
15	20122	Burner, Ceramic Grids 4
16	20124	Male Fitting Conn. 1/4 MPT x 1/4 SAE FLR 1
17	20126	Solenoid Valve, Goyen 1
18	20128	Male Fitting Conn. 1/8 MPT x 1/4 SAE FLR, LG. 1
19	20130	Burn Rate Adjustment Valve 1
20	20132	Fitting, TEE 1/4 NPT, Female 1
21	20134	Fuel Tube Assembly 1
22	20136	Electrode, Flame Sensor 1
23	20138	Burner, Fiber-Frax Gasket 1
24	20140	Thermostat Mounting Bracket 1
25	20142	Thermostat Assembly 1
26	20144	Burner, Inner Plate 1
27	20146	Flame Control, Potted 1
28	20148	Burner, SS Spacer 4
29	20150	Terminal Board 1
30	20152	Burner, Mixing Tube 1
31	20154	Knob, Thermostat 1
32	20156	Knob, Burn Rate Adjustment 1
33	20158	Control Box, Exit Panel 1
34	20160	Control Box, Base Panel 1
35	20162	Motor Mounting 1
36	20164	Fitting, Plug 1/4 MPT 1
37	20166	Inlet Filter Screen 1
38	20168	Control Mounting Bracket 1
39	20170	Control Box, CRTL Panel
40	20172	Male Fitting Conn. 1/4 MPT x 1/4 SAE FLR 1
41	20174	Set Screw, Nyloc 2
42	20176	Control Box, Inlet Panel 1
43	20184	Bracket, lift 1

Key No.	Part No.	Description
*	26225	Snap Bushing, 5/8 1
*	20178	Control Box, Right Panel 1
*	26223	Bushing Strain Relief 1
*	21036	Power Cord Assembly 1
*	26070	Loop Clamp, 5/16 1
*	21008	Hose Assembly 1
*	11671	Regulator, 20psig
*	26433	POL Excess Flow Valve 1
*	72427	Label, Safety Precautions 1
*	28755	Label, General Hazard Warning 1
*	72429	Label, Model 1
*	28731	Label, Operating Instructions 1
*	26410	Label, Thermostat Warning 1
*	72432	Label, Warning Massachusetts 1
*	26374	Label, Warning Electrical 1
*	72434	Label, Wiring Schematic 1
*	72435	Label, Hang Tag 1
*	72436	Label, BTU 400,000 1
*	72426	Manual, Operating Instructions 1

Enerco LP 400,000 BTU

Enerco Quick Parts Reference (Propane)

Model#	Motor	Thermocouple /Flame Sensor	Ignition Control /Dsi	Valve	Fan Blade	Safety Switches	Igniter/ Electrode	Regulator	Orifice: Pilot /Burner	Hose	Hose/Reg Assembly	Spark Generator
MH35FA	28076	28082	NA	28081	28077	26168	28080	NA	See Valve	NA	21007	26473
HS35FA	28076	28082	NA	28081	28077	26168	28080	NA	See Valve	NA	21007	26473
MH55FAV	21652	26655	NA	27285	26086	21751	21082	26257	21930	26152	21667	23276
HS55FAV	21652	26655	NA	27285	26086	21751	21082	26257	21930	26152	21667	23276
TS55FAV	21652	26655	NA	27285	26086	21751	21082	26257	21930	26152	21667	23276
MH85FAV	21551	26655	NA	27285	26086	21751	21083	26257	21673	26152	21667	23276
HS85FAV	21551	26655	NA	27285	26086	21751	21083	26257	21673	26152	21667	23276
MH125FAV	21551	26655	NA	27285	27898	22003	21083	26257	22002	26152	21667	23276
HS125FAV	21551	26655	NA	27285	27898	22003	21083	26257	22002	26152	21667	23276
TS125FAV	21551	26655	NA	27285	27898	22003	21083	26257	22002	26152	21667	23276
MH170FAVT	22251	NA	27808	26101	26074	26168	28774	26257	22250	26152	NA	NA
HS170FAVT	22251	NA	27808	26101	26074	26168	28774	26257	22250	26152	NA	NA
TS170FAVT	22251	NA	27808	26101	26074	26168	28774	26257	22250	26152	NA	NA
MH400FAVT	20114	NA	20146	20126	20112	26168	20136	20180	20104	21008	NA	NA
HS400FAVT	20114	NA	20146	20126	20112	26168	20136	20180	20104	21008	NA	NA

Enerco Quick Parts Reference (Propane - Convection)

Model	Thermocouple	T E Safety Valve	Igniter/ Electrode	Regulator	Orifice: Pilot /Burner	Hose	Other
MH80CV	8643 6045 Clip	6104	6473 7652	6255	8644 8641	6152	8654 Manual Control Valve
HS80CV	8643 6045 Clip	6104	6473 7652	6255	8644 8641	6152	8654 Manual Control Valve
MH200CV	8643 6045 Clip	6104	6473 7652	6256	8647 8646	1591	8654 Manual Control Valve
HS200CV	8643 6045 Clip	6104	6473 7652	6256	8647 8646	1591	8654 Manual Control Valve

Enerco Quick Parts Reference (Propane - Radiant)

Model	Thermocouple	T E Safety Valve	Ignitor/ Electrode	Regulator	Orifice: Pilot /Burner	Other
MH4B	15155	15161	15155	15161	15151	
MH9B	E73404	E73416	E73404	E11410	E73413	
MH9BX	E73404	32054	E73404	75198	32068	
MH18B	78422	78421	78422	78422	NA	
MH25LP	09360	00025	NA*	00025	05573 05455	10367 thermostat 04435A burner grid
HS25LP	09360	00025	NA*	00025	05573 05455	10367 thermostat 04435A burner grid
MH40LP	09360	00025	NA*	00025	05573 05450	10357 thermostat 02523A burner assy.
HS40LP	09360	00025	NA*	00025	05573 05450	10357 thermostat 02523A burner assy.

*Light pilot with match

Enerco Quick Parts Reference (Natural Gas - Radiant)

Model	Thermocouple	T E Safety Valve	Ignitor/ Electrode	Regulator	Orifice: Pilot /Burner	Other
MH25NG	09360	00024	NA*	00024	05576 05445	10367 thermostat 04435A burner grid
HS25NG	09360	00024	NA*	00024	05576 05445	10367 thermostat 04435A burner grid
MH40NG	09360	00024	NA*	00024	05574 05437	10357 thermostat 02523A burner assy.
HS40NG	09360	00024	NA*	00024	05574 05437	10357 thermostat 02523A burner assy.

* Light pilot with match

Enerco Quick Parts Reference (Tank Top)

Model	Thermocouple	Orifice	Gas Valve	Hose	Regulator	Other
MH12C	F273117	75784	F273116	NA	F273320	
MH12CS	F273117	75784	F273116	NA	F273320	73235 Piezo 73233 Electrode
MH12T	F273117	75784	F273116	NA	F273606	
MH12TS	F273117	75784	F273116	NA	F273606	
MH24T	F273117	NA	73213	73658	F273606	
MH24TS	F273117	NA	73213	73658	F273606	73234 Piezo 73233 Electrode
MH42T	F273117	NA	73213	73658	F273606	

Enerco Gas Quick Parts Ref.

L.B. White Gas Heaters

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater. If your model number does not appear in the breakdowns, please refer to the Quick Parts Reference Parts Guide for common replacement parts.

**L.B. White
Brand Names Include**
Foreman
Norseman
Tradesman
Workman
Premier

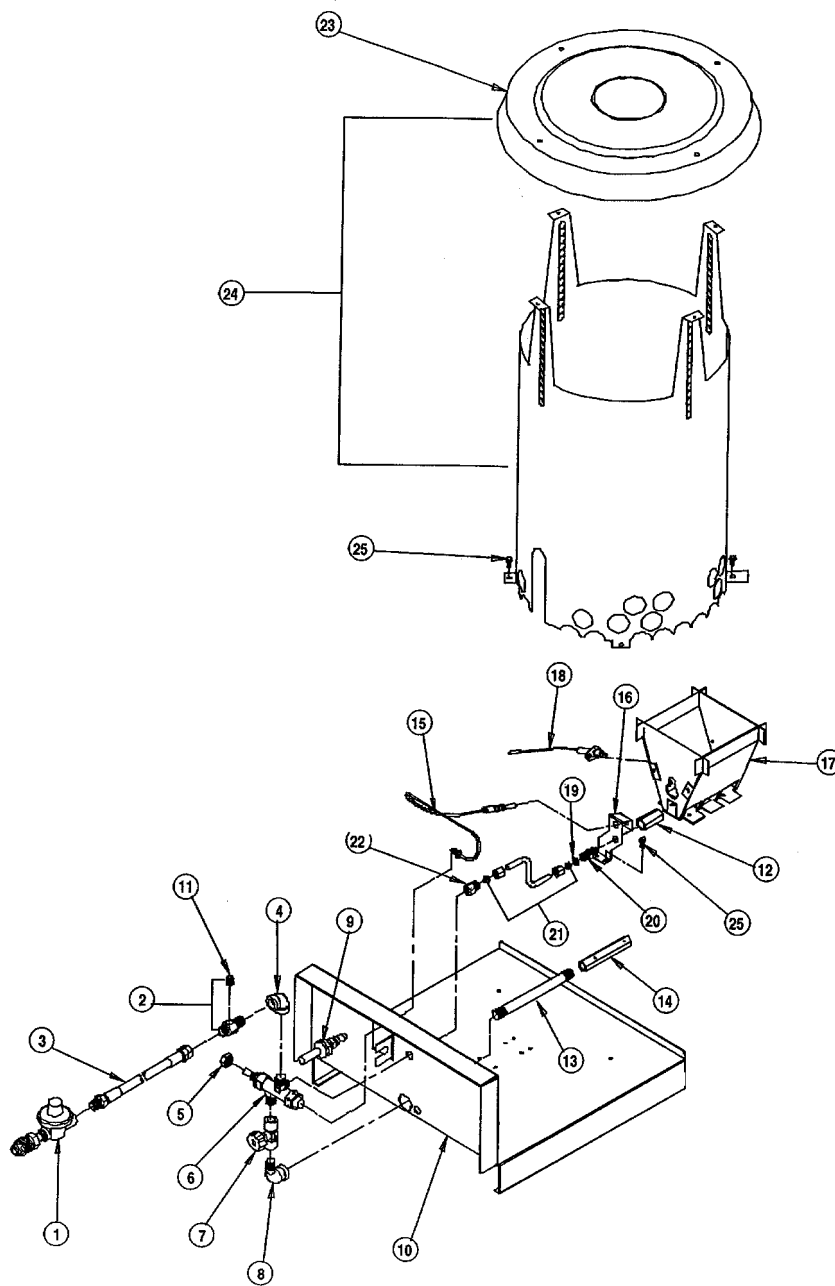
If you need technical assistance, feel free to call **1-800-362-6951 ext. 2** or e-mail us at **techservice@phpdistribution.com**. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service.

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225,000 BTU L.B. White Propane Heater

Model Numbers
CV225



Key Part

No.	Number	Description
1	23463	Regulator with P.O.L.
2	08435	Adapter, Hose, 1/4 NPT x 9/16-18 L.H. w/Plug
3	23731	Hose, 1/4 in. x 10 ft. w/Adapter
4	01300	Ell, 1/4 NPT
5	20185	Nut, Jam
6	07966	Valve, Pilot Safety
7	20229	Burner Shut Off Valve
8	01425	Ell, Street, 1/4 NPT
9	20280	Igniter, Piezo
10	23375	Base
11	09271	Plug, 1/8 NPT
12	01079	Pilot Head
13	20228	Nipple, 1/4 NPT x 6 in.
14	23392	Orifice, Burner
15	03555	Thermocouple, 18 in.

Key Part

No.	Number	Description
16	22257	Bracket
17	23380	Burner, w/Electrode
18	20184	Electrode with Wire (Piezo)
19	01722	Filter
20	01230	Orifice, Pilot
21	23730	Tube, Copper w/Compression Nuts & Sleeves
22	23393	Adapter, 1/4" Compression x 1/8 NPT
23	20064	Top
24	23421	Barrel w/Top
25	21183	Screw, #8 x 1/2 (qty. 4)

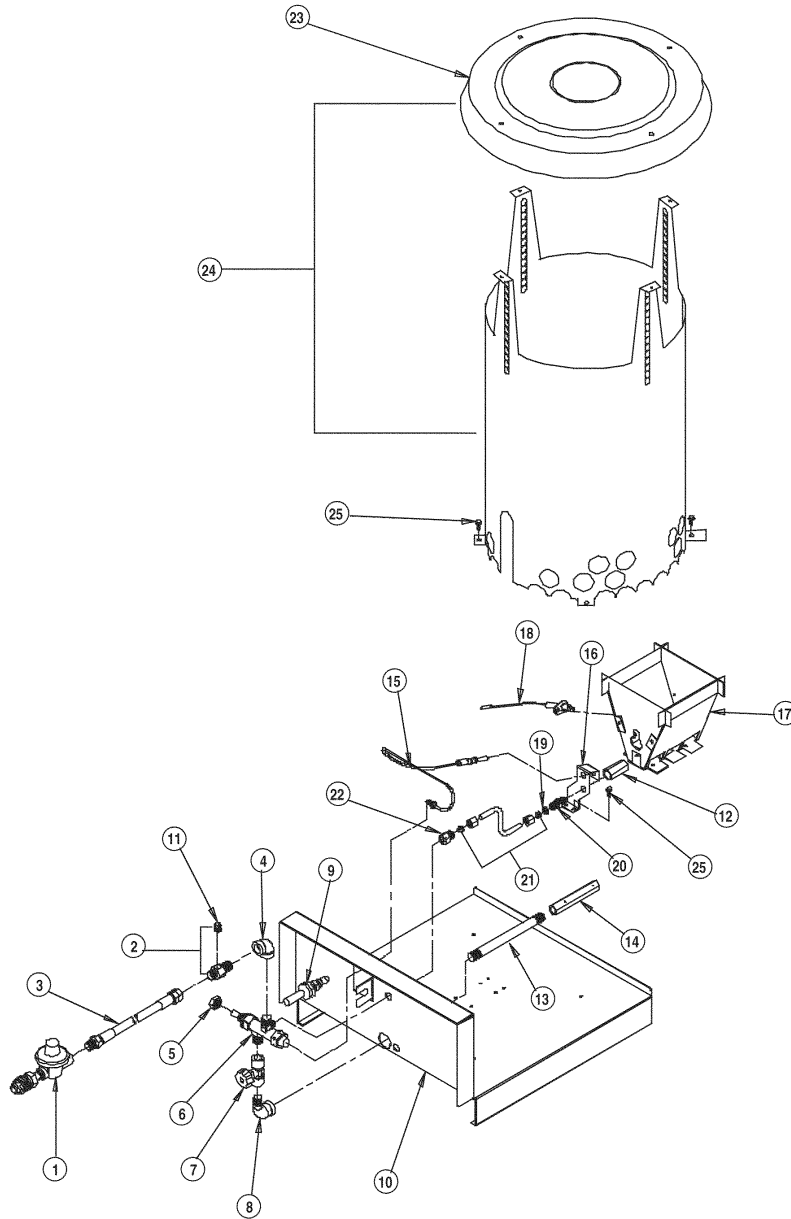
Parts Available, Not Shown

* 7111NR Power Coil

L.B. White 225,000 BTU

225,000 BTU L.B. White Propane Heater

Model Numbers
 Workman 225 Plus
 CV225B



Key No.	Description	Part Number
1	Regulator, w/ POL	23463
2	Adapter, Hose, 1/4 NPT x 9/16-18 L.H. w/ Plug	08435
3	Hose, 1/4 in. x 10 ft w/ Adapter	23731
4	Ell, 1/4 NPT	01300
5	Nut, Jam	20185
6	Valve, Pilot Safety	07966
7	Valve, Main Burner	20229
8	Ell, Street, 1/4 NPT	01425
9	Igniter, Piezo	20280
10	Base	23375
11	Plug, 1/8 NPT	09271
12	Pilot Head	01079
13	Nipple, 1/4 NPT x 6 in.	20228
14	Orifice, Burner	23392

Key No.	Description	Part Number
15	Thermocouple, 18 in.	23728
16	Bracket	22257
17	Burner, w/ Electrode	23380
18	Electrode with Wire (Piezo)	20184
19	Filter	01722
20	Orifice, Pilot	01230
21	Tube, Copper w/ Compression Nuts & Sleeves	23730
22	Adapter, 1/4" Compression x 1/8 NPT	23393
23	Top	20064
24	Barrel - w/ Top	23421
25	Screw, #8 x 1/2	21183
26	Bushing	04817

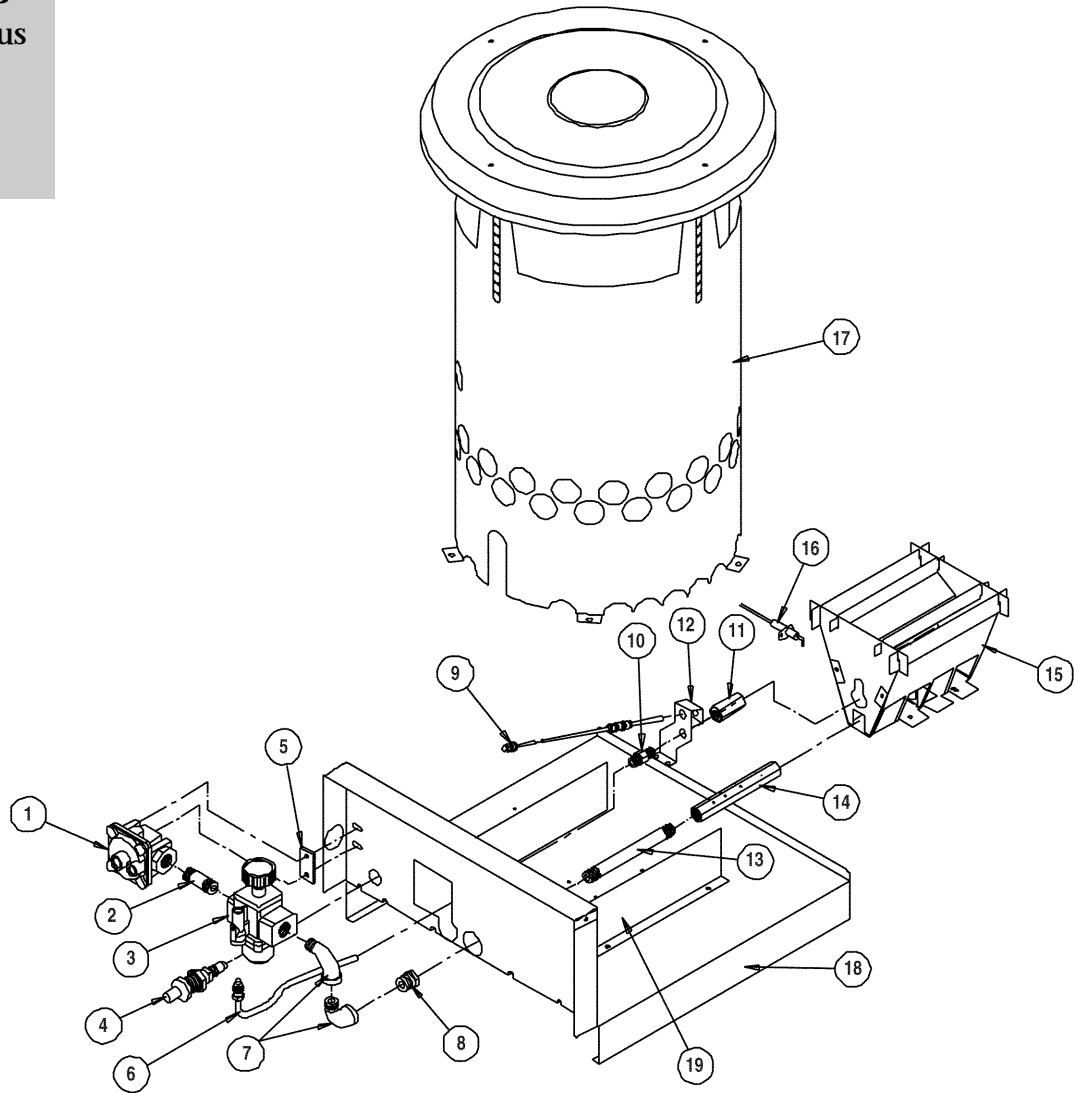
L.B. White LP 225,000 BTU

100,000 BTU L.B. White Natural Gas Heater

Model Numbers

Workman 100N Plus

Model CV100B



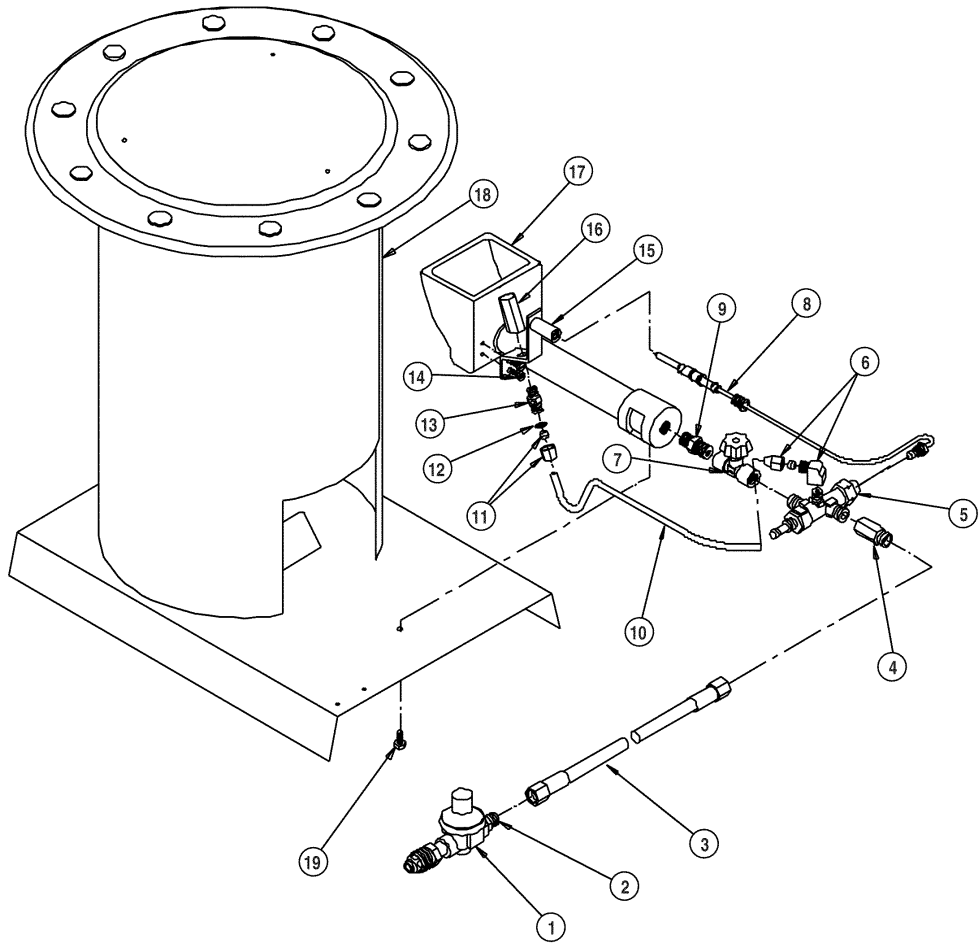
Key No.	Description	Part Number
1	Regulator, Natural Gas	25031
2	Nipple 3/8 in. x 1 1/2 in.	02421
3	Valve, Pilot Safety Control	22250
4	Igniter w/Nut	20280
5	Spacer	22298
6	Tube, Pilot w/Nuts and Sleeves	22330
7	Ell, 3/8 in.	01175
8	Bushing	01544
9	Thermocouple	03555
10	Orifice, Pilot	22260
11	Head, Pilot	22258
12	Bracket	22257
13	Nipple, 5 in.	80854
14	Orifice, Burner	22252
15	Burner, Assembly w/Electrode	22244
16	Electrode	20184
17	Barrel, Case, w/ Top	22253
18	Base, Case, w/ Labels	23673
19	Shield	22297

L.B. White LP 100,000 BTU

250,000 BTU L.B. White Propane Heater

Model Numbers

Norseman 250
341H



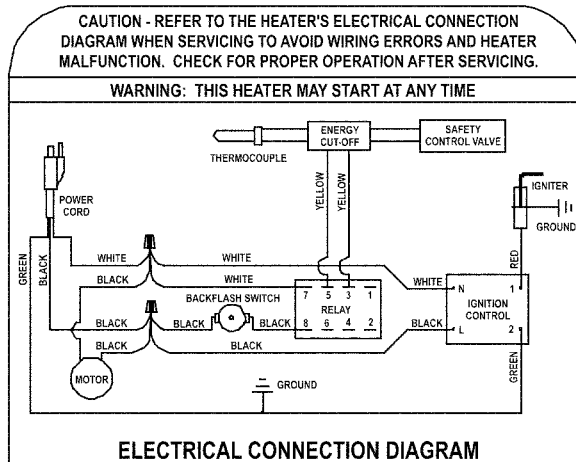
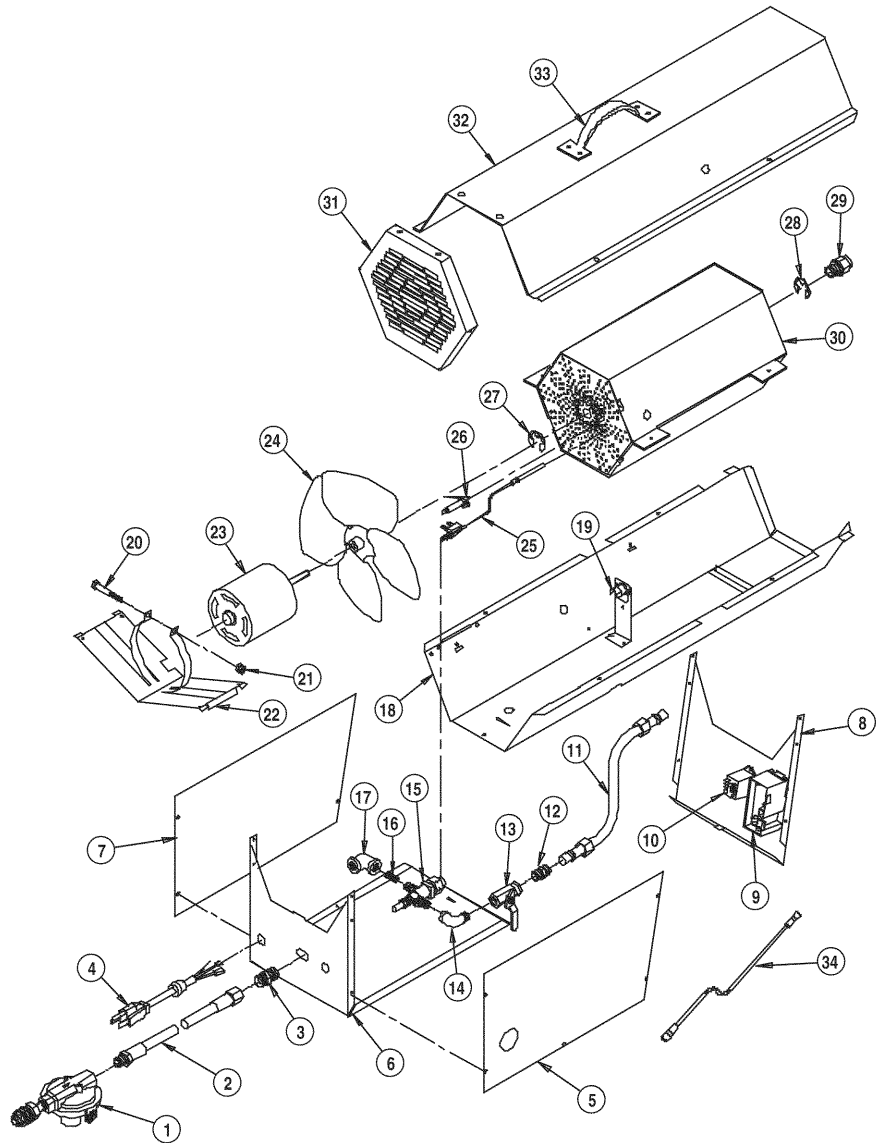
Key No.	Description	Part Number
1	Regulator	550-21788
2	Adapter, Hose	310-01098
3	Hose, 1/4 in. x 10 ft.	400-20242
4	Adapter, Hose	310-07970
5	Valve, Pilot Safety	130-07966
6	Ell, w/ Nut and Sleeve	130-07968
7	Valve, Manual Burner	130-20229
8	Thermocouple	120-01090
9	Orifice Burner	310-01329
10	Tube, Pilot w/Nuts & Sleeves	550-20529
11	Nut and Sleeve	550-01168
12	Screen	130-01722
13	Orifice, Pilot w/ Screen	400-01230
14	Screw	130-03068
15	Bracket, Pilot	400-03202
16	Head, Pilot	400-01079
17	Burner, Casting	320-03989
18	Case, Assembly w/Labels	500-22338
19	Bolt, 1/4-20 x 1/2	130-01151

L.B. White LP 250,000 BTU

100,000 BTU L.B. White Propane Heater

Model Numbers CP100

Key No.	Description	Part Number
1	Regulator, Single Stage	21856
2	Hose, 3/8 in. ID x 10 ft.	21841
3	Adapter, Hose	06654
4	Cord, Power	09139
5	Panel, Left with Marking	21795
6	Case, Back	21794
7	Panel, Right	21796
8	Case, Front	21798
9	Control, Ignition	21813
10	Relay with Clips and Screws	21816
11	Tube, Manifold with Nuts and Sleeves	21805
12	Union	21809
13	Valve, Heat Adjustment	21806
14	Ell, 1/4 in.	01425
15	Valve, Safety Control with Screen	21808
16	Screen	20391
17	Elbow	21807
18	Case, Barrel Bottom	21794
19	Switch, Backlash	21855
20	Bolt	03140
21	Nut	04955
22	Mount, Motor	21828
23	Motor	21830
24	Fan	21829
25	Thermocouple with Retaining Sleeve	21811
25A	Sleeve, Thermocouple Retaining (Not Illustrated)	21812
26	Igniter	21803
27	Ring, Bowed	08460
28	Ring, Flat	05847
29	Orifice with Rings	21802
30	Chamber, Heat with Igniter, Orifice and Burner Plate	21799
31	Guard, Inlet	21792
32	Case, Top	21793
33	Handle with Screws	03941
34	Ignition Lead	21826

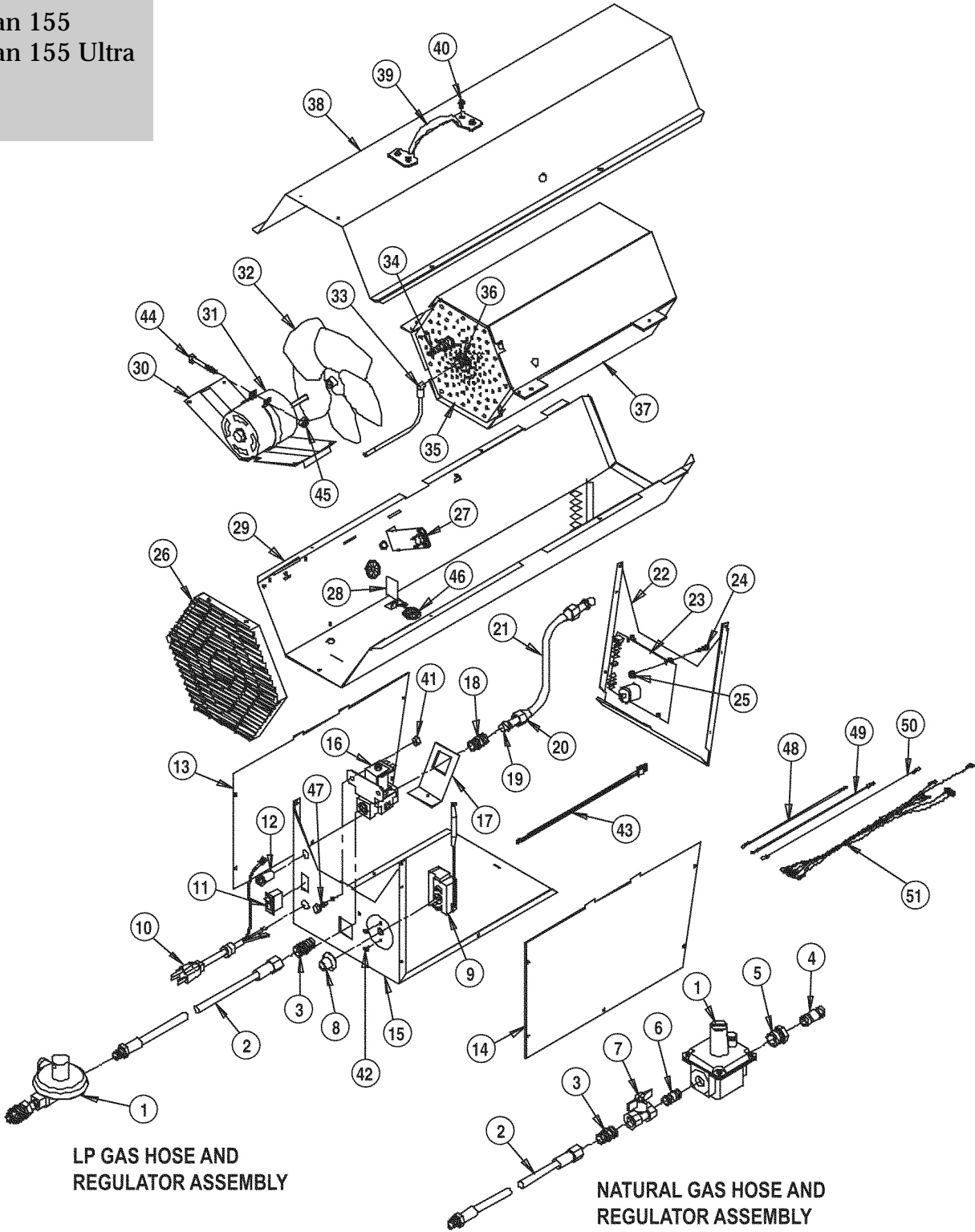


L.B. White LP 100,000 BTU

155,000 BTU L.B. White Propane/Natural Gas Heater

Model Numbers

Tradesman 155
 Tradesman 155 Ultra
 CP155D



L.B. White LP 155,000 BTU

155,000 BTU L.B. White Propane/Natural Gas Heater

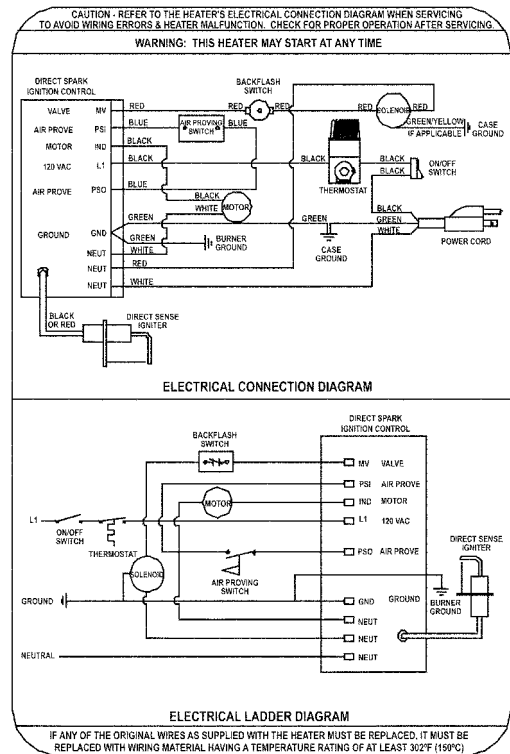
Model Numbers
Tradesman 155
Tradesman 155 Ultra
CP155D

Key

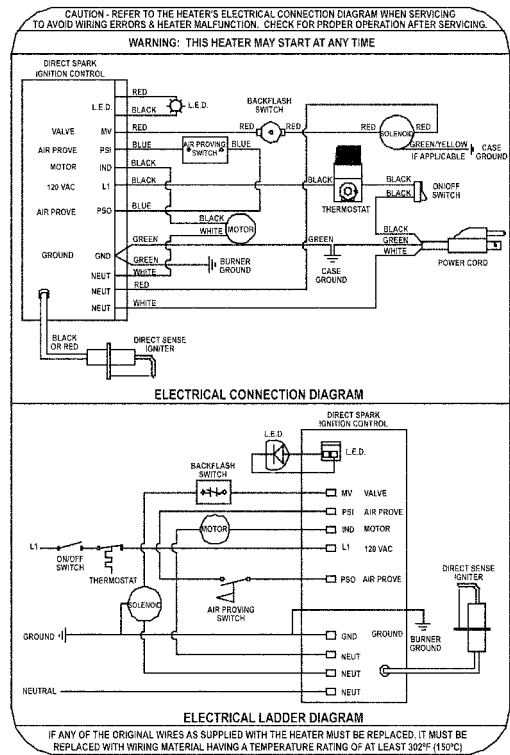
No.	Description
1	Regulator with POL (Propane Gas)
	Regulator (Natural Gas)
2	Hose, Fixed X Swivel, 3/8 in. x 10 ft. Propane
	Hose, Fixed X Swivel, 1/2 in. x 10 ft. Natural Gas
3	Adaptor, Hose, 3/8 in. (Propane Gas)
	Adaptor, Hose, 1/2 in. (Natural Gas)
4	Nipple
5	Bushing, Pipe
6	Nipple, 1/2 in. Close
7	Valve, Manual
8	Thermostat Knob
9	Thermostat
10	Power Cord
11	Switch, ON/OFF
12	Lens, L.E.D.
13	Case, Right Side
14	Case, Left Side
15	Case Back
16	Solenoid Valve, 120V
17	Bracket, Solenoid Valve
18	Union, Half
19	Sleeve, Compression
20	Nut, Compression
21	Tube, Formed Copper, w/ Nuts and Sleeves
22	Case, Front
23	Direct Spark Ignition Control, Screw, Ignition Control
24	Nut
25	Air Inlet Guard
26	Switch, Backflash, Assembly
27	Switch, Air-proving, Assembly with Bracket
28	Case, Barrel Bottom
29	Bracket, Motor Mount
30	Motor
31	Fan
32	Wire, Igniter
33	Igniter
34	Burner Plate,
35	Orifice with Retaining Clips, (Propane)
36	Orifice with Retaining Clips, (Natural Gas)
37	Burner Assembly, LP Gas
38	Natural Gas
39	Case, Top
40	Handle
41	Screws
42	Nut
43	Screw, Thermostat
44	Harness, LED
45	Bolt, Motor
46	Nut, Motor
47	Bushing
48	Bolt
49	Wire, Black, 12 in.
50	Wire, Red, 14 in.
51	Wire, Red, 18 in.

Part Number	155	155ULTRA
-----	21856	-----
-----	06713	-----
-----	21841	-----
-----	20504	-----
-----	06654	-----
-----	02894	-----
-----	02421	-----
-----	01195	-----
-----	01305	-----
-----	05548	-----
-----	22214	-----
-----	24676	-----
-----	05795	-----
-----	03834	-----
-----	-----	22299
-----	07162	-----
-----	06316	-----
22388	-----	22389
-----	24642	-----
-----	05774	-----
-----	04786	-----
-----	03879	-----
-----	05772	-----
-----	24641	-----
-----	06218	-----
24640	-----	24665
-----	09043	-----
-----	86169	-----
-----	22387	-----
-----	06687	-----
-----	06739	-----
-----	22391	-----
-----	06400	-----
-----	03830	-----
-----	21575	-----
-----	09347	-----
-----	08834	-----
-----	06429	-----
-----	06685	-----
-----	06686	-----
-----	22366	-----
-----	22368	-----
-----	06222	-----
-----	03941	-----
-----	03973	-----
-----	04955	-----
-----	04955	-----
-----	-----	22300
-----	03140	-----
-----	04955	-----
-----	05768	-----
-----	01151	-----
-----	24596	-----
-----	22630	-----
-----	24595	-----
-----	24597	-----

TRADESMAN 155



TRADESMAN 155 ULTRA

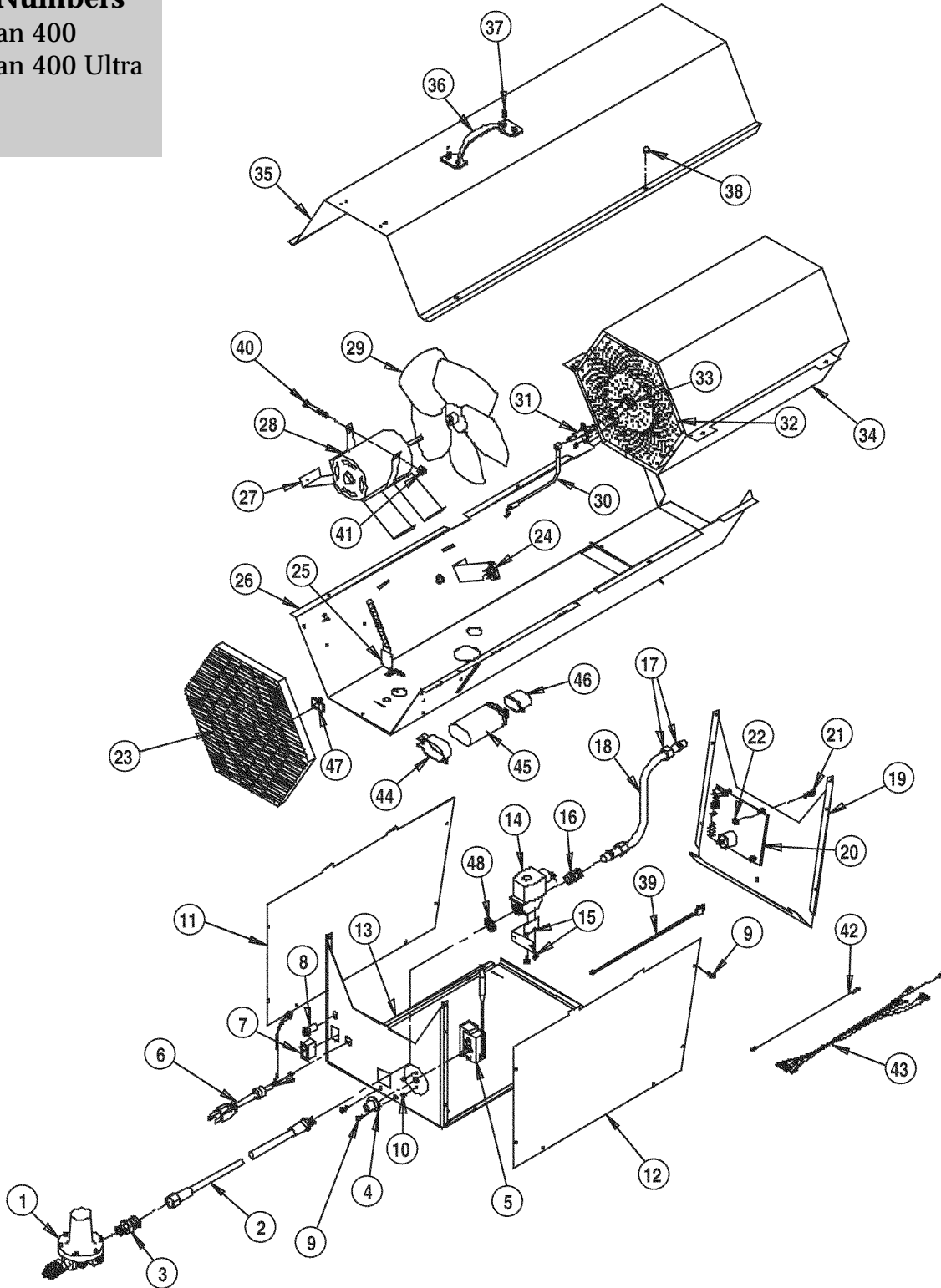


L.B. White LP 155,000 BTU

400,000 BTU L.B. White Propane Heater

Model Numbers

Tradesman 400
Tradesman 400 Ultra
CP400



L.B. White LP 400,000 BTU

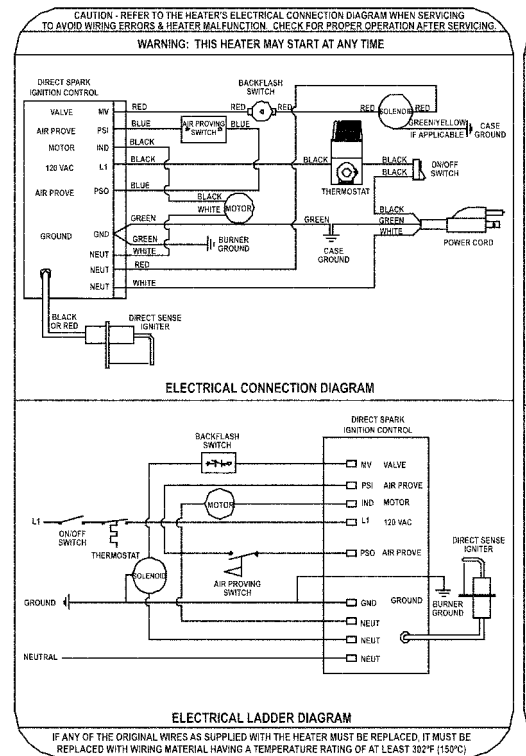
400,000 BTU L.B. White Propane Heater

Model Numbers

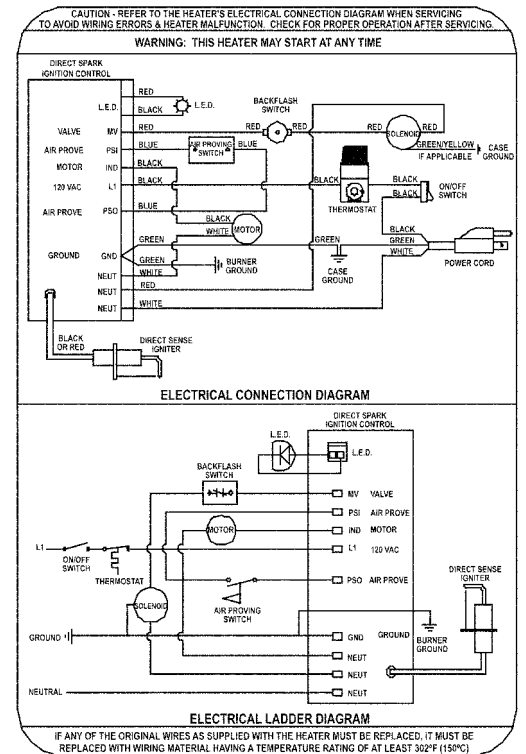
Tradesman 400
Tradesman 400 Ultra
CP400

Key No.	Description	Part Number	
		400	400ULTRA
1	Regulator with POL	-----	22315
2	Hose, Fixed X Swivel, 3/8 in. x 10 ft.	-----	22128
3	Adaptor, Hose	-----	21997
4	Thermostat Knob	-----	22214
5	Thermostat	-----	24676
6	Power Cord	-----	05795
7	Switch, ON/OFF	-----	03834
8	Lens, L.E.D.	-----	22299
9	Screw	-----	07288
10	Screw, Thermostat	-----	03778
11	Case, Right Side	-----	08017
12	Case, Left Side	-----	08016
13	Case Back	22292	22293
14	Solenoid Valve, 120V	-----	24644
15	Bracket, Solenoid Valve	-----	22295
16	Union, Half	-----	08894
17	Compression Sleeve and Nut	-----	24689
18	Tube, Formed Copper, w/ Nuts and Sleeves	-----	23422
19	Case, Front	-----	22291
20	Direct Spark Ignition Control	24640	24665
21	Screw, Ignition Control	-----	09843
22	Nut	-----	86169
23	Fan Guard	-----	06307
24	Switch, Backflash, Assembly	-----	24691
25	Switch, Air-proving, Assembly with Bracket	-----	24692
26	Case, Barrel Bottom	-----	22290
27	Bracket, Motor Mount	-----	06717
28	Motor	-----	04719
29	Fan	-----	22302
30	Wire, Igniter	-----	20409
31	Igniter	-----	20312
32	Burner Plate	-----	06314
33	Orifice with Retaining Rings	-----	20410
34	Burner Assembly	-----	20416
35	Case, Top	-----	08013
36	Handle	-----	03941
37	Screws	-----	03973
38	Nut	-----	04955
39	Harness, LED	-----	22300
40	Bolt, Motor	-----	03140
41	Nut, Motor	-----	04955
42	Wire, Black, 12 in.	-----	24596
43	Wire Harness	-----	24597
44	Capacitor Bracket with Screw	-----	04721
45	Capacitor	-----	04720
46	Boot, Capacitor	-----	04938
47	Clip, Thermostat Bulb Mounting	-----	22215
48	Screen, Valve Inlet	-----	06702

TRADESMAN 400



TRADESMAN 400 ULTRA

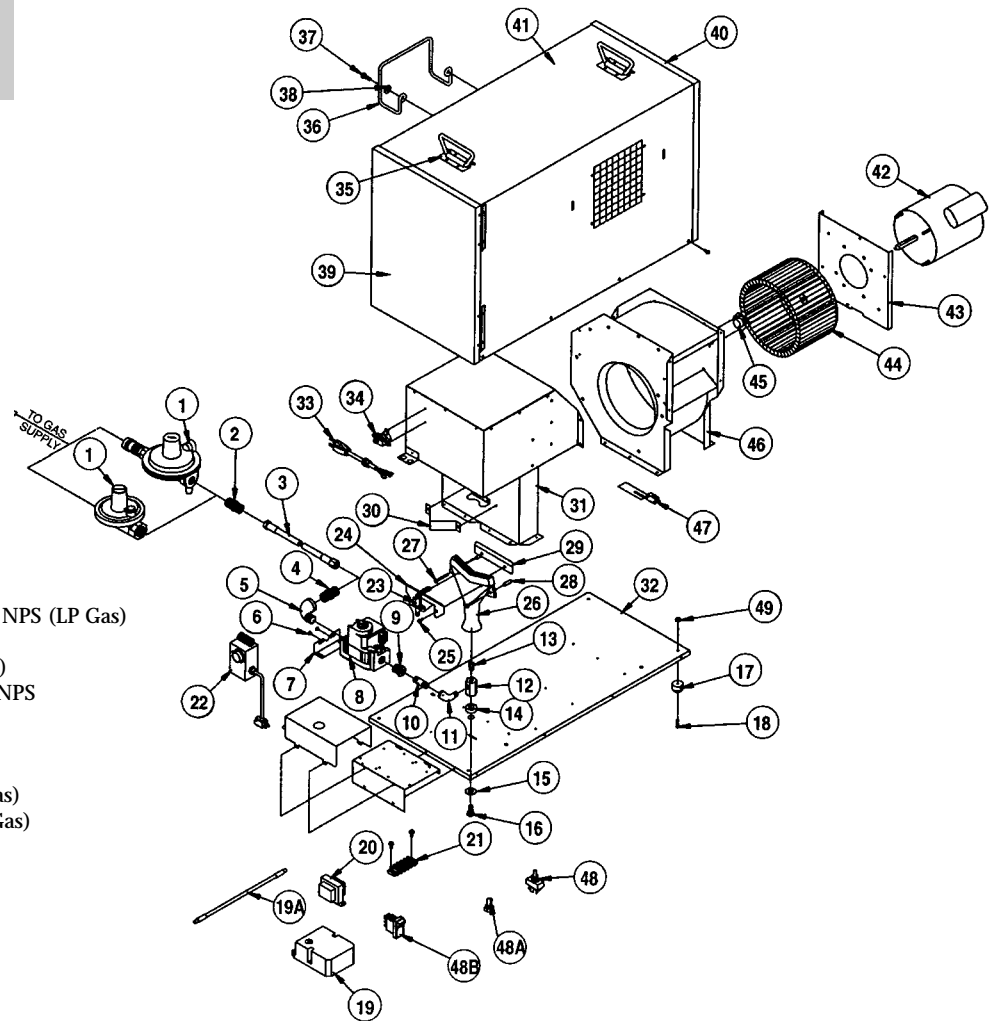


L.B. White LP 400,000 BTU

80,000 BTU Forced Air L.B. White Propane/Natural Gas Heater

Model Numbers

TS080



Key Part

No.	Number	Description
1	08990	Regulator (LP Gas)
	21999	Regulator (Nat.Gas)
2	06655	Adapter, 3/8" NPT x 1/2" NPS (LP Gas)
3	20531	Hose, 1/2" x 10' (LP Gas)
	20704	Hose, 1/2" x 10' (Nat Gas)
4	02894	Adapter, 1/2" NPT x 1/2"NPS
5	09309	Ell
6	09425	Screw
7	09760	Bracket
8	09368	Valve, Gas Control (LP Gas)
	09428	Valve, Gas Control (Nat Gas)
9	01519	Bushing
10	02453	Nipple
11	01425	Street Elbow, 1/4"
12	09759	Holder, Orifice
13	09753	Orifice, Burner (LP Gas)
	09754	Orifice Burner (Nat Gas)
14	07905	Spacer, Burner
15	01589	Washer
16	02692	Bolt
17	08932	Bumper
18	08944	Screw
19	08810	Control Ignition
19A	09348	Wire, Ignition Control
20	08922	Transformer
21	08253	Terminal Strip
22	09454	Thermostat Kit
23	06479	Igniter
24	08906	Bracket
25	01213	Screw
26	06479	Burner
27	02688	Screw
28	02687	Spacer
29	08942	Bracket Flame Arrestor
30	08933	Bracket, Burner
31	08952	Chamber, Heat
32	08909	Base
33	09139	Cord, Power
34	03933	Switch, High Limit, Burner End (275 F)
35	08534	Handle
36	08936	Hanger, Hose
37	01254	Bolt
38	03054	Washer

Key Part

No.	Number	Description
39	08917	Case Access Panel, Burner End
40	08916	Case Access Panel, Motor End
41	09970	Case Assembly w/Access Panels
42	08920	Motor
43	08146	Mount, Motor
44	03531	Fan
45	09821	Switch, High Limit (250 F)
46	09961	Housing Fan w/Motor, Fan & High Limit Switch (LP Gas)
	22067	Housing Fan w/Motor, Fan & High Limit Switch (Nat Gas)
47	21186	Switch, Air Proving w/Bracket
48	09915	Switch, Heat/Vent (Toggle)
48A	09916	Boot
49	08811	Light, LED w/Leads
50	03109	Nut
*	08978	12" x 12' Black Duct
*	20865	12" x 12' White Duct
*	21177	Diffuser for Duct (attach to duct)
*	09389	Diffuser for Heater (attach to heater)

L.B. White 80,000 BTU

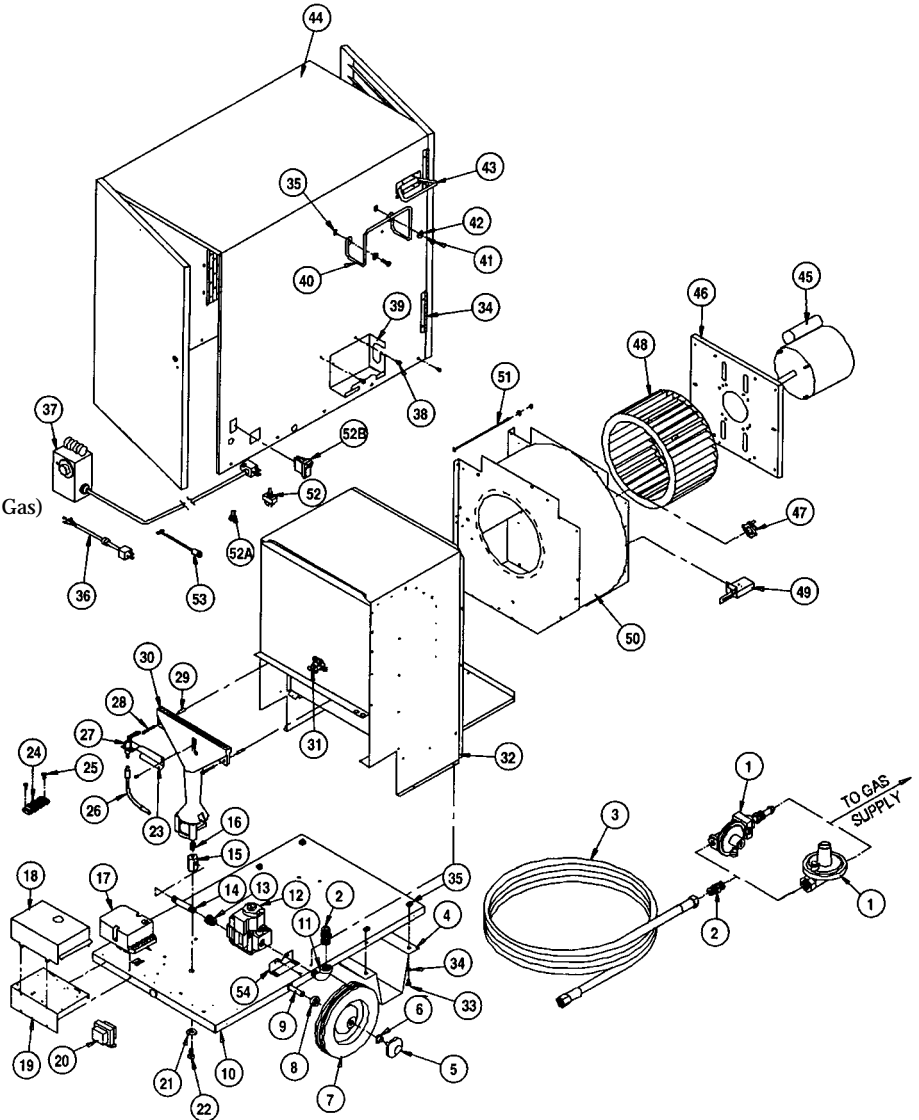
170,000 BTU Forced Air L.B. White Propane/Natural Gas Heater

Model Numbers

TS170

Key Part

No.	Number	Description
1	09911	Regulator (LP Gas)
	09795	Regulator (Nat.Gas)
2	02894	Adapter, 1/2" NPT x 1/2" NPS (LP Gas)
3	20704	Hose, 1/2" x 10'
4	20960	Kit, Leg Bracket
5	07187	Cap, Hub
6	01095	Nut
7	09160	Wheel
8	07905	Spacer
9	06421	Axle
10	09150	Base
11	09309	Ell
12	09368	Valve, Gas Control (LP Gas)
	09428	Valve, Gas Control (Nat Gas)
13	01519	Bushing
14	03115	Nipple
15	09759	Holder, Orifice
16	09786	Orifice, Burner (LP Gas)
	09787	Orifice, Burner (Nat Gas)
17	08810	Control Ignition
18	08964	Cover
19	08963	Bracket
20	08922	Transformer
21	01589	Washer
22	02692	Bolt
23	09783	Bracket, Igniter
24	08253	Terminal Strip
25	02330	Screw
26	09348	Wire, Igniter
27	06479	Igniter
28	02688	Screw
29	02687	Spacer
30	03453	Burner
31	03933	Switch, High Limit, Burner End (275 F)
32	09133	Chamber Heat
33	11267	Bolt
34	02513	Washer
35	07708	Cage Nut
36	09917	Cord, Power
37	21790	Thermostat Kit, w/20 ft. Cord
38	07288	Screw
39	09919	Bracket, Regulator Storage
40	08936	Hanger, Hose
41	11254	Bolt
42	03054	Washer
43	08534	Handle
44	09927	Case, Assembly
45	20169	Motor
46	08647	Mount, Motor



Key Part

No.	Number	Description
47	09784	Switch, High Limit Motor End (190 F)
48	09050	Fan
49	09925	Switch, Air Proving
50	09789	Housing, Fan w/Motor, Fan, High Limit and Air Proving Switches
51	09239	Bolt, 7-1/2"
52	09915	Switch, Heat/Vent, Toggle
52A	09916	Boot
52B	22017	Switch, Heat/Vent, Rocker w/LED
53	08811	Light, LED w/Leads
54	09760	Bracket, Gas Control
*	08978	12" x 12' Black Duct
*	20865	12" x 12' White Duct
*	21177	Diffuser for Duct (attach to duct)
*	09389	Diffuser for Heater (attach to heater)

L.B. White 170,000 BTU

80,000 BTU Forced Air L.B. White Propane/Natural Gas Heater

Model Numbers

PREMIER 80

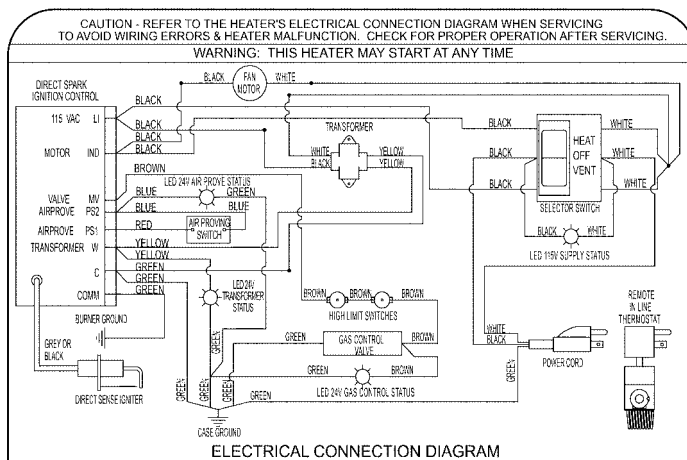
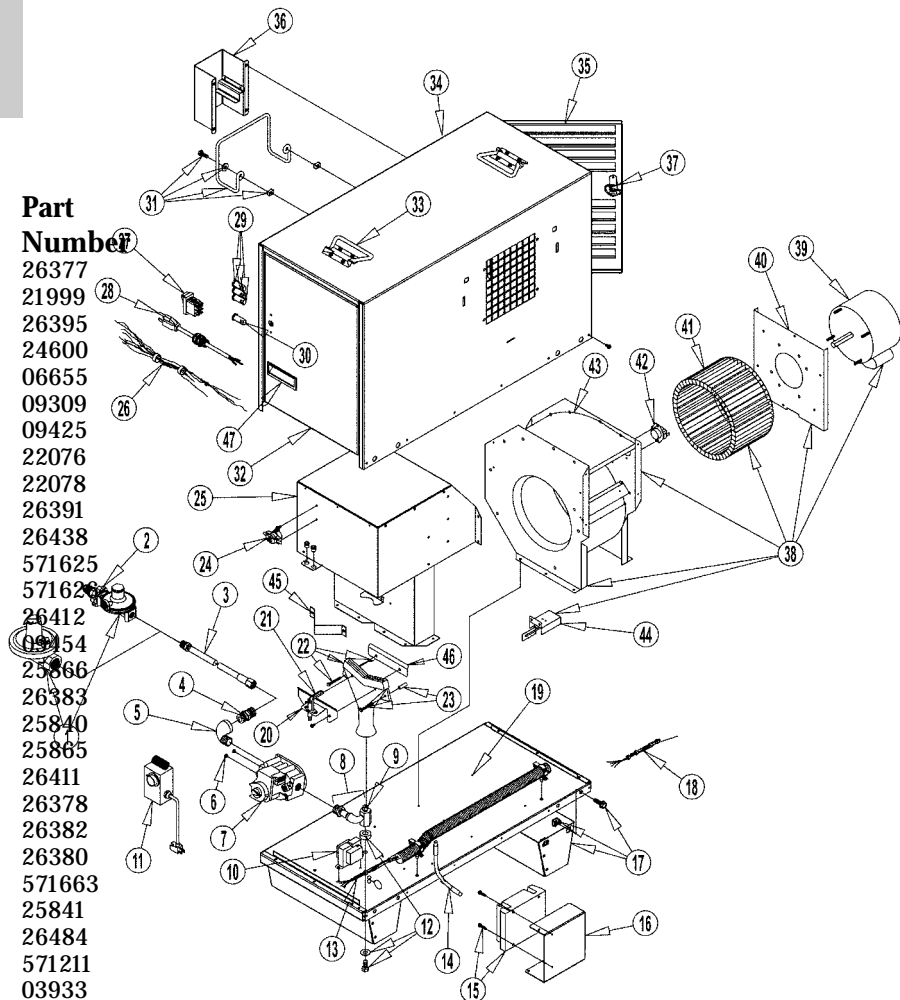
Key

No. Description

- 1 Regulator Propane Gas
Natural Gas
- 2 Handwheel w/Spring Propane
- 3 Universal Hose Kit, 15 ft. Hose w/ Adapters
- 4 Adapter 1/2 NPT x 5/8 - 18
- 5 Ell
- 6 Screw
- 7 Valve, Gas Control Propane Gas
Natural Gas
- 8 Manifold Assembly w/ Orifice Propane Gas
Natural Gas
- 9 Orifice, Burrner Propane Gas
Natural Gas
- 10 Transformer
- 11 Thermostat Kit
- 12 Washer, Bolt, Spacer
- 13 Harness, Wire, Burner End
- 14 Wire, Igniter
- 15 Control Ignition
- 16 Bracket, Ignition Control
- 17 Support Leg
- 18 Harness, Wire, Motor End
- 19 Base
- 20 Bracket, Igniter/Sensor
- 21 Igniter
- 22 Burner
- 23 Screws and Spacers
- 24 Switch, High Limit, Burner End (275°F)
- 25 Chamber, Heat
- 26 Harness, Wire, Status Lights
- 27 Switch, Selector
- 28 Cord, Power
- 29 Light, Status, 24 Volt
- 30 Light, Status, 120 Volt
- 31 Hanger, Hose
- 32 Door Assembly, Burner End Propane Gas
Natural Gas
- 33 Handle
- 34 Case Assembly Propane Gas
Natural Gas
- 35 Door Assembly, Fan End
- 36 Thermostat Bracket
- 37 Latch, Door
- 38 Fan Assembly
- 39 Motor
- 40 Motor Mount
- 41 Fan
- 42 Switch, High Limit, Fan End (250°F)
- 43 Housing, Fan
- 44 Switch, Air Proving
- 45 Bracket, Burner
- 46 Bracket, Flame Arrestor
- 47 Handle, Door

Part

- Number
- 26377
- 21999
- 26395
- 24600
- 06655
- 09309
- 09425
- 22076
- 22078
- 26391
- 26438
- 571625
- 571628
- 26412
- 09954
- 25866
- 26383
- 25840
- 25865
- 26411
- 26378
- 26382
- 26380
- 571663
- 25841
- 26484
- 571211
- 03933
- 571666
- 26381
- 26385
- 26379
- 26392
- 26393
- 571619
- 26434
- 26433
- 25859
- 26389
- 26387
- 26435
- 26401
- 26437
- 26384
- 20292
- 571686
- 570304
- 571671
- 571612
- 26485
- 571649
- 571609
- 26479



L.B. White 80,000 BTU

170,000 BTU Forced Air L.B. White Propane Heater

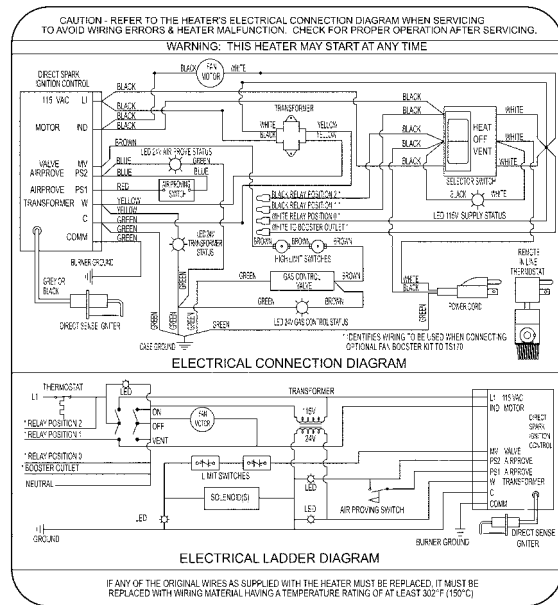
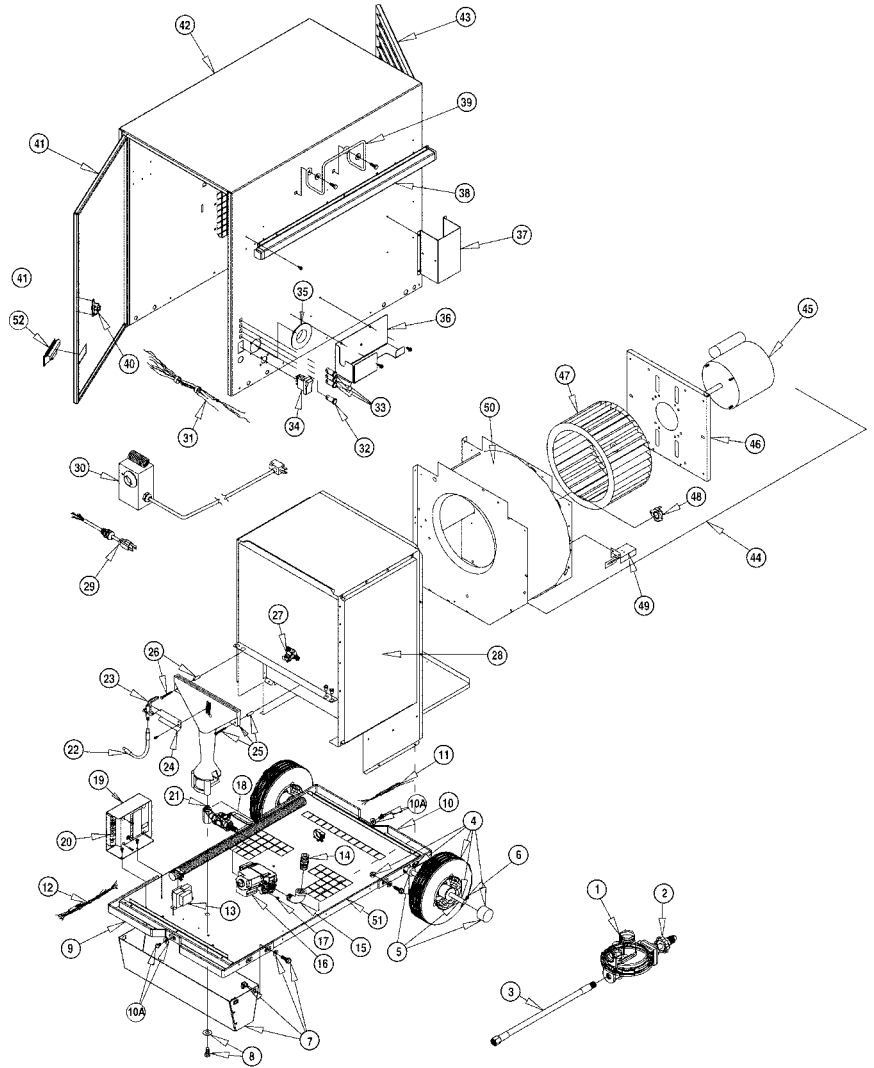
Model Numbers

CS170DF
170DF

Key

No. Description

1	Regulator	26423
2	Hand Wheel with Spring	26395
3	Universal Hose Kit, 15 ft.	24600
4	Wheel Kit	26418
5	Axle	26415
6	Cotter Pin	26417
7	Kit, Leg Bracket	26413
8	Bolt and Washer	25866
9	Handle, Bracket, Burner End	26426
10	Handle, Bracket, Motor End	26427
10A	Nut, Bolt, and Washer	26443
11	Wire Harness, Motor End	26406
12	Wire Harness, Burner and Gas Control end	26407
13	Transformer	26412
14	Adapter, Hose, 1/2 NPT x 5/18-18	06655
15	Ell	09309
16	Valve, Gas Control	25831
17	Screw	09425
18	Manifold Assembly with Orifice	25871
19	Bracket, Ignition Control	26410
20	Ignition Control	25865
21	Orifice	25870
22	Wire, Igniter	25840
23	Igniter	25841
24	Bracket, Igniter	25843
25	Burner with Mounting Hardware	25842
26	Burner Mounting Hardware	571211
27	Switch, High Limit, Burner End (275°F)	25869
28	Chamber, Heat	25844
29	Cord, Power	26379
30	Thermostat with 20 ft. Cord	09454
31	Wire Harness, Status Lights	26408
32	Light, Status, 120 Volt	26393
33	Light, Status, 24 Volt	26385
34	Switch, heat/Vent, Rocker	25747
35	Plug	26442
36	Bracket, Regulator Storage	26401
37	Bracket, Thermostat, Storage	571760
38	Handle, Sliding	571619
39	Hanger, Hose	26437
40	Latch, Door	26429
41	Door, Burner End	26436
42	Case Assembly	26430
43	Door, Louvered, Motor End	26439
44	Housing Assembly with Motor, Fan, High limit, and Air Proving Switches	25839
45	Motor	25835
46	Mount, Motor	25849
47	Fan	25846
48	Switch, High Limit, Motor End (190°F)	25858
49	Switch, Air Proving	26440
50	Housing, Fan	26425
51	Base	26479
52	Handle, Door	



L.B. White 170,000 BTU

170,000 BTU Forced Air L.B. White Propane/Natural Gas Heater

Model Numbers

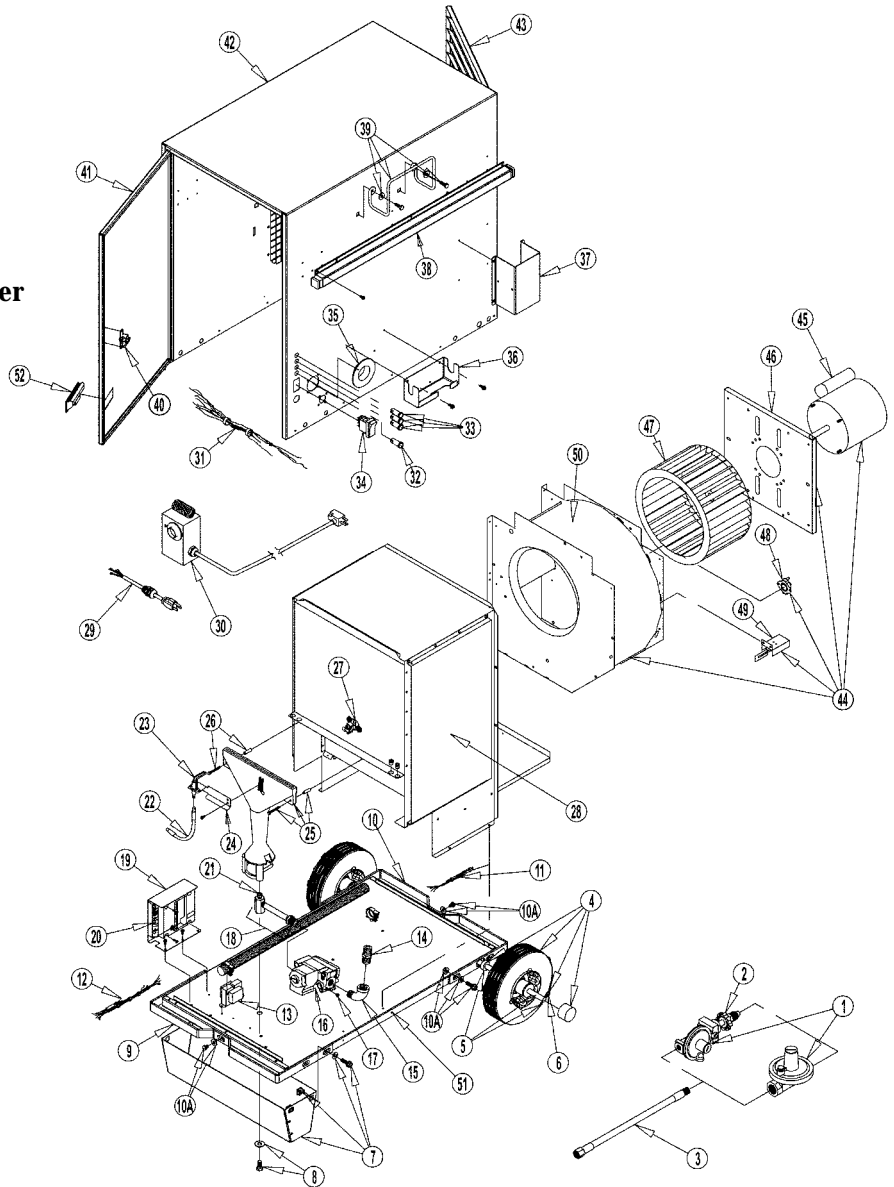
Premier 170

Key

No. Description

1	Regulator Propane Gas	26419
	Natural Gas	09795
2	Hand Wheel w/Spring Propane Gas	26395
3	Universal Hose Kit, 15 ft. Hose	
	w/ Adapters	24600
4	Wheel Kit	26418
5	Axle	26415
6	Cotter Pin	26417
7	Kit, Leg Bracket	26413
8	Bolt and Washer	25866
9	Handle, Bracket, Burner End	26426
10	Handle, Bracket, Motor End	26427
10A	Nut, Bolt & Washer	26443
11	Wire Harness, Motor End	26406
12	Wire Harness, Burner and	
	Gas Control End	26407
13	Transformer	26412
14	Adapter,Hose, 1/2 NPT x 5/8-18	
	Propane Gas	06655
	Natural Gas	25873
15	ELL 09309	
16	Valve, Gas Control Propane Gas	22076
	Natural Gas	22078
17	Screw	09425
18	Manifold Assembly with Orifice	
	Propane Gas	26404
	Natural Gas	26441
19	Bracket, Ignition Control	26410
20	Ignition Control	25865
21	Orifice Propane Gas	21573
	Natural gas	09787
22	Wire, Igniter	25840
23	Igniter	25841
24	Bracket, Igniter	25843
25	Burner with Mounting Hardware	25842
26	Burner Mounting Hardware	571211
27	Switch, High Limit, Burner End (275° F)	25869
28	Chamber, Heat	26403
29	Cord, Power	26379
30	Thermostat Kit w/ 20 ft. Cord	09454
31	Wire Harness, Status Lights	26408
32	Light,Status, 120 Volt	26393
33	Light,Status, 24 Volt	26392
34	Switch, Heat/Vent, Rocker	26385
35	Plug	25747
36	Bracket, Regulator Storage	26402
37	Bracket, Thermostat Storage	26401
38	Handle, Sliding	571760
39	Hanger, Hose	571619
40	Latch, Door	26437
41	Door, Burner End Propane Gas	26432
	Natural Gas	26431

Part Number



42	Case Assembly	Propane Gas	26398
		Natural Gas	26397
43	Door, Louvered, Motor End		26430
44	Housing Assembly w/ Motor, Fan,		
	High Limit and Air Proving Switches		26439
45	Motor		25834
46	Mount, Motor		25835
47	Fan		25849
48	Switch, High Limit, Motor End (190° F)		25846
49	Switch, Air Proving		25858
50	Housing, Fan		26440
51	Base		26414
52	Handle,Door		26479

L.B. White 170,000 BTU

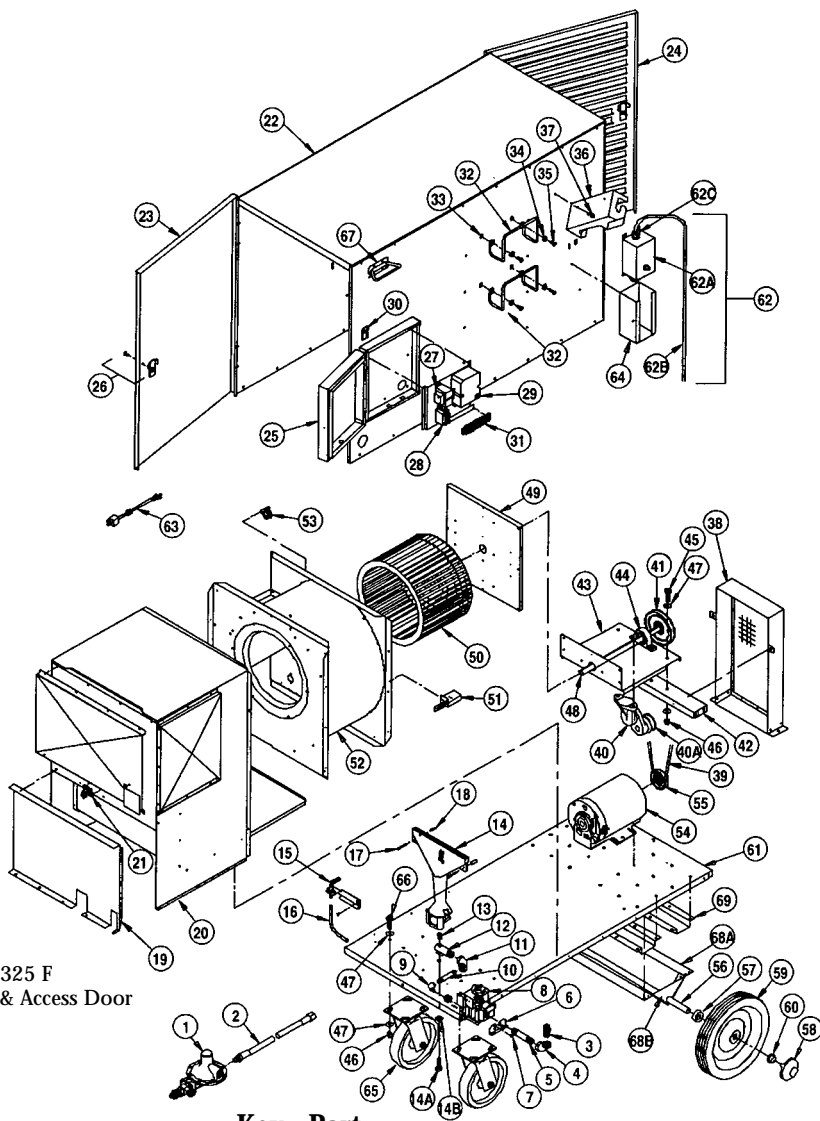
350,000 BTU Forced Air L.B. White Propane/Natural Gas Heater

Model Numbers

TS350

Key Part

No.	Part Number	Description
1	22919	Regulator (LP Gas)
	23136	Regulator (Nat. Gas)
2	23078	Hose, 3/4" x 15'
	23079	Hose, 3/4" x 10'
3	22426	Adapter, 3/4 NPT x 3/4 NPS
4	22404	Elbow
5	23143	Nipple, 3/4 x 4-1/2"
6	23132	Bracket, Gas Control
8	22897	Valve, Gas Control (LP Gas)
	22900	Valve, Gas Control (Nat. Gas)
9	01359	Elbow, 1/2 NPT
10	07148	Nipple
11	01426	Elbow, 1/2 NPT
12	09291	Manifold
13	22898	Orifice, Burner (LP Gas)
	22901	Orifice, Burner (Nat. Gas)
14	21781	Burner
14A	02692	Bolt, Burner
14B	01589	Washer
15	06479	Igniter
16	22948	Lead, Ignition
17	02688	Screw, Burner Mounting
18	02687	Spacer, Burner
19	22903	Panel, Burner Access
20	22890	Chamber, Heat
21	81108	Switch, High Limit, Burner End, 325 F
22	22877	Case Assembly w/Control Panel & Access Door
23	22881	Panel, Case Access, Burner
24	22880	Panel, Case Access, Motor
25	22875	Panel, Control Box Cover
26	09199	Latch
27	09615	Transformer
28	08685	Relay
29	08810	Control Ignition
30	22017	Switch, Selectro w/L.E.D.
31	22905	Terminal Strip
32	08936	Hose and Thermostat Hanger
33	07708	Cage Nut
34	03054	Washer, 1/4
35	11254	Bolt, 1/4 - 20 x 3/4
36	22917	Bracket, Regulator Storage
37	07288	Screws, Regulator Storage Bracket & Thermostat Storage Bracket
38	23058	Guard, Belt
39	23129	Belt
40	23096	Belt Tensioner
40A	23098	Idler
41	23037	Sheave, Fan
42	22889	Bracket, Support
43	22888	Platform, Bearing
44	22949	Bearing, Pillow Block
45	03147	Bolt, 3/8 - 16 x 1-1/4
46	05100	Nut, 3/8 - 16
47	01589	Washer, 3/8
48	22950	Shaft, 3/4 Dia. with 3/16 keyway
49	22887	Panel, Fan Access
50	22868	Fan



Key Part

No.	Part Number	Description
50A	22955	Key, 3/16", Fan & Motor Sheaves & Fan Shaft
51	22946	Switch, Air Proving
52	22882	Housing, Fan
53	09784	Switch, High Limit, Fan End, 190 F
54	22908	Motor
55	23038	Sheave, Motor
56	22951	Axle, Wheel
57	07905	Spacer
58	07187	Hub Cap
59	22914	Wheel
60	01095	Cap, Retaining
61	22904	Base
62	22920	Thermostat Kit w/20 ft. Cord
62A	09785	Thermostat
62B	22921	Cord, Thermostat
62C	08948	Connector, Liquid Tight
63	22907	Cord, Power, 10 ft.
64	23111	Bracket, Thermostat Storage
65	23130	Wheel, Caster
66	03141	Bolt, 5/16 - 18
67	08534	Handle, Case
68A	23112	Bracket, Axle Mount
68B	23113	Bracket, Axle
69	23110	Support Motor

L.B. White 350,000 BTU

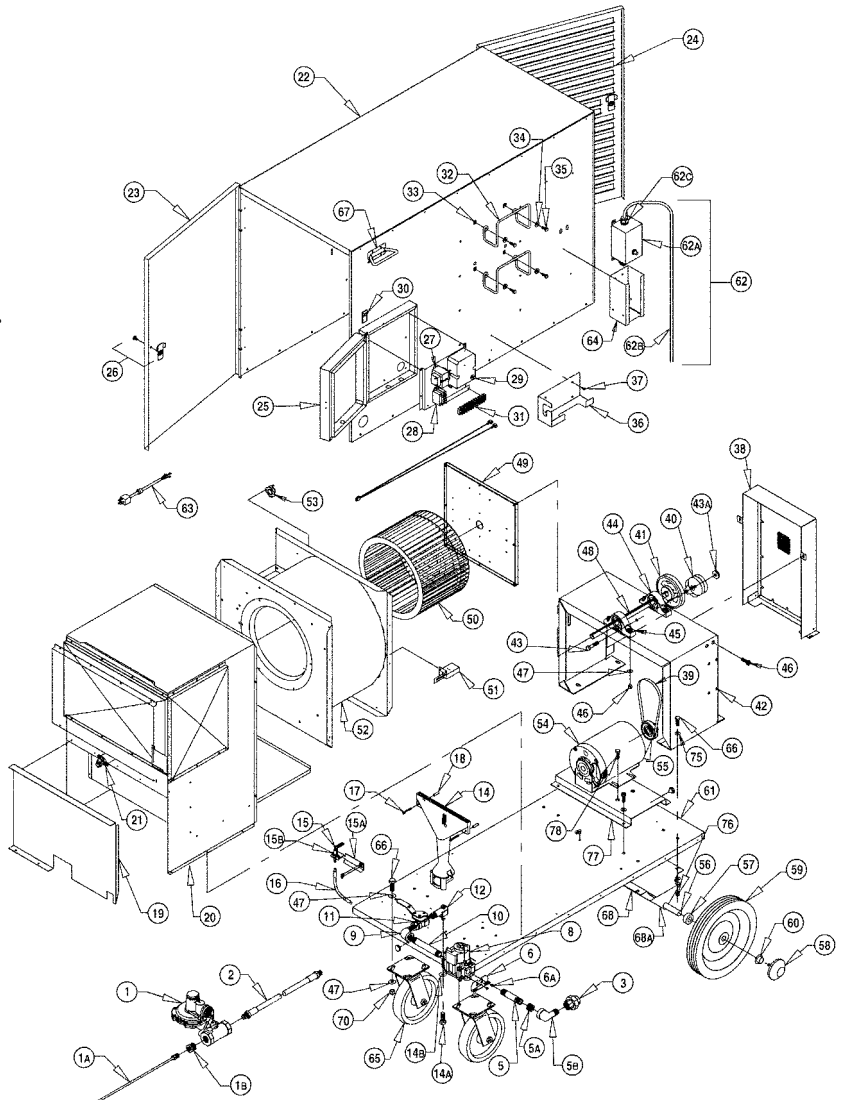
350,000 BTU Forced Air L.B. White Propane/Natural Gas Heater

Model Numbers

Premier 350 DF
TS350C

Key

No.	Description	Part Number
1	Regulator	25141
1A	Pigtail Connector Propane Gas	25774
1B	Bushing Propane Gas	25775
2	Hose, 3/4 ID x 15 Ft.	23078
3	Union	25272
5	Nipple, 1/2 x 4 In.	03128
5A	Bushing	08955
5b	Street Ell	25273
6	Bracket, Gas Control	21768
6A	Screws	09425
8	Valve, Gas Control	24025
9	Elbow, 1/2 NPT	01359
10	Nipple	02706
11	Gas Selector Valve	25826
12	Manifold with Burner Orifice	25828
14	Burner	23176
14A	Bolt, Burner	02692
14B	Washer	01589
15	Igniter	06479
15A	Bracket	22895
15B	Screws	07288
16	Lead, Ignition	24810
17	Screw, Burner Mounting	02688
18	Spacer, Burner	02687
19	Panel, Burner Access	24012
20	Chamber, Heat	22890
21	Switch, High Limit, Burner End, 325°	81108
22	Case Assembly	22877
23	Panel, Case Access, Burner	22881
24	Panel, Case Access, Motor	22880
25	Panel, Control Box Cover	22875
26	Latch	09199
27	Transformer	09615
28	Relay	08685
29	Control Ignition	25590
30	Switch, Selector w/ L.E.D.	22017
31	Terminal Strip	22905
32	Hose Hanger	08936
33	Cage Nut	07708
34	Washer, 1/4	03054
35	Bolt, 1/4 - 20 x 3/4	11254
36	Bracket, Regulator Storage	22917
37	Screws, Regulator Storage Bracket and Thermostat Storage Bracket	07288
38	Guard, Belt	24021
39	Belt	24031
40	Belt Tensioner	25135
41	Pulley, Fan	23037
42	Drive Platform	25277
43	Bolt, 3/8 - 16 x 1	23128
44	Bearing, Pillow Block	25132
45	Bolt, 3/8 - 16 x 1 1/4	03147
46	Nut, 3/8 - 16	05100
47	Washer, 3/8	01589
48	Shaft, 3/4 Dia. with 3/16 keyway	25133-A
49	Panel, Fan Access	22887
50	Fan	22868
50A	Key, 3/16 in., Fan & Motor Sheaves, & Fan Shaft (Not Illustrated)	22955
51	Switch, Air Proving	09925
52	Housing, Fan	22882
53	Switch, High Limit, Fan End, 190°F	25822
54	Motor	22908
55	Pulley, Motor	23038
56	Axle, Wheel	22951
57	Spacer	07905
58	Hub Cap	07187
59	Wheel	22914
60	Cap, Retaining	01095
61	Base	24013
62	Thermostat Kit w/ 20 Ft. Cord	24041
62A	Thermostat	09381
62B	Cord, Thermostat	20164
62C	Connector, Liquid Tight	08948
63	Cord, Power, 10 Ft.	22907
64	Bracket, Thermostat Storage	23186
65	Wheel, Caster	23130
66	Bolt, 5/16 - 18	03141
67	Handle, Case	08534
68	Bracket, Axle Mount	25274
68A	Bracket, Axle	23113
76	Nut, 5/16 - 18	01680
77	Motor Mount	25276
79	Wire Harness, LED	24685



L.B. White 350,000 BTU

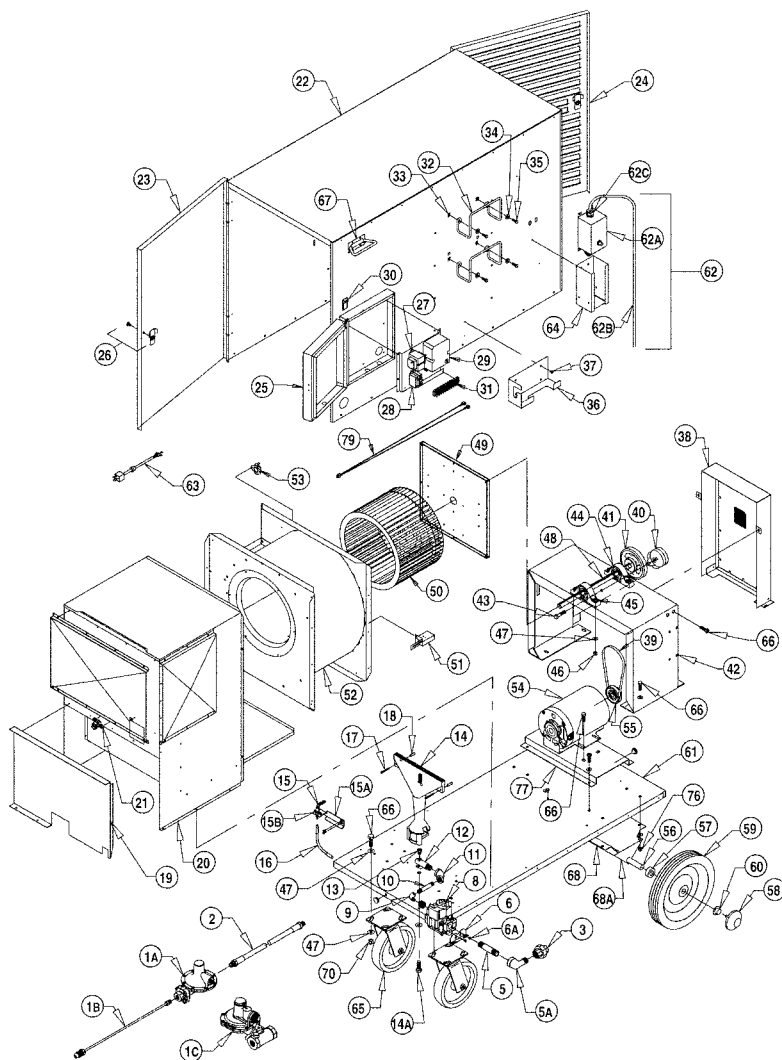
350,000 BTU Forced Air L.B. White Propane/Natural Gas

Model Numbers

Premier 350
TS350D

Key

No.	Description	Part Number
1A	Regulator Propane Gas	25767
1B	Pigtail Connector Propane Gas	25774
1C	Regulator Natural Gas	25108
2	Hose, 3/4 ID x 15 Ft.	23078
3	Union	25272
5	Nipple, 3/4 x 4 In.	22403
5A	Street Ell	25273
6	Bracket, Gas Control	21768
6A	Screws	09425
8	Valve, Gas Control Propane Gas	23153
	Natural Gas	23154
9	Ell	01359
10	Nipple	07148
11	Elbow, 1/2 NPT	01426
12	Manifold	09291
13	Orifice, Burrner Propane Gas	22898
	Natural Gas	22901
14	Burner	23176
14A	Bolt, Burner	02692
14B	Washer	01589
15	Igniter	06479
15A	Bracket	22895
15B	Screws	07288
16	Lead, Ignition	24810
17	Screw, Burner Mounting	02688
18	Spacer, Burner	02687
19	Panel, Burner Access	24012
20	Chamber, Heat	22890
21	Switch, High Limit, Burner End, 325°F	81108
22	Case Assembly	22877
23	Panel, Case Access, Burner	22881
24	Panel, Case Access, Motor	22880
25	Panel, Control Box Cover	22875
26	Latch	09199
27	Transformer	09615
28	Relay	08685
29	Control Ignition	25590
30	Switch, Selector w/ L.E.D.	22017
31	Terminal Strip	22905
32	Hose Hanger	08936
33	Cage Nut	07708
34	Washer, 1/4	03054
35	Bolt, 1/4 - 20 x 3/4	11254
36	Bracket, Regulator Storage	22917
37	Screws, Regulator Storage Bracket and Thermostat Storage Bracket	07288
38	Guard, Belt	24021
39	Belt	24031
40	Belt Tensioner	25135
41	Pulley, Fan	23037
42	Drive Platform	25277
43	Bolt, 3/8 - 16 x 1	23128
44	Bearing, Pillow Block	25132
45	Bolt, 3/8 - 16 x 1 1/4	03147
46	Nut, 3/8 - 16	05100
47	Washer, 3/8	01589
48	Shaft, 3/4 Dia. with 3/16 keyway	25133-A
49	Panel, Fan Access	22887
50	Fan	22868



50A	Key, 3/16 in., Fan & Motor Sheaves, & Fan Shaft (Not Illustrated)	22955
51	Switch, Air Proving	09925
52	Housing, Fan	22882
53	Switch, High Limit, Fan End, 190°F	25822
54	Motor	22908
55	Pulley, Motor	23038
56	Axle, Wheel	22951
57	Spacer	07905
58	Hub Cap	07187
59	Wheel	22914
60	Cap, Retaining	01095
61	Base	24013
62	Thermostat Kit w/ 20 Ft. Cord	22920
62A	Thermostat	09785
62B	Cord, Thermostat	20164
62C	Connector, Liquid Tight	08948
63	Cord, Power, 10 Ft.	22907
64	Bracket, Thermostat Storage	23186
65	Wheel, Caster	23130
66	Bolt, 5/16 - 18	03141
67	Handle, Case	08534
68	Bracket, Axle Mount	25274
68A	Bracket, Axle	23113
76	Nut, 5/16 - 18	01680
77	Motor Mount	25276
79	Wire Harness, LED	24685

L.B. White 350,000 BTU

L.B. White Quick Parts

L.B. White Construction Heater Quick Parts Reference (LP Gas Only)

Model#	Motor	Thermocouple/ Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan/Squirrel Cage	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Transformer	Other
286 286A	20290	NA	05547	02808	05550 Air Proving 05559 Flapper 07264 Limit (286A)	06479	06772	05560	20704 (10ft)	NA	05548 Manual Shut-Off Valve 05568 Thermostat With Bracket 07027 Wiring Harness
286B	20290	NA	05547	02808	05550 Air Proving 05559 Flapper 05566 Limit (350)	06479	06772	05560	20704 (10ft)	NA	05548 Manual Shut-Off Valve 05568 Thermostat With Bracket 07027 Wiring Harness
290 290A	20554	NA	05547	02684	07264 Limit (350) 02680 Air Proving 02441 Flapper	06479	09911	02691	20704 (10ft)	NA	05548 Manual Shut-Off Valve 05568 Thermostat With Bracket 09160 Wheel (Qty 2)
290B	20554	NA	05547	02684	05566 Limit (350) 02680 Air Proving 02441 Flapper	06479	09911	02691	20704 (10ft)	NA	05548 Manual Shut-Off Valve 05568 Thermostat With Bracket 07027 Wiring Harness
292A	03830	NA	05144 (Call)	03831	03933 Limit (275) 04605 Air Flow 03948 Flame Rod	03849	04655	05303	04784 (10ft)	06979	03834 On-Off Switch 05148 Wiring Harness 04724 Valve Cock Assy
292E	03830	NA	05309	21575	06739 Air Proving 06687 Backflash	07160	06772	05851	20704 (10ft)	NA	03834 On-Off Switch 07027 Wiring Harness
296 296A	03830	NA	03837	03831	03933 Limit (275) 04605 Air Flow 03948 Flame Rod	03849	03836	03860	03535 (10ft)	06979	03834 On-Off Switch
296B	03830	NA	05144 (Call)	03831	03933 Limit (275) 04605 Air Flow 03948 Flame Rod	03849	04655	03860	04784 (10ft)	06979	03834 On-Off Switch 05148 Wiring Harness
296D	03830	NA	05549	21575	05688 Flame Rod 07161 Sail Switch	05687	06772	05849	20704 (10ft)	NA	03834 On-Off Switch 05845 Valve Cock Assy 05854 Fuse, Thermal Assy
296E	03830	NA	05309	21575	06739 Air Proving 06687 Backflash	07160	06772	06685	20704 (10ft)	NA	03834 On-Off Switch 07027 Wiring Harness
301A	03830	NA	03986	03831	03933 Limit (275) 04605 Air Flow 03843 Flame Rod	03849	03836	03860	03535 (10ft)	06979	03834 On-Off Switch
304B	04785	NA	05867	04794	03933 Limit (275) 03326 Air Flow 03843 Flame Rod 09224 Tilt	03849	04791	04665	20704 (10ft)	06979	03834 On-Off Switch 04977 Valve Cock Assy 05829 Thermostat 05149 Wiring Harness
304D	04719	NA	08022	06697	06664 Backflash 07161 Sail 09224 Tilt	06873 Plug OR 20312 Electrode	08997	06571	20704 (10ft)	NA	03834 On-Off Switch 05829 Thermostat 04720 Capacitor 06871 Throttling Valve
324	07181	01090	NA	01227	02990 Solenoid AND 20356 Thermo Electric 7111NR Power Coil	NA	21788	01230 Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	NA	06537 Thermostat 01099 Wheel 20598 Manual Shut Off Valve
324E 324F	07181	01090	NA	01227	20356 Thermo Electric 7111NR Power Coil	NA	01106	01230 Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	NA	20598 Manual Shut Off Valve 01098 Hose Adapter 01099 Wheel
324G	07181	01020	NA	01227	02812 Solenoid AND 20356 Thermo Electric 7111NR Power Coil	NA	01106	01230 Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	NA	20598 Manual Shut Off Valve 01098 Hose Adapter 01099 Wheel
324H	07181	01090	NA	01227	07966 Thermo Electric 7111NR Power Coil	NA	01106	01230 Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	NA	20229 Manual Shut Off Valve 01098 Hose Adapter 01099 Wheel

L.B. White Construction Heater Quick Parts Reference (LP Gas Only)

Model#	Motor	Thermocouple/ D.S.I.	Ignition Control/ Auto Control	Valve: Safety/ Thermo Electric	Fan/Squirrel Cage	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Transformer	Other
326	07181	01020	NA	02990 Solenoid AND 20356 Thermo Electric 7111NR Power Coil	01227	NA	NA	21788	01230 Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	NA	06537 Thermostat 20598 Manual Shut Off Valve
326H	07181	01020	NA	02812 Solenoid AND 20356 Thermo Electric 7111NR Power Coil	01227	NA	NA	01106	01230 Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	NA	06537 Thermostat 01098 Hose Adapter 01099 Wheel
326J	07181	01020	NA	02990 Solenoid AND 07966 Thermo Electric 7111NR Power Coil	01227	NA	NA	01106	01230 Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	NA	07339 Thermostat 01098 Hose Adapter 01099 Wheel
328	07181	01090	NA	02990 Solenoid AND 20356 Thermo Electric 7111NR Power Coil	01227	NA	NA	21788	01230 Pilot 03415 Burner	01229 (10ft) 2525LH (25ft)	NA	06537 Thermostat 20598 Manual Shut Off 01098 Hose Adapter
328F	07181	01090	NA	02990 Solenoid AND 20356 Thermo Electric 7111NR Power Coil	01227	NA	NA	01106	01230 Pilot 03415 Burner	01229 (10ft) 2525LH (25ft)	NA	06537 Thermostat 20598 Manual Shut Off Valve 01099 Wheel
330 330G	07181	01020	NA	02990 Solenoid AND 20356 Thermo Electric 7111NR Power Coil	01227	NA	NA	21788	01230 Pilot 03415 Burner	01229 (10ft) 2525LH (25ft)	NA	06537 Thermostat 01098 Hose Adapter 01099 Wheel
334 334G	07181	01020	NA	20356 Thermo Electric 7111NR Power Coil	01342	NA	NA	21788	01230 Pilot 03416 Burner	01229 (10ft) 2525LH (25ft)	NA	01098 Hose Adapter 20229 Manual Shut Off Valve 01099 Wheel (Qty 2)
334H	07181	01020	NA	20356 Thermo Electric 7111NR Power Coil	01342	NA	NA	21788	01230 Pilot 03416 Burner	01229 (10ft) 2525LH (25ft)	NA	01098 Hose Adapter 20229 Manual Shut Off Valve 01099 Wheel (Qty 2)
343G	20290	03497	NA	02309	02808	05566 Limit (350)	NA	01225	02689 Pilot 03411 Burner	01229 (10ft) 2525LH (25ft)	NA	05568 Thermostat 05548 Manual Shut Off Valve
346A	01174	01036	NA	01196	02808	02662 Limit	NA	01225	02729 Pilot 02805 Burner	01229 (10ft) 2525LH (25ft)	NA	01208 Thermostat
346E 346F	20290	03497	NA	02309	02808	05566 Limit (350)	NA	06772	02729 Pilot 03418 Burner	20543 (10ft)	NA	05548 Manual Shut Off Valve 05567 High Limit Switch Cover 00815 Sediment Trap
346G 346H 346J	20290	03497	NA	02309	02808	05566 Limit (350)	NA	01225	02689 Pilot 03418 Burner	01229 (10ft) 2525LH (25ft)	NA	05568 Thermostat 05548 Manual Shut Off Valve
346K	20290	03497	NA	86302	02808	05566 Limit (350)	NA	06772	02729 Pilot 03418 Burner	20543 (10ft)	NA	05548 Manual Shut Off Valve 05567 High Limit Switch Cover 00815 Sediment Trap
350	01174	01036	NA	02309	01190	02662 Limit	NA	06772	02689 Pilot 01296 Burner	5010 (10ft) 5025 (25ft)	NA	3850FTG Hose to Regulator Fitting 01208 Thermostat 01420 Manual Shut Off Valve
377J 377J-3 377J-4	20554	03497	NA	02309	03531	05566 Limit (350) 02680 Sail Switch	NA	06772	02689 Pilot 03518 Burner	20704 (10ft)	NA	06537 Thermostat 05548 Manual Shut Off Valve 03535 Hose to Regulator Fitting
408J 408J-3 408J-4	20554	01090	NA	02309	02684	05566 Limit (350) 02680 Sail Switch	NA	09911	02689 Pilot 02691 Burner	20704 (10ft)	NA	06537 Thermostat 05548 Manual Shut Off Valve
CP100	21830	21811	NA	21808	21829	21855	21803	21856	21802	21841	21813	
CP100A CP100B	03830	NA	08810 (24Volt)	22039	21575	06739 Air Proving 06687 Back Flash	07160	06772	05851	20704 (10ft)	08260	08240 On-Off Switch 08811 L.E.D. With Leads 03536 Hose to Regulator Fitting
CP100BSP	03830	NA	08810 (24Volt)	22039	21575	07161 Sail Switch 06687 Back Flash	07160	06772	05851	20704 (10ft)	08260	08240 On-Off Switch 08811 L.E.D. With Leads 03536 Hose to Regulator Adapter

L.B. White Construction Heater Quick Parts Reference (LP Gas Only)

Model#	Motor	Thermocouple/ D.S.I.	Ignition Control/ Valve-Safety/ Auto Control	Fan/Squirrel Cage	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Transformer	Other
CP100C	21830	21811	NA	21829	21855 Back Flash	21803	21856	21802	21841 (10ft)	21813 Spark Igniter	21816 Relay with Clips 21806 Heat Adjustment Valve 06654 Hose Adapter
CP155A CP155B	03830	NA	08810 (24Volt)	21575	06739 Air Proving 06687 Back Flash	07160	06772	06685	20704 (10ft)	08260	08240 On-Off Switch 08811 L.E.D. With Leads 03536 Hose to Regulator Adapter
CP155BSP	03830	NA	08810 (24Volt)	21575	07161 Sall Switch 06687 Back Flash	07160	06772	06685	20704 (10ft)	08260	08240 On-Off Switch 08811 L.E.D. With Leads 03536 Hose to Regulator Adapter
CP155C	03830	NA	22301 (24 Volt)	21575	06687 Back Flash 06739 Air Proving	07160	06772	06685	21841 (10ft)	06979	22213 Thermostat 03834 On-Off Switch
CP155C (Diagnostic)	03830	NA	07637 (120 Volt)	21575	06687 Back Flash 06739 Air Proving	07160	06772	06685	21841 (10ft)	NA	07027 Wire Harness 03834 On-Off Switch 22213 Thermostat
CP155D	03830	NA	22301 (24 Volt)	09347	06687 Back Flash 06739 Air Proving	07160	06772	06685	21841 (10ft)	06979	22209 L.E.D. Lens 05549 Manual Valve 22213 Thermostat
Tradesman 155	03830	NA	24640	21575	06687	08834	21856	06685	21841	NA	
CP380A CP380B	04719	NA	08810 (24Volt)	06697	06664 Back Flash 06739 Air Proving	20312	08997	20410	20719 (10ft)	08958	04720 Capacitor 08811 L.E.D. With Leads 08240 On/Off Switch
CP380BSP	04719	NA	08810 (24Volt)	06697	06664 Back Flash 07161 Air Flow 20076 Till Switch	07160 Plug OR 20312 Electrode	08997	06751	20704 (10ft)	08958	06871 Throttle Valve 04720 Capacitor 08811 L.E.D. With Leads
CP400A	04719	NA	098884-01	06697	06739 Air Proving 06664 Back Flash	20312	08997	20410	20704 (10ft)	NA	04720 Capacitor 06871 Throttle Valve 05829 Thermostat
CP400B	04719	NA	07637	22302	22526 Air Proving 22294 Back Flash	20312	22315	20410	21841 (10ft)	NA	06971 Throttle Valve 04720 Capacitor 03834 On/Off Switch
CP400B (Diagnostic)	04719	NA	22301 (24 Volt)	22302	22526 Air Proving 22294 Back Flash	20312	22315	20410	21841 (10ft)	06979	22213 Thermostat 04720 Capacitor 22299 L.E.D.
CP400D	04719	NA	24640	22302	24691	20312	22315	20410	22128	NA	
CP400T	04719	NA	07637	06697	06739 Sall 20411 Back Flash	20312	08997	20410	20704 (10ft)	NA	03834 On/Off Switch 05829 Thermostat 04720 Capacitor
CP400T (Diagnostic)	04719	NA	08810 (24Volt)	06697	06739 Sall 20411 Back Flash	20312	08997	20410	20704 (10ft)	08958	05829 Thermostat 04720 Capacitor 08811 L.E.D.
CS060	20290	03497	NA	02808	05566 Limit (350)	NA	06772	02689 Pilot 03418 Burner	01517 (10ft)	NA	05548 Manual Valve 06537 Thermostat
CS080C CS080D	08920	NA	08810 (24Volt)	03531	03833 Limit (275) 09821 Limit (250) 09821 Limit (250)	06479	08990	09753	20704 (10ft)	08922	09454 Thermostat
CS080E	08920	NA	08810 (24Volt)	03531	03833 Limit (275) 09821 Limit (250) 21186 Air Proving	06479	08990	09753	20704 (10ft)	08922	09454 Thermostat
CS170	25839	NA	25865	25849	25869	25841	26423	25870	24600	NA	
CS170D CS170E	20169	NA	08810 (24Volt)	09050	03833 Limit (275) 09784 Limit (190) 09925 Air Proving	06479	09911	09786	20704 (10ft)	08922	09160 Wheel (Qty 2) 06421 Axle 09454 Thermostat
CS170DF	25839	NA	25865	25849	25869 25846	25841	26423	25870	24600	NA	

L.B. White Construction Heater Quick Parts Reference (LP Gas Only)

Model#	Motor	Thermocouple/ Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan/Squirrel Cage	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Transformer	Other
CT080A CT080B	08920	NA	22039	03531	03933 Limit (275)	06479	08990	08918	20704 (10ft)	08922	09454 Thermostat 08872 L.E.D. With Leads
CT170A CT170B	22112	NA	22039	09050	03933 Limit (275)	06479	09911	09130	20704 (10ft)	08922	09160 Wheel (Qty 2) 09454 Thermostat 08872 L.E.D. With Leads
TS080C TS080D	08920	NA	22076	03531	03933 Limit (275) 09821 Limit (250)	06479	08990	09753	20243 (10ft)	08922	09454 Thermostat 09915 Heat/Vent Toggle Switch 08811 L.E.D. With Leads
TS080E	20292	NA	22076	03531	03933 Limit (275) 09784 Limit (190) 21186 Air Proving	06479	08990	09753	20243 (10ft)	08922	09454 Thermostat 22017 Heat/Vent Rocker Switch 08811 L.E.D With Leads
TS170C	20169	NA	22076	09050	03933 Limit (275) 09784 Limit (190) 09925 Air Proving	06479	09911	09786	20704 (10ft)	08922	09160 Wheel (Qty 2) 09915 Heat/Vent Toggle 09454 Thermostat
TS170D	20169	NA	22076	09050	03933 Limit (275) 09784 Limit (190) 09925 Air Proving	06479	09911	09786	20704 (10ft)	08922	22017 Rocker Switch (with L.E.D.) 09454 Thermostat 09160 Wheel (Qty 2)
TS350	22908	NA	22897	22868	81108 Limit (325) 09784 Limit (190) 22946 Air Proving	06479	22919	22898	23079 (10ft) 23078 (15ft)	09615	08685 Relay 22017 Rocker Switch (with L.E.D.) 22914 Wheel (Qty 2) 23130 Caster (Qty 2) 23129 Bell 22920 Thermostat
TS350C	22908	NA	24025	22868	81108 25822	06479	25141	25828	23078	NA	
TS350D	22908	NA	23153	22868	81108 25822	06479	25767	22898	23078	NA	
Tradesman400 Ultra	04719	NA	24644	22302	24691	20312	22315	20410	22128	NA	

L.B. White Premier Heater Series Quick Parts Reference

Model#	Motor	Thermocouple/ Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan/Squirrel Cage	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Transformer	Other
PREMIER 80	20292	NA	22076	570304	03933 571671	25841	26377	571625	24600	NA	
PREMIER 170	25834	NA	22076	25849	25869 25846	25841	26419	21573	24600	NA	
PREMIER 350DF	22908	NA	24025	22868	81108 25822	06479	25141	25828	23078	NA	
PREMIER 350 US	22908	NA	23153	22868	81108 25822	06479	25767	22898	23078	NA	

L.B. White Quick Parts

L.B. White Quick Parts Reference (Natural Gas)

Model#	Motor	Thermocouple/ D.S.I.	Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan/Squirrel Cage	Safety Switches	Igntier/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Transformer	Other
298E	03830	NA	098884-01	05309	21575	06739 Air Flow, 06687 Back Flash	07160	06713	06686	20704	NA	03834 On-Off Switch 07028 Wiring Harness
303A	04785 (With Capacitor)	NA	6183NR (Call)	05335	05336	03933 Limit 03246 Air Flow 03813 Flame Rod 04803 Tip Switch	03849	04799	05323	NA	06979	0934 On-Off Switch 05689 Thermostat 04805 Thermostat Knob
336 336F 336G	07181	03066	NA	20356 Thermo Electric 7111NR Power Coil	01342	NA	NA	01104	01520 Pilot 01081 Burner	20704	NA	09698 Manual Control Valve 01099 Wheel (Qty 2)
345G	20290	03497	NA	02309	02808	05566 Limit	NA	01326	02740 Pilot 03412 Burner	05301	NA	05568 Thermostat 05548 Manual Shut-Off Valve
348A	01174	01036	NA	01196	02808	02662 Limit	NA	01326	02740 Pilot 01514 Burner	20704	NA	01208 Thermostat 02741 Pilot Mixer
348F 348J	20290	03497	NA	02309	02808	05566 Limit	NA	01326	02740 Pilot 01297 Burner	20504	NA	05548 Manual Shut-Off Valve 05568 Thermostat 05567 High Limit Switch Cover
348G 348H 348J	20290	03497	NA	02309	02808	05566 Limit	NA	01326	02740 Pilot 01297 Burner	05301	NA	05568 Thermostat 05548 Manual Shut-Off Valve 05567 High Limit Switch Cover
348K	20290	03497	NA	86302	02808	05566 Limit	NA	01326	02740 Pilot 01297 Burner	05301	NA	05548 Manual Shut-Off Valve 05568 Thermostat 05567 High Limit Switch Cover
352	01174	01036	NA	02309	01190	02326 Limit	NA	01326	02740 Pilot 01297 Burner	NA	NA	01208 Thermostat 01420 Valve Cock 02741 Pilot Mixer
379J 379J-3 379J-4	20554	03497	NA	02309	03531	05566 Limit 02680 Sail Switch	NA	02736	02740 Pilot 03519 Burner	20704	NA	05548 Manual Shut-Off Valve 06537 Thermostat
410J 410J-3 410J-4	02683	01090	NA	02309	02684	05566 Limit 02680 Sail Switch	NA	02736	06978 Pilot 02735 Burner	20704	NA	05548 Manual Shut-Off Valve 06537 Thermostat
CP155BSN	03830	NA	08810	06623	21575	06687 Back Flash 05689 Sail Switch	07160	06713	06683	20704	08260	08240 On-Off Switch 08810 L.E.D. With Leads
CP155C	03830	NA	22301 (24 Volt)	22400 (24 Volt)	21575	06687 Back Flash 06739 Air Proving	07160	06713	06686	20504	06979	05548 Manual Shut-Off Valve 2213 Thermostat 03834 On-Off Switch
CP155C (Diagnostic)	03830	NA	07637 (120 Volt)	05144 (120 Volt)	21575	06687 Back Flash 06739 Air Proving	07160	06713	06686	20504	NA	05548 Manual Shut-Off Valve 2213 Thermostat 03834 On-Off Switch
CP155D (NG)	03830	N/A	24640	24642	21575	06687	08834	06713	06686	20504	N/A	
CS060	20290	03497	NA	02309	02808	05566 Limit	NA	01326	02740 Pilot 01297 Burner	20704	NA	06537 Thermostat 05548 Manual Shut-Off Valve
CS080C CS080D	08920	NA	08810	09368	03531	03933 Limit (275) 09821 Limit (250)	06479	21999	09754	20531	08922	22299 L.E.D. Lens 05548 Manual Shut-Off Valve 08240 On-Off Switch
CS080E	20292	NA	08810	09368	03531	03933 Limit 21186 Air Proving	06479	21999	09754	20531	08922	09454 Thermostat
Premier 80 NG	20292	N/A	25865	22078	570304	03933 571671	25841	21999	571626	24600	N/A	
Premier 170 NG	25834	N/A	25865	22078	25849	25849 25846	25841	09795	9787	24600	N/A	
Premier 350 US NG	22908	NA	25590	23154	22868	81108 25822	06479	25108	22901	23078	NA	
TS350D NG	22908	NA	25590	23154	22868	81108 25822	06479	25108	22901	23078	NA	

L.B. White Quick Parts Reference LP & Natural Gas (Convection)

Model#	Thermocouple	T.E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
320	01090	7111NR Power Coil 20356	NA	06228	01230_Pilot 01329 Burner	01229 (10ft) 2525LH (25ft)	20598 Manual Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
320B	01090	7111NR Power Coil 07966	NA	21788	01230_Pilot 22353 Burner	01229 (10ft) 2525LH (25ft)	20229 Burner Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
322	01090	7111NR Power Coil 20356	NA	21788	01230_Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	20598 Burner Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
322F	01090	7111NR Power Coil 20356	NA	01106	01230_Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	20598 Burner Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
322G	01090	7111NR Power Coil 07966	NA	01106	01230_Pilot 01591 Burner	01229 (10ft) 2525LH (25ft)	20229 Burner Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
340	03497	7111NR Power Coil 07966	NA	07960	01230_Pilot 07942 Burner	01229 (10ft) 2525LH (25ft)	07969 Burner Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
340A	03497	7111NR Power Coil 07966	06434 Piezo 07975 Electrode	07960	01230_Pilot 07942 Burner	01223 (10ft) 2525LH (25ft)	07969 Burner Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
340A	03497	7111NR Power Coil 07966	20280 Piezo 07975 Electrode	21722	01230_Pilot 07942 Burner	20703 (10ft)	07969 Burner Shut-Off Valve 01098 Hose Adapter G1629 P.O.L. Fitting
341	01090	7111NR Power Coil 20356	NA	21788	01230_Pilot 01329 Burner	01229 (10ft) 2525LH (25ft)	20598 Manual Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
341G	01090	7111NR Power Coil 20356	NA	01106	01230_Pilot 01329 Burner	01229 (10ft) 2525LH (25ft)	20598 Manual Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
341H 342G	01090	7111NR Power Coil 20356	NA	21788	01230_Pilot 01329 Burner	01229 (10ft) 2525LH (25ft)	20598 Manual Shut-Off Valve 01098 Hose Adapter 01722 Pilot Screen
380 380J	03497	01540	NA	06772	02689_Pilot 06237 Burner	20704 (10ft)	03536 Hose Adapter
CV100	03555	7111NR Power Coil 07966	20280 Piezo 20184 Electrode	21722	20213_Pilot 20187 Burner	20496 (10ft)	20229 Burner Shut-Off Valve 01098 Hose Adapter 20391 Inlet Screen
CV100B	03555	22250	20184	25031	22260 22252	NA	
CV200	03497	7111NR Power Coil 07966	20280 Piezo 07975 Electrode	21722	01230_Pilot 07942 Burner	20703 (10ft)	07969 Burner Shut-Off Valve 01098 Hose Adapter 01722 Inlet Screen
CV225	03555	7111NR Power Coil 07966	20280 Piezo 20184 Electrode	23463	01230_Pilot 23392 Burner	23731 (10ft)	20229 Burner Shut-Off Valve 08435 Hose Adapter
CV225B	23728	07966	20184	23463	01230 23392	23731	
CV250	03555	7111NR Power Coil 07966	20280 Piezo 20184 Electrode	21722	20212_Pilot 20189 Burner	20496 (10ft)	20229 Burner Shut-Off Valve 01098 Hose Adapter
Norseman 250	01090	07966	NA	21788	01230 01329	20242	
Workman 100N Plus (NG)	03555	22250	20184	25031	22260 22252	NA	
Workman 225 Plus	23728	07966	20184	23463	01230 23392	23731	

Desa Gas Fired Heaters

You will need (1) 100 l.b.. Cylinder for every 100,000 BTU's your heater produces.

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. Use a breakdown only if you have the exact model match for your particular heater. If your model number does not appear in the breakdowns, please refer to the Quick Parts Reference Guide for common replacement parts.

If you need technical assistance, feel free to call **1-800-362-6951** or e-mail us at techservice@phpdistribution.com. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service.

Desa Name Brands Include:

Amoco
Cenex
Co-op
Dart
Dayton
Desa
Handy Master
Homelite
John Deere
Knipco
Koehring
Master
Queen Bee
Reddy
Remington
Sears
TSC

HEATER INDEX

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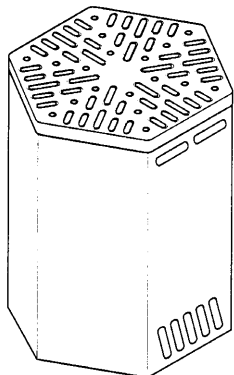
15-25,000 BTU Convection Desa Propane Heater

Desa LP 25,000 BTU

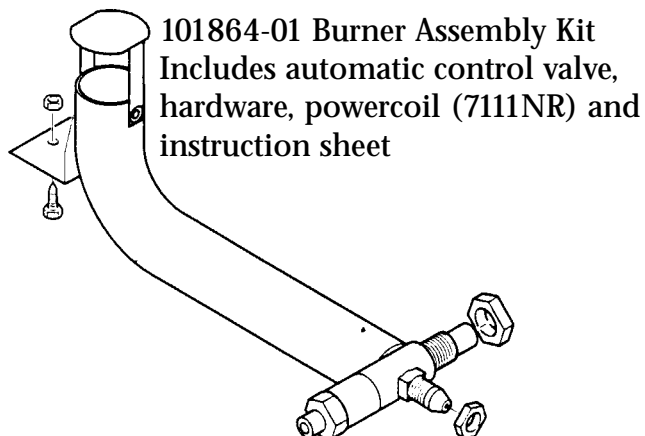
Model Numbers

Reddy
RCP25

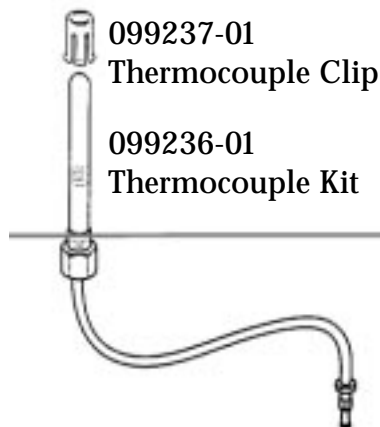
Master
TC25



101880-01 Shell Assembly



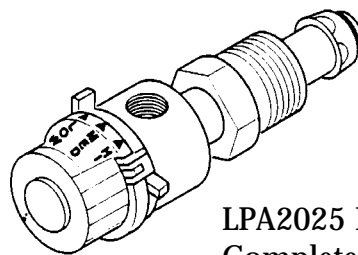
101864-01 Burner Assembly Kit
Includes automatic control valve,
hardware, powercoil (7111NR) and
instruction sheet



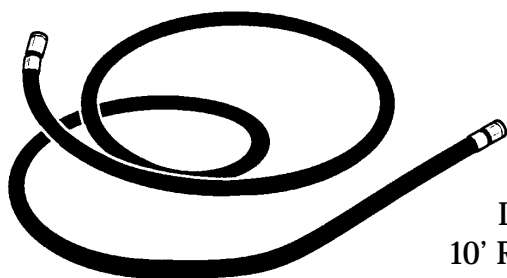
099237-01
Thermocouple Clip

099236-01
Thermocouple Kit

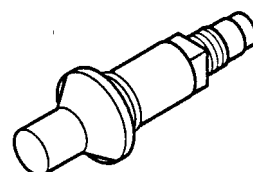
Note: Screws are
standard hardware
items



LPA2025 Regulator
Complete with regulator
and fuel gas connector



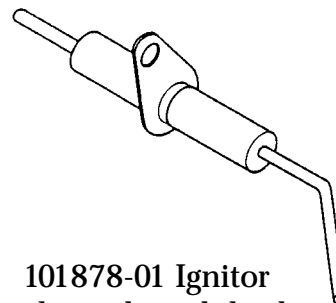
LPA1025
10' Rubber hose
w/ Brass Fitting



102445-01 Piezo Ignitor
Includes nut



LPA3025
Regulator/Fuel Gas
Connector/Hose Assembly

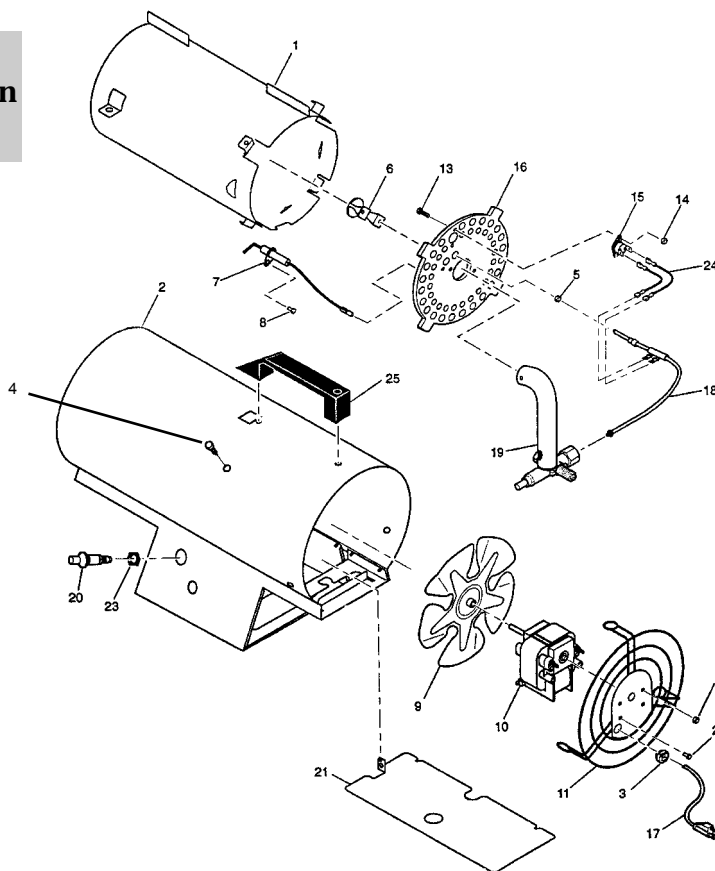


101878-01 Ignitor
electrode with lead

30,000 BTU Forced Air Desa Propane Heater

Model Numbers

Reddy	Master	Remington
RLP30	BLP30	REM30LP



Key No.	Part Number	Description
1	104154-01	Combustion Chamber
2	104152-01	Unichassis
3	M11143-1	Bushing, Strain Relief
4	M11084-27	Screw (qty. 5)
5	099237-01	Thermocouple Clip (qty. 1)
6	103894-01	Target Bracket Kit
7	104162-01	Electrode Ignitor with lead
8	M11084-38	Hex Tap Screw, #8-18 x 3/8"
9	101478-02	Fan
10	104156-01	Motor Assembly
11	103863-01	Fan Guard
12	097384-02	Captive Washer Nut (qty. 2)
13	097968-05	Hex Screw, #4-40 x 1/2" (qty. 2)
14	NPC-00C	Hex Nut, #4-40 (qty. 2)
15	101732-05	Thermal Switch Kit
16	103895-01	Rear Head Kit
17	098219-17	Cord, Power Supply
18	104146-01	Thermocouple
19	104144-01	Valve/Orifice/Burner Tube Assembly
20	102445-01	Piezo Ignitor
21	104153-01	Filler Panel
22	M12461-14	Hex Screw, 8-32 x 3/8 (qty. 4)
23	102334-01	Piezo Ignitor Hex Nut
24	101480-12	Wire Assembly (qty. 2)
25	104786-01	Handle Assembly

PARTS AVAILABLE - NOT SHOWN

097647-09	Tradename Decal (BLP30) (qty. 2)
097941-26	Tradename Decal (RLP30) (qty. 2)
099596-15	Tradename Decal (REM30LP) (qty. 2)
104161-01	General Info Decal
104160-01	Operation Decal

ACCESSORIES

1591NR	Regulator & Hose Assembly
LPA1020	10' Hose
LPA2170	Regulator
6252NR	POL Connector
2525	25' Hose
G1851	Acme (new style) Tank Connector
TFI	Tank Stabilizer
C20	20 lb. Propane Cylinder
C40	40 lb. Propane Cylinder
7111NR	Control Valve Powercoil

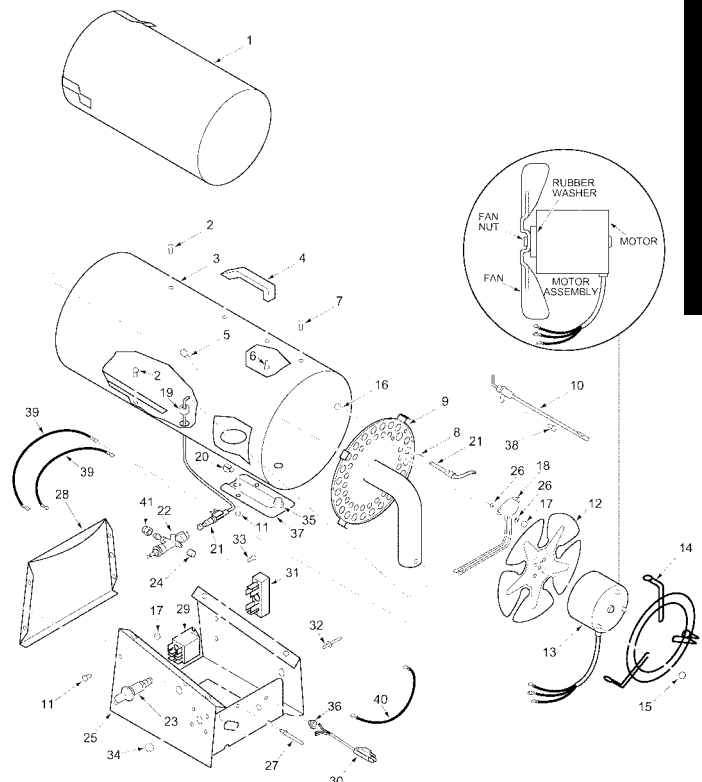
35/50,000 BTU Forced Air Desa Propane Heaters

Desa LP 35-50,000 BTU

Model Numbers

Reddy	Master	Remington
RLP35	BLP35	REM35LP
RLP50	BLP50	REM50LP
Desa	Vanguard	
C35LP	VLP35	
C50LP	VLP50	

Key No.	Part Number	Description
1	099568-01	Inner Shell (Combustion Chamber)
2	M11084-26	Hex Tap Screw, #10-16 x 3/8" (qty. 7)
		Outer Shell
3	099599-01AC	REM35LP - Black
	099599-01AB	BLP35 - Yellow
	099599-01AC	RLP35 - White
	099599-01AD	RLP35,VLP35 - Green
	099599-01AC	HM35LP
	099599-01BJ	C35LP
	099599-02AA	REM50LP - Black
	099599-02AB	BLP50LP - Master
	099599-02AC	RLP50 - White
	099599-02AD	VLP50 - Green
	099599-02BJ	C50LP - Green
4	M51104-01	Handle
5	099230-01	Hex Tap Shoulder Screw (qty. 4)
6	M11084-29	Hex Tap Screw, #10-16 x 3/4" (qty. 2)
7	M11084-3	Hex Tap Screw, #12-14 x 1/2" (qty. 3)
8	099237-01	Thermocouple Clip
9	099727-01	Burner Assembly
10	099539-01	Electrode Ignitor w/lead (All 35,000 BTU units)
	100588-01	Electrode Ignitor w/lead (All 50,000 BTU units)
11	M11084-38	Hex Tap Screw, #8-18 x 3/8" (qty. 8)
12	099537-01	Fan (All 35,000 BTU models)
	099537-03	Fan (All 50,000 BTU models)
		Motor Assembly (Includes Rubber Washer & Fan Nut)
13	099521-01	All 35,000 BTU Models
	100589-01	All 50,000 BTU Models
14	099540-01	Fan Guard
15	097384-02	Captive Washer Nut (qty. 3)
16	097968-05	Hex Screw, #4-40 x 1/4" (qty. 2)
17	NPC-00C	Hex Nut, #4-40 (qty. 2)
18	101732-02	Thermal Switch Assembly (All 35,000 BTU Models)
	097952-09	Thermal Switch Assembly (All 50,000 BTU Models)
19	097776-01	Universal Bushing
20	099542-01	Wire Clip
21	099538-01	Thermocouple
22	099728-01	Valve/Orifice Assembly (All 35,000 BTU Models)
	100591-01	Valve/Orifice Assembly (All 50,000 BTU Models)
23	097159-01	Piezo Ignitor
24	078978-03	Sleeve Cap
25	099598-01AA	Base
26	100397-01	Lock Washer #4 (qty. 4)
27	099202-02	Steel Rivet 1/8"
28	100594-01AA	Painted Cover (50,000 BTU Models Only)
29	100184-02	Relay (50,000 BTU Models Only)
30	098219-25	Power Supply Cord Assembly (50,000 BTU Models Only)
31	099125-01	Terminal Board (50,000 BTU Models Only)
32	099157-01	Rivet (50,000 BTU Models Only)



33	097968-01	Hex Screw (qty. 2) (50,000 BTU Models Only)
34	098835-01	Hex Nut (50,000 BTU Models Only)
35	M50104-01	Shorty Bushing (50,000 BTU Models Only)
36	M11143-1	Strain Relief Bushing (50,000 BTU Models Only)
		Wire Guard (BLP50) (50,000 BTU Models Only)
37	100596-01AB	Wire Guard (RLP50) (50,000 BTU Models Only)
	100596-01AC	Wire Guard (REM50LP) (50,000 BTU Models Only)
	100596-01AA	Wire Guard (REM50LP) (50,000 BTU Models Only)
38	M11084-37	Hex Screw (50,000 BTU Models Only)
39	079010-14	Wire Assembly, Red 9 (qty. 2)
40	079010-21	Wire Assembly, White
41	099460-01	Hex Cap, 1/8-27 NPTF

ACCESSORIES

LPA3090	Regulator & Hose Assembly (All 35,000 Units)
LPA1020	10' Hose (All Models)
7111NR	Control Valve Power Coil
LPA2110	Regulator (All 35,000 BTU Models)
LPA2140	Regulator (All 50,000 BTU Models)
G1690	POL Connector
TFI	Tank Stabilizer
2525	25 Foot Hose (All Models)
G1851	Acme (new style) POL Connector
LPA3055	Regulator & Hose Assy (All 50,000 Models)

PARTS AVAILABLE - NOT SHOWN

097647-02	Tradename Decal (BLP50) Master (qty. 2)
097941-05	Tradename Decal (RLP50) Reddy (qty. 2)
079718-05	Tradename Decal (VLP50) Vanguard (qty. 2)
099596-02	Tradename Decal (REM50LP -left) Remington
099596-01	Tradename Decal (REM50LP -right) Remington
079871-02	Tradename Decal (C50LP) Desa (qty. 2)
079663-01	LP Warning Decal
099672-01	Notice Decal

50,000 BTU Forced Air Desa Propane Heater

Model Numbers

Reddy	Master	Remington
RLP50V	BLP50V	REM50PV

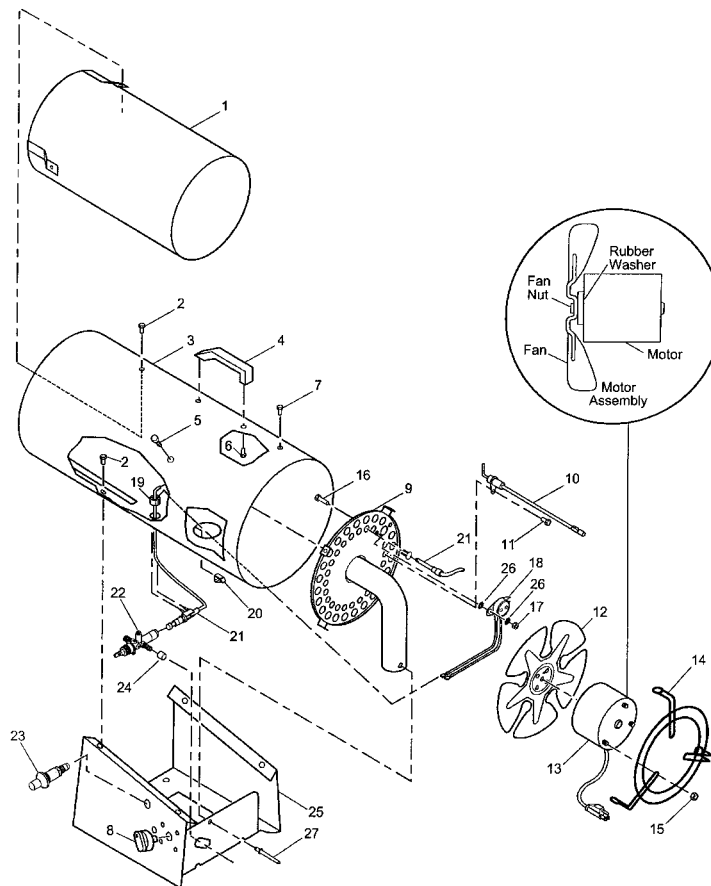
Key No.	Part Number	Description
1	099568-01	Inner Shell (Combustion Chamber)
2	M11084-26	Hex Tap Screw, #10-16 x 3/8" (qty. 7)
3	Outer Shell	
	099599-01AB	Outer Shell (BLP50V)
	099599-01AA	Outer Shell (REM50PV)
	099599-01AC	Outer Shell (RLP50V)
4	M51104-01	Handle
5	099230-01	Hex Tap Shoulder Screw (qty. 4)
6	M11084-29	Hex Tap Screw, #10-16 x 3/4" (qty. 2)
7	M11084-27	Hex Tap Screw, #12-14 x 1/2" (qty. 3)
8	099393-03	Knob, Control
9	103931-01	Burner Assembly
10	099539-01	Electrode Ignitor with lead
11	M11084-38	Hex tap Screw, #8-18 x 3/8"
12	099537-03	Fan
13	103864-01	Motor Assy (Includes Rubber Washer & Fan Nut)
14	099540-01	Fan Guard
15	097384-02	Captive Washer Nut (qty. 3)
16	097968-05	Hex Screw, #4-40 x 1/2" (qty. 2)
17	NPC-00C	Hex Nut, #4-40 (qty. 2)
18	101481-05	Thermal Switch Kit
19	097776-01	Universal Bushing
20	099542-01	Wire Clip
21	103919-01	Thermocouple Kit
22	103921-01	Valve/Orifice Assembly
23	102445-01	Piezo Ignitor with nut
24	078978-03	Sleeve Cap
25	103922-01	Base Assembly
26	100397-01	Lock Washer #4 (qty. 4)
27	099202-02	Steel Rivet, 1/8"

PARTS AVAILABLE - NOT SHOWN

097941-18	Tradename Decal (RLP50V) (qty. 2)
097647-07	Tradename Decal (BLP50V) (qty. 2)
099596-11	Tradename Decal (REM50PV)
099596-12	Tradename Decal (REM50PV)
103867-01	General Information Decal
103869-01	Operation Decal
079663-01	LP Warning Decal
099672-01	Notice Decal

ACCESSORIES

LPA3055	Regulator & Hose Assembly
LPA1020	10' Hose
LPA2140	Regulator
LPA4020	Fuel Gas Connector
2525	25 Foot Hose (All Models)
G1851	Acme (new style) Tank Connector
C20	20 lb. Propane Cylinder
C40	40 lb. Propane Cylinder
TF1	Propane Tank Stabilizer



SPECIFICATIONS

Output Rating	30-50,000 BTU/Hr	Hot Air Output	275 CFM
Fuel	Propane Vapor	Motor	3300 RPM
Fuel Consumption	2.19 GPH	Amperage	2
Supply Pressure to Regulator		Ignition	Ripple
Min. (for input adjustment)	10 PSI		
Max.	200 PSI		

50,000 BTU Forced Air Desa Propane Heater

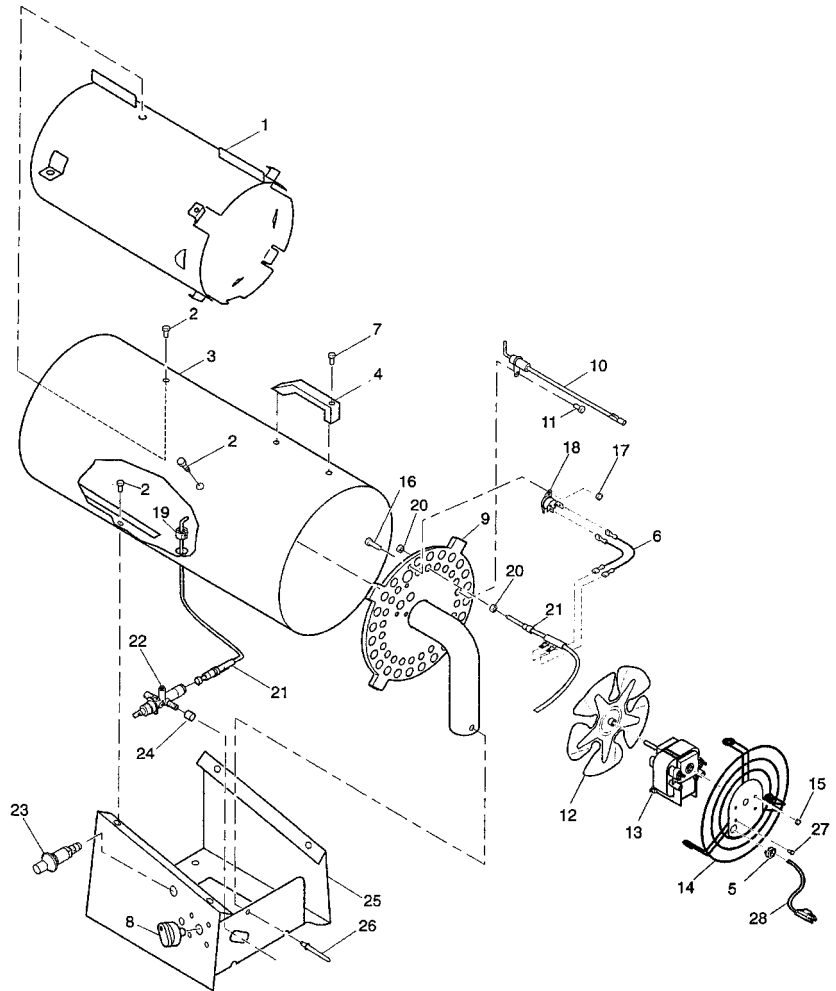
Desa LP 50,000 BTU

Model Numbers

Reddy
RLP50VA

Master
BLP50VA

Remington
REM50PVA



Key No.	Part Number	Description
1	104154-01	Combustion Chamber
2	M11084-26	Hex Tap Screw, #10-16 x 3/8" (qty. 7)
3	Outer Shell	
	105333-03AB	Outer Shell (BLP50VA)
	105333-02	Outer Shell (REM50PVA)
	105333-01	Outer Shell (RLP50VA)
4	104786-01	Handle Kit
5	M11143-1	Bushing Strain Relief
6	101480-12	Wire Assembly (qty. 2)
7	M11084-27	Hex Tap Screw, #12-14 x 1/2" (qty. 3)
8	099393-03	Control Knob
9	105341-01	Burner Assembly
10	099539-01	Electrode Ignitor with lead
11	M11084-38	Hex Tap Screw, #8-18 x 3/8"
12	101478-03	Fan
13	105332-01	Motor
14	103863-01	Fan Guard
15	097384-02	Captive Washer Nut (qty. 3)
16	097968-05	Hex Screw, #4-40 x 1/2" (qty. 2)
17	NPC-00C	Hex Nut, #4-40 (qty. 2)
18	101481-04	Thermal Switch
19	097776-01	Universal Bushing
20	099237-01	Thermocouple Clip (qty. 2)
21	104146-01	Thermocouple
22	103921-01	Valve/Orifice Assembly

Key No.	Part Number	Description
23	102445-01	Piezo Ignitor
24	078978-03	Sleeve Cap
25	105335-01	Base Assembly
26	099202-02	Steel Rivet, 1/8"
27	M12461-14	Hex Screw, 8-32 x 3/8 (qty. 2)
28	098219-25	Cord, Power Supply

PARTS AVAILABLE - NOT SHOWN

097941-28	Tradename Decal (RLP50VA) (qty. 2)
097647-10	Tradename Decal (BLP50VA) (qty. 2)
099596-16	Tradename Decal (REM50PVA) (qty. 2)
103867-05	General Information Decal
103869-03	Operation Decal
099672-01	Notice Decal

ACCESSORIES

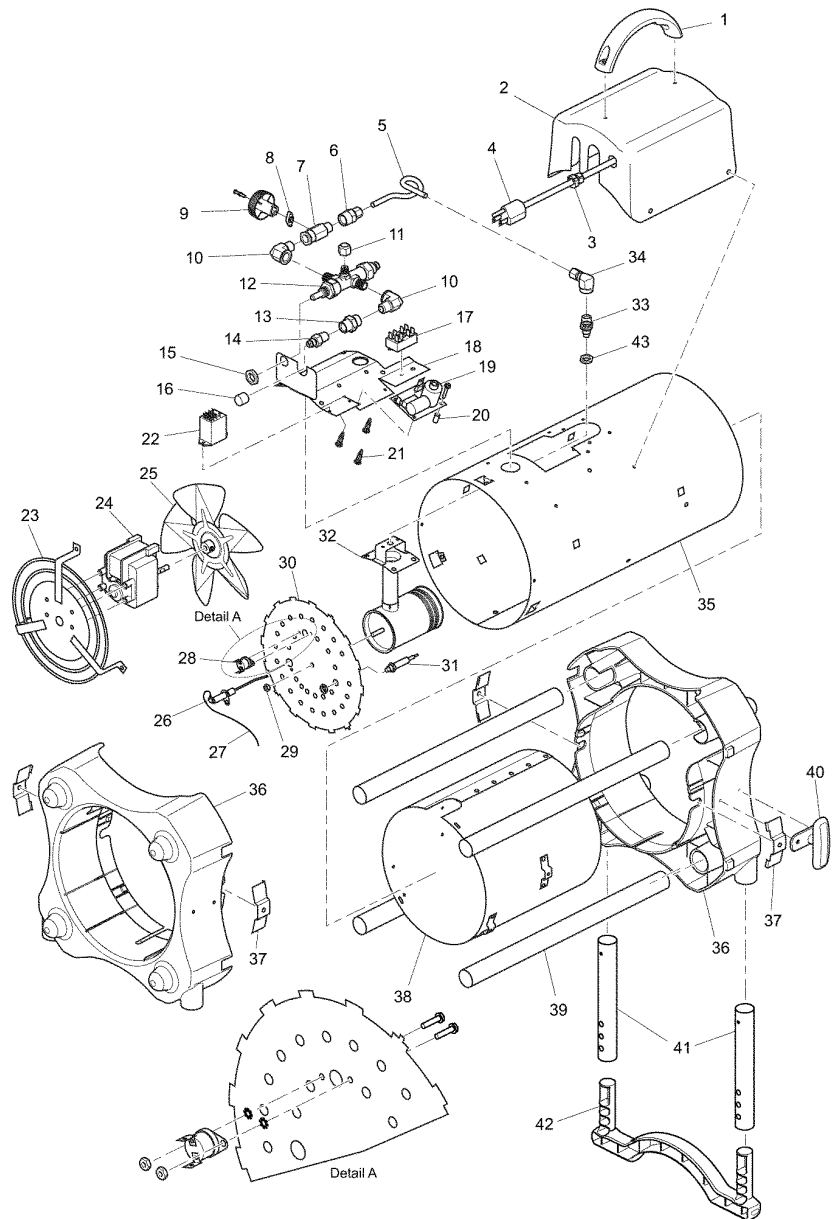
LPA3055	Regulator & Hose Assembly
LPA4020	Fuel Gas Connector
LPA2140	Regulator Only
LPA1020	1/4" x 10' Hose
2525	1/4" x 25' Hose
G1851	Acme (new style) Tank Connector
C20	20 lb. Propane Cylinder
C40	40 lb. Propane Cylinder
7111NR	Control Valve Powercoil

55,000 BTU Forced Air Desa Propane Heater

Model Numbers

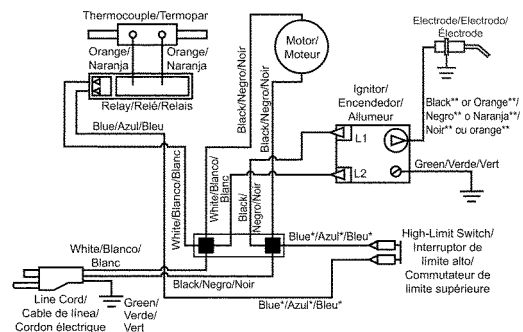
TB100	TB104
TB106	TB110

Key No.	Part No.	Description
1	118476-01	Handle
2	118472-01	Control Box
3	M11143-2	Strain Relief Bushing
4	098219-42	Power Supply Cord Assembly
5	100145-03	Fuel Tube
6	118796-01	Female Compression Fitting
7	114159-05	Ball Valve Assembly
8	113810-01	Ball Valve Knob Insert
9	118773-01	Ball Valve Knob
10	113870-01	Elbow Fitting qty. 2
11	116981-01	Female Cap Fitting
12	113871-01	Control Valve
13	113869-01	Coupling Fitting
14	097809-04	Male Fitting
15	113794-01	Valve Nut
16	078978-03	Cap Sleeve
17	119401-01	Terminal Block
18	118506-01	Heat Shield
19	113867-01	Hi-Lo Mini Ignitor
20	114150-01	Steel Spacer
21	118802-01	Printed Circuit Board Support qty. 3
22	113875-02	Relay Assembly
23	118780-01	Motor Grill Assembly
24	113880-02	Motor Assembly
25	113881-01	Fan
26	097805-04	Ignitor
27	097806-03	Ignitor Cable
28	101481-12	Thermal Limit Switch
29	098249-01	Nut
30	118497-02	Rear Plate
31	104146-05	Thermocouple
32	118514-01	Burner Assembly
33	118685-01	Injector
34	100146-01	Female Elbow
35	119496-01	Shell (Black)
36	118471-01	End Cap ••••
37	119459-01	Hold Down Bracket qty. 4
38	119497-01	Combustion Chamber
39	118477-03	Steel Tube qty. 4
40	118475-01	Cord Cleat qty. 2
41	118478-03	Foot Leg qty. 2
42	118474-01	Foot
43	119631-01	Nut



Parts available - not Shown

M9900-199	Wire Assembly, Black
M9900-200	Wire Assembly, White
101480-14	Wire Assembly, Blue
118774-04	Hose and Regulator Assembly
118687-03	Operation Decal
119144-01	Model Data Decal
119146-01	Wiring Decal



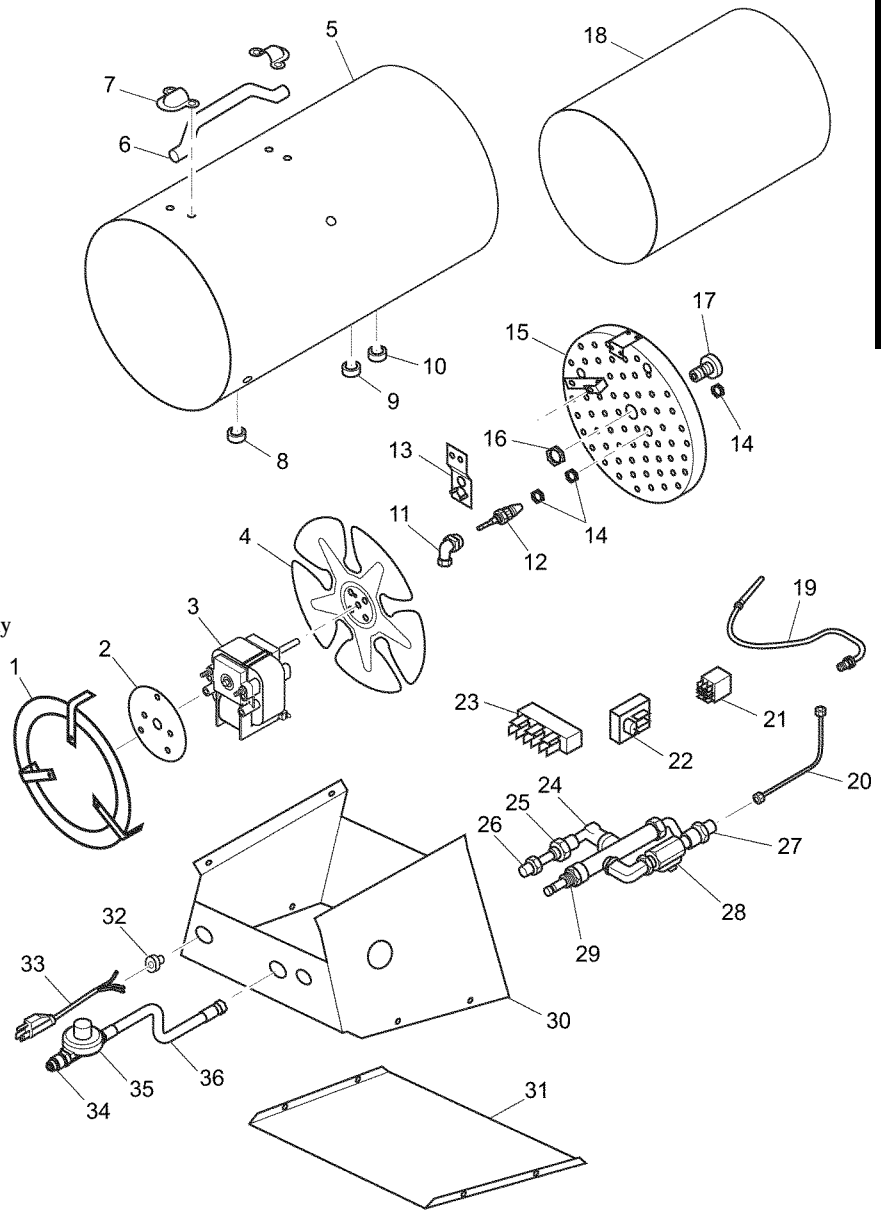
55,000 BTU Forced Air Desa Propane Heater

Desa LP 55,000 BTU

Model Numbers

BLP55V REM55PV
 RLP55V

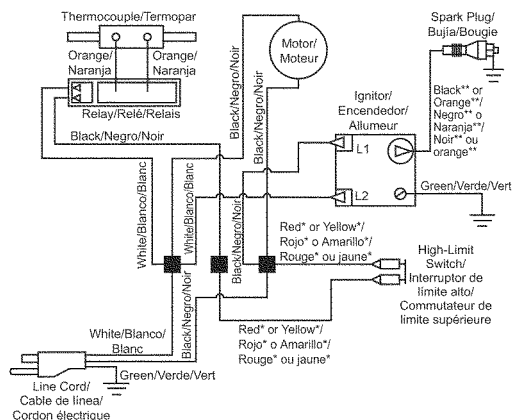
Key No.	Part No.	Description
1	113878-01	Grille Assembly
2	115772-01	Motor Mounting Bracket
3	113880-01	Motor Assembly
4	113881-01	Fan
5	113882-01	Outer Cylinder, Red
	113882-02	Outer Cylinder, Orange
	113882-03	Outer Cylinder, Yellow
	113882-04	Outer Cylinder, Black
6	097917-01	Handle
7	097918-01	Clip Handle Mounting qty. 2
8	113883-01	Snap Bushing, 5/8
9	118651-01	Universal Bushing
10	114162-01	Snap Bushing, 1/2
11	113887-01	Male Elbow Fitting
12	113885-01	Spark Plug
13	113889-01	High Limit Switch Control Assembly
14	113886-01	Nut, Spark Plug qty. 2
15	113892-01	Flame Holder Assembly
16	113888-01	Nut orifice Mounting
17	113890-01	Orifice, LP Assembly
18	**	Middle Cylinder Assembly
19	113884-01	Thermocouple
20	113877-01	Fuel Tube Assembly
21	113875-01	Relay Assembly
22	113867-01	Ignitor
23	113872-01	Terminal Board
24	113870-01	Elbow Street Fitting qty. 2
25	113869-01	Coupling Fitting qty. 2
26	113868-01	Male Connector Fitting
27	113876-01	Female Connector Fitting
28	113873-01	Ball Valve
29	113871-01	Valve
30	113866-01	Control Box Assembly
31	113863-01	Bottom Panel
32	113865-01	Strain Relief Bushing
33	113864-01	Power Cord
34	113791-01	POL Excess Flow 1/4 MPT
35	113862-01	Regulator, 28" W.C.
36	113776-01	Hose Assembly, LP



PARTS AVAILABLE - NOT SHOWN

- 113909-01 Wiring Decal
- 113802-18 Model Data Decal
- 113933-07 Operating Instructions Decal, English/Spanish
- 113984-07 Warning Decal, English
- 113858-01 Tradename Decal, All-Pro
- 113858-02 Tradename Decal, Universal
- 097650-01 Tradename Decal, Master
- 109111-02 Tradename Decal, Reddy
- 110789-01 Tradename Decal, Remington
- 113914-01 Hang Tag, English
- 113927-01 Fan Label

** Not a field replaceable part.

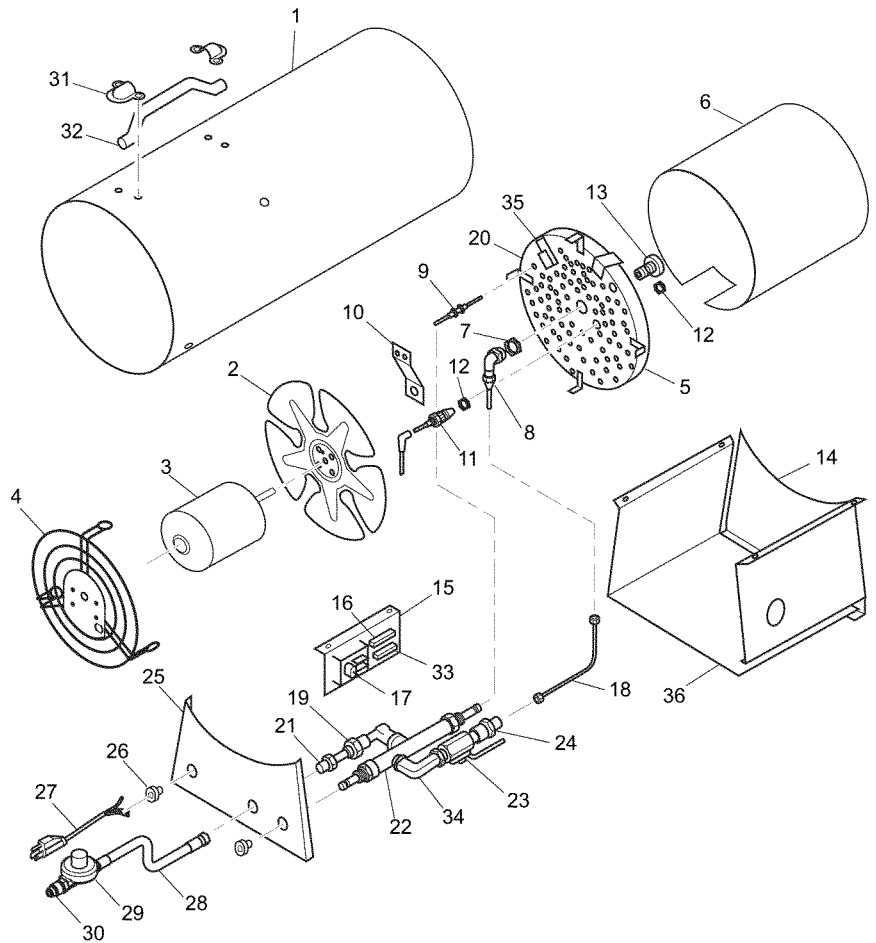


85,000 BTU Forced Air Desa Propane Heater

Model Numbers

BLP85V REM85PV
RLP85V

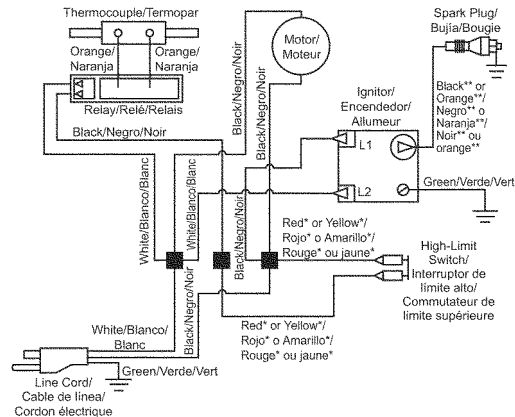
Key No.	Part No.	Description
1	113918-01	Outer Cylinder Assembly, Orange
	113918-02	Outer Cylinder Assembly, Red
	113918-03	Outer Cylinder Assembly, Yellow
	113918-04	Outer Cylinder Assembly, Black
2	113881-01	Fan
3	113860-01	Motor Assembly
4	113919-01	Motor Grill
5	113922-01	Flame Holder Assembly
6	**	Middle Cylinder Assembly
7	113888-01	Nut orifice Mounting 3/4-16
8	113931-01	Male Elbow Fitting
9	113884-01	Thermocouple
10	113889-01	High Limit Control Assembly
11	113885-02	Spark Plug, 1/8 Gap
12	113886-01	Nut-Spark Plug qty. 3
13	113920-01	Orifice Assembly
14	113935-01	Control Box Assembly
15	113924-01	Ignition Relay Bracket
16	113872-01	Terminal Board
17	113867-01	Spark Ignition, 115V
18	113917-01	Fuel Tube Assembly
19	113869-01	Fitting, Coupling
20	113936-01	Spacer, TC Bracket
21	113868-01	Fitting, Male Connector
22	113871-01	Valve
23	113928-01	Ball Valve, Variable Rate
24	113929-01	Female Connector Fitting
25	113925-01	Control Panel Assembly
26	113865-01	Strain Relief Bushing
27	113864-01	Power Cord
28	113776-01	Hose Assembly
29	113862-01	Regulator, 28" W.C. (6.97 kPa)
30	113791-01	POL Excess Flow
31	097918-01	Clip Handle Mounting qty. 2
32	097917-01	Handle
33	113875-01	Relay
34	113870-01	Fitting, Elbow qty. 2
35	113923-01	racket, TC
36	113926-01	Access Panel



PARTS AVAILABLE - NOT SHOWN

113909-01	Wiring Decal
113802-05	Model Data Decal
113933-02	Operating Instructions Decal, English/Spanish
113984-01	Warning Decal, English
113915-01	Tradename Decal, All-Pro
113908-01	Tradename Decal, Universal
109111-02	Tradename Decal, Reddy
097650-01	Tradename Decal, Master
110789-01	Tradename Decal, Remington
113914-01	Hang Tag, English
113927-01	Fan Label

** Not a field replaceable part.



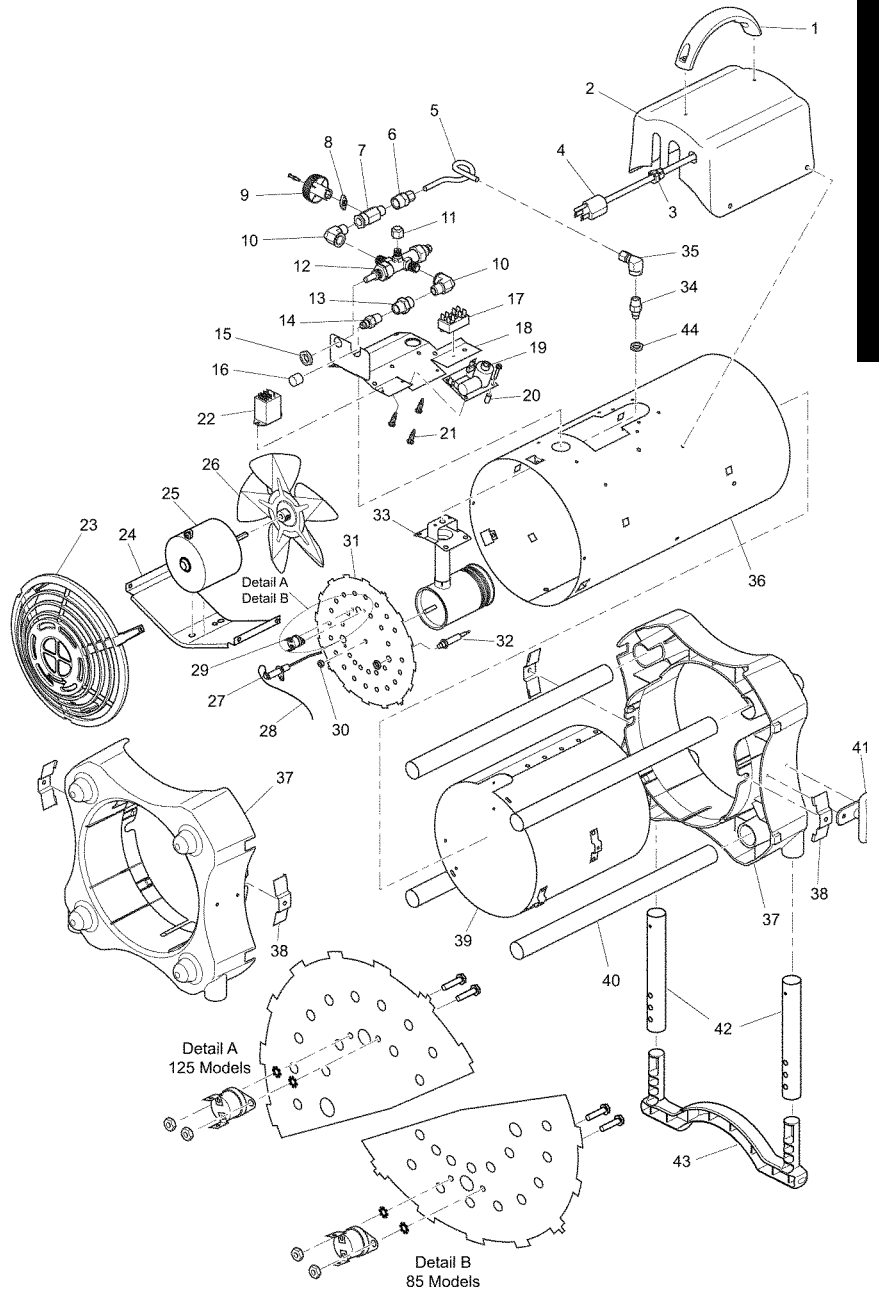
85,000 BTU Forced Air Desa Propane Heater

Desa LP 85,000 BTU

Model Numbers

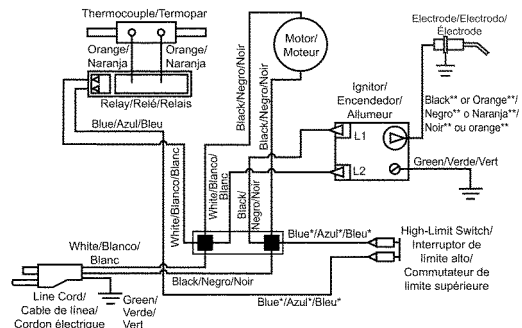
TB102 TB111
TB114

Key No.	Part No.	Description
1	118476-01	Handle
2	118472-01	Control Box
3	M11143-2	Strain Relief Bushing
4	098219-42	Power Supply Cord Assembly
5	100145-03	Fuel Tube
6	118796-01	Female Compression Fitting
7	114159-05	Ball Valve Assembly
8	113810-01	Ball Valve Knob Insert
9	118773-01	Ball Valve Knob
10	113870-01	Elbow Fitting qty. 2
11	116981-01	Female Cap Fitting
12	113871-01	Control Valve
13	113869-01	Coupling Fitting
14	097809-04	Male Fitting
15	113794-01	Valve Nut
16	078978-03	Sleeve Cap
17	119401-01	Terminal Block
18	118506-01	Heat Shield
19	113867-01	Hi-Lo Mini Ignitor
20	114150-01	Steel Spacer
21	118802-01	Printed Circuit Board Support qty. 3
22	113875-02	Relay Assembly
23	118473-01	Fan Guard
24	118482-01	Motor Mount
25	113860-02	Motor Assembly
26	113881-01	Fan 7"
27	097805-04	Ignitor
28	097806-03	Ignitor Cable
29	101481-04	Thermal Limit Switch
30	098249-01	Nut
31	118497-03	Rear Plate
32	104146-05	Thermocouple
33	118514-01	Burner Assembly
34	118685-02	Injector
35	100146-01	Female Elbow
36	119496-02	Shell (Black)
37	118471-01	End Cap qty. 2
38	119459-01	Hold Down Bracket qty. 4
39	119497-02	Combustion Chamber
40	118477-01	Steel Tube qty. 4
41	118475-01	Cord Cleat qty. 2
42	118478-01	Foot Leg qty. 2
43	118474-01	Foot
44	119631-01	Nut



Parts available - not shown

M9900-199	Wire Assembly, Black
M9900-00	Wire Assembly, White
101480-14	Wire Assembly, Blue
118774-01	Hose and Regulator Assembly
118687-03	Operation Decal
119144-02	Model Data Decal
119146-01	Wiring Decal



80,000 BTU Convection Desa Propane Heater

Model Numbers

Reddy
RCP80V

Master
TC80V

Key No.	Part Number	Description
1	103928-01	Top and Shell Assembly
2	103929-01	Burner Assembly
3	103904-01	Ignitor Electrode with lead
4	103032-01	Nozzle
5	103031-01	Base
6	103036-01	Stealth Knob
7	102445-01	Piezo Ignitor with nut
8	099236-01	Thermocouple Kit with clip
9	103854-01	Thermocouple Bracket
10	103037-01	Nozzle Locator
11	103930-01	Valve Assembly
12	078978-03	Cap Sleeve

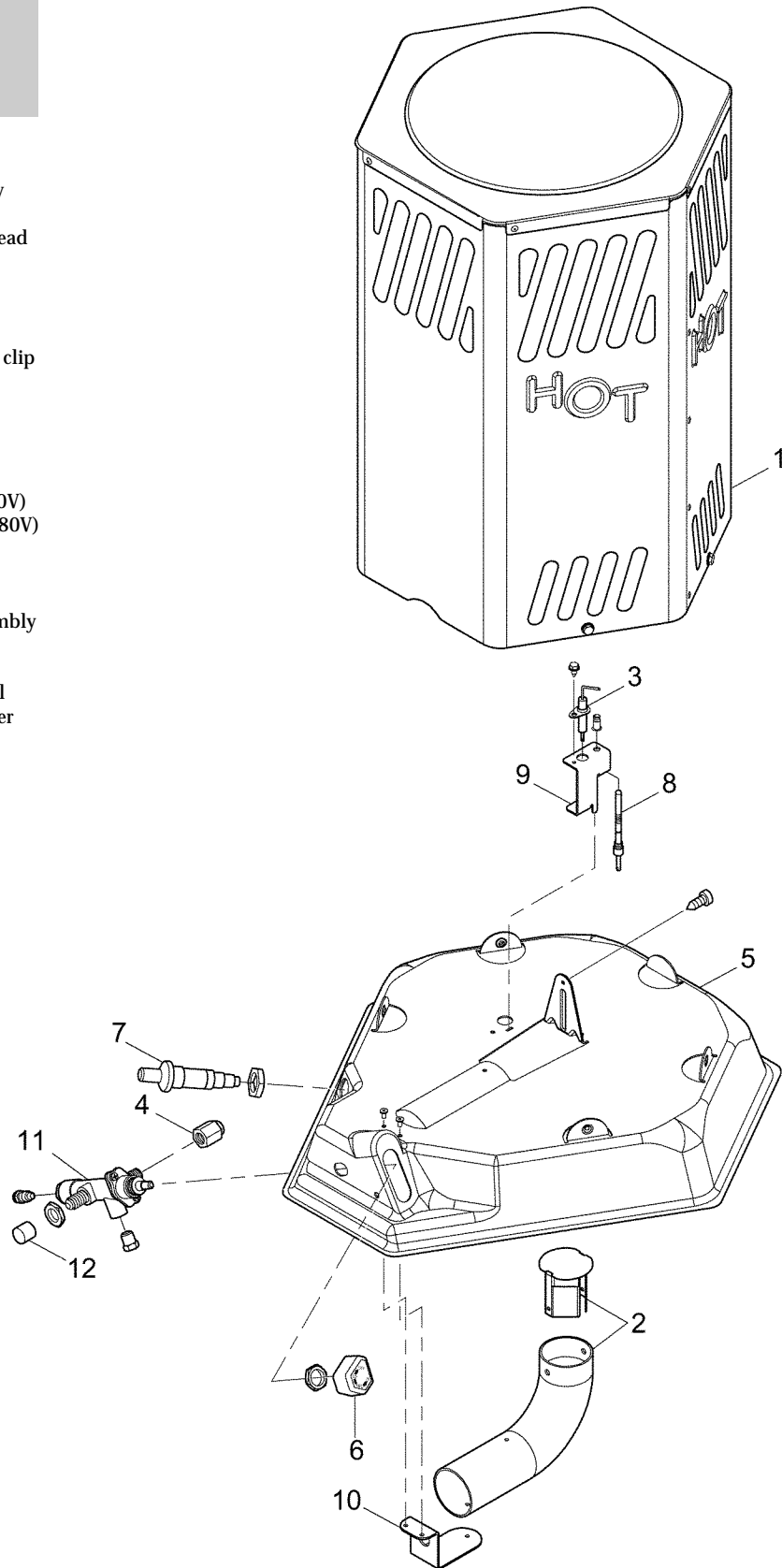
PARTS AVAILABLE - NOT SHOWN

098853-06	Tradename Decal (TC80V)
098851-05	Tradename Decal (RCP80V)
099681-03	Information Decal
099683-02	Operation Decal

ACCESSORIES

LPA3110	Regulator & Hose Assembly
LPA2160	Regulator
LPA4020	POL Connector
7111NR	Control Valve Powercoil
C100	100 lb. Propane Cylinder
LPA1020	10' Hose
2525	25' Hose
099237-01	Thermocouple Clip
7161NR	Piezo Igniter Nut

Screws Are Standard Hardware Items



Desa LP 80,000 BTU

100,000 BTU Forced Air Desa Propane Heater

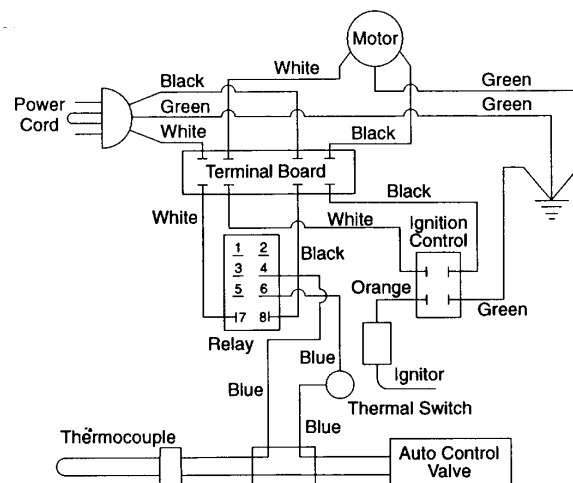
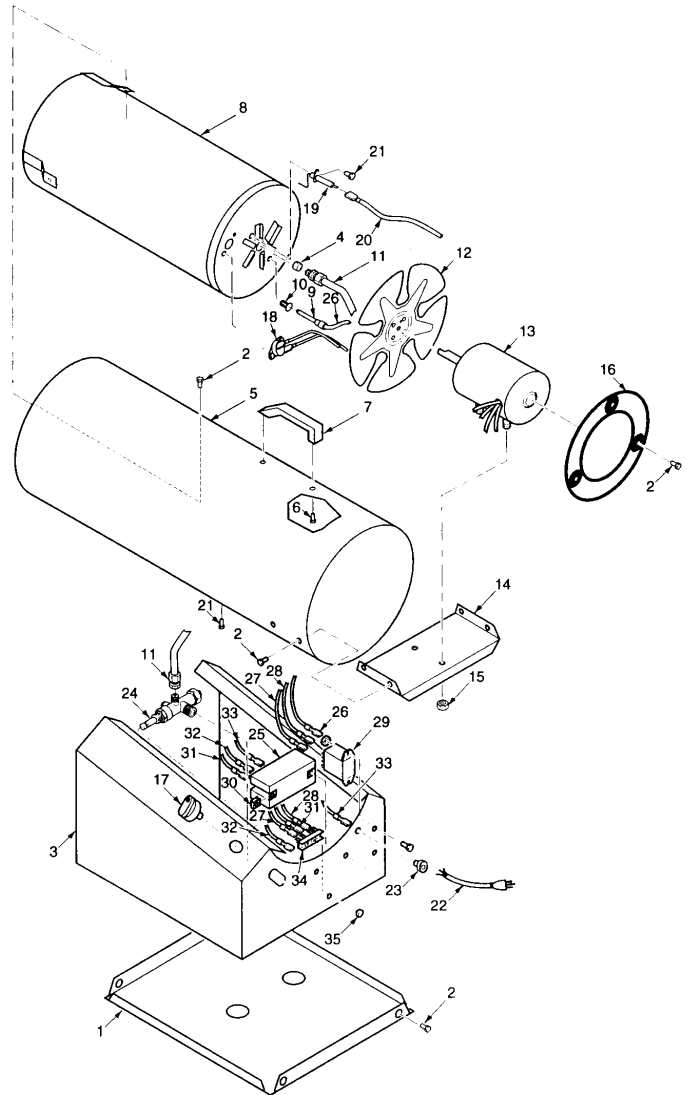
Model Numbers

Reddy	Remington	Master
RLP100	REM100LP	BLP100

Key No.	Part Number	Description
1	102362-01	Base Tray
2	M11084-26	Hex TPG Screw (qty. 15)
3	102361-01AA	Base
4	099138-02	Nozzle
5	098511-216	Shell Kit
6	M11084-29	Screw (qty. 2)
7	M51104-01	Handle
8	098512-61	Combustion Chamber Kit
9	099538-01	Thermocouple
10	099237-01	Thermocouple Clip
11	099334-02	Fuel Tube Kit
12	M51153-01	Fan
13	102366-01	Motor
14	102380-01	Motor Bracket
15	NTC-4C	Hex Lock Nut (qty. 2)
16	102315-02	Fan Guard
17	099393-03	Control Knob
18	101732-04	Thermal Switch Kit
19	102487-01	Ignitor Electrode
20	097806-02	Ignitor Cable
21	M11084-38	Screw (qty. 2)
22	098219-17	Power Cord
23	M11143-1	Strain Relief Bushing
24	103846-01	Valve Kit
25	102601-01	Ignition Control
26	079010-30	Wire Assembly (Relay)
27	079010-19	Wire Assembly (Relay)
28	097951-14	Wire Assembly (Relay)
29	103847-01	Relay Kit
30	102602-01	U-Clip Nut (qty. 2)
31	097951-13	Wire Assembly (Ignition Ctrl)
32	M16841-56	Wire Assembly (Ignition Ctrl)
33	M16841-68	Wire Assembly (Ignition Ctrl)
34	099125-11	Terminal Board
35	099157-01	Rivet

PARTS AVAILABLE - NOT SHOWN

102370-01	Owners Manual
079231-01	Service Center List
097940-06	Tradename Decal (BLP100)
097941-17	Tradename Decal (RLP100)
099596-09	Tradename Decal (REM100LP)
099596-10	Tradename Decal (REM100LP)
102600-01	Operation Decal
102604-01	General Information Decal
102599-01	Electrical Decal
LPA3100	Regulator & Hose Assy
LPA1000	10' Hose
LPA2150	Regulator
LPA4020	Fuel Gas Connector
3825	25' Hose
C100	100 lb. Propane Cylinder
7111NR	Control Valve Powercoil



Desa LP 100,000 BTU

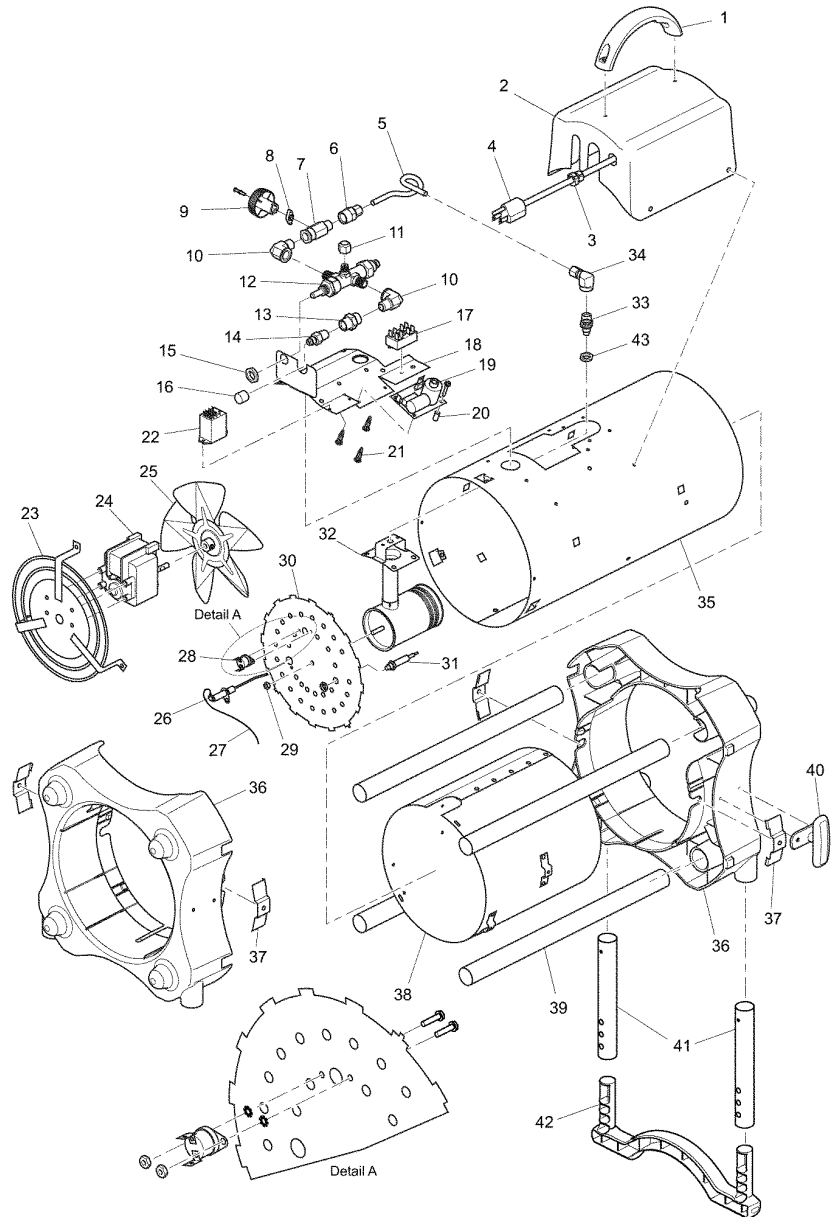
125,000 BTU Forced Air Desa Propane Heater

Desa LP 125,000 BTU

Model Numbers

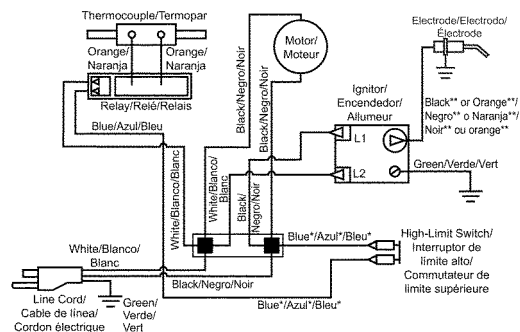
TB101	TB105
TB107	TB112

Key No.	Part No.	Description
1	118476-01	Handle
2	118472-01	Control Box
3	M11143-2	Strain Relief Bushing
4	098219-42	Power Supply Cord Assembly
5	100145-03	Fuel Tube
6	118796-01	Female Compression Fitting
7	114159-03	Ball Valve Assembly
8	113810-01	Ball Valve Knob Insert
9	118773-01	Ball Valve Knob
10	113870-01	Elbow Fitting qty. 2
11	116981-01	Female Cap Fitting
12	113871-01	Control Valve
13	113869-01	Coupling Fitting
14	097809-04	Male Fitting
15	113794-01	Valve Nut
16	078978-03	Sleeve Cap
17	119401-01	Terminal Block
18	118506-01	Heat Shield
19	113867-01	Hi-Lo Mini Ignitor
20	114150-01	Steel Spacer
21	118802-01	Printed Circuit Board Support qty. 3
22	113875-02	Relay Assembly
23	118473-01	Fan Guard
24	113860-02	Motor Assembly
25	114160-01	Fan 8"
26	097805-03	Ignitor
27	097806-03	Ignitor Cable
28	101481-13	Thermal Limit Switch
29	098249-01	Nut
30	118497-01	Rear Plate
31	104146-05	Thermocouple
32	118765-02	Burner Assembly
33	118685-03	Injector
34	100146-01	Female Elbow
35	119496-02	Shell (Black)
36	118471-01	End Cap qty. 2
37	119459-01	Hold Down Bracket qty. 4
38	119497-02	Combustion Chamber
39	118477-01	Steel Tube qty. 4
40	118475-01	Cord Cleat qty. 2
41	118478-01	Foot Leg qty. 2
42	118474-01	Foot



Parts available - not shown

M9900-199	Wire Assembly, Black
M9900-00	Wire Assembly, White
101480-14	Wire Assembly, Blue
118774-02	Hose and Regulator Assembly
118687-03	Operation Decal
119144-03	Model Data Decal
119146-01	Wiring Decal



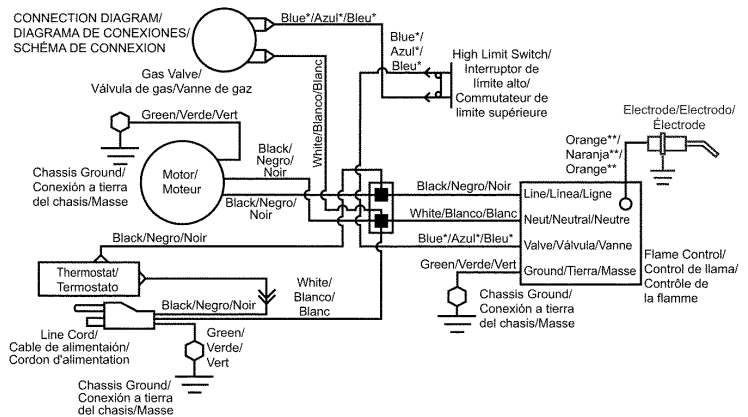
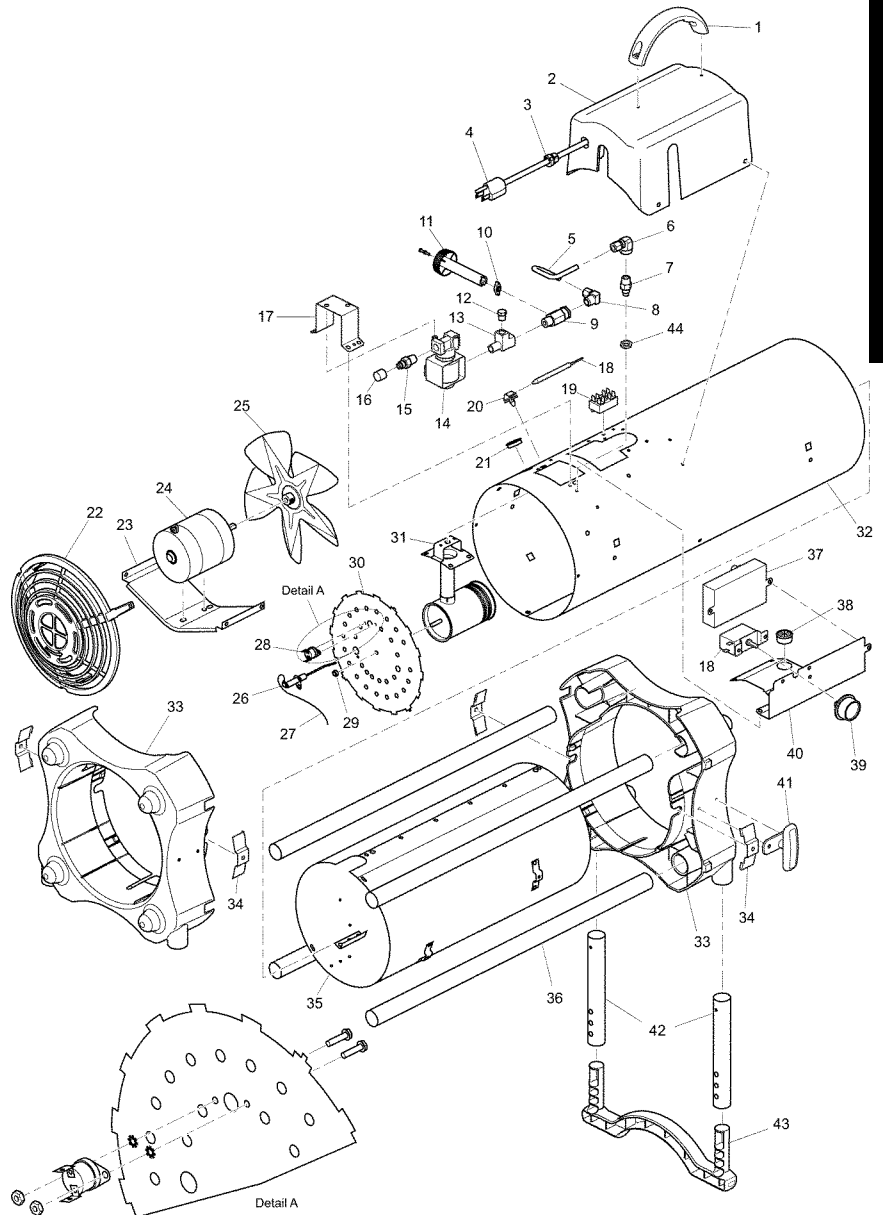
170,000 BTU Forced Air Desa Propane Heater

Desa LP 170,000 BTU

Model Numbers

TB103 TB108
TB113

Key No.	Part No.	Description
1	118476-01	Handle
2	118770-01	Control Box
3	M11143-2	Strain Relief Bushing
4	098219-42	Power Supply Cord Assembly
5	118767-01	Fuel Tube
6	100146-01	Female Elbow
7	118685-04	Injector
8	M50114-02	Male Elbow
9	114159-04	Ball Valve Assembly
10	113810-01	Ball Valve Knob Insert
11	118773-02	Ball Valve Knob
12	098276-01	Plug
13	118768-01	Street Tee
14	098201-01	Solenoid Valve
15	097809-04	Male Fitting
16	078978-03	Sleeve Cap
17	118766-01	Solenoid Valve Bracket
18	113944-01	Thermostat Assembly
19	119401-01	Terminal Block
20	099123-01	Thermobulb Clip
21	M50104-02	Shorty Bushing
22	118473-01	Fan Guard
23	118482-01	Motor Mount
24	113941-02	Motor Assembly
25	113950-01	Fan
26	097805-03	Ignitor
27	097806-03	Ignitor Cable
28	101481-05	Thermal Limit Switch
29	098249-01	Nut
30	118497-01	Rear Plate
31	118765-02	Burner Assembly
32	119496-03	Shell (Black)
33	118471-01	End Cap qty. 2
34	119459-01	Hold Down Bracket qty. 4
35	119497-03	Combustion Chamber
36	118477-02	Steel Tube qty. 4
37	110287-01	DSI Control
38	097776-01	Universal Bushing
39	113961-01	Thermostat Knob
40	118919-01	Heat Shield
41	118475-01	Cord Cleat qty. 2
42	118478-02	Foot Leg qty. 2
43	118474-01	Foot
44	119631-01	Nut



Parts available - not shown

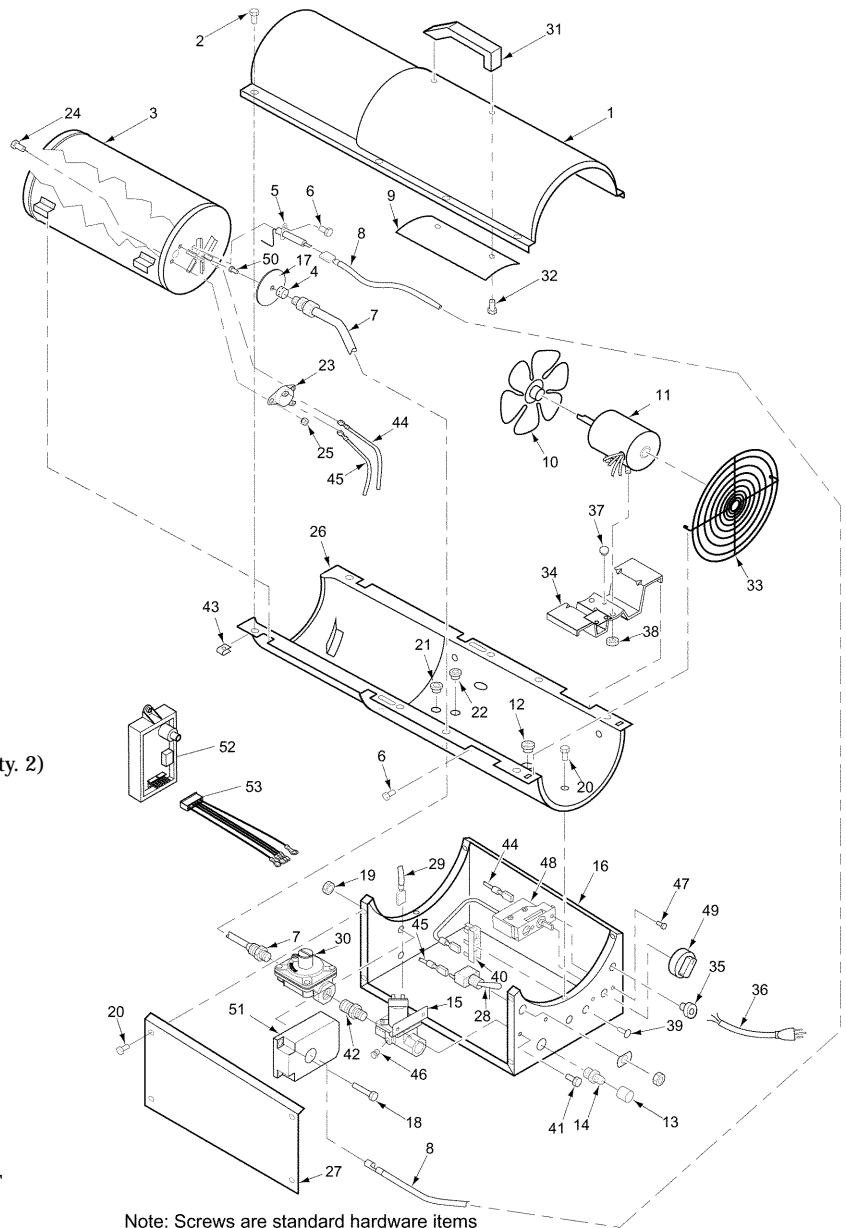
M16841-80	Wire Assembly, White
M9900-170	Wire Assembly, Black
101480-15	Wire Assembly, Blue
118774-03	Hose and Regulator Assembly
118687-04	Operation Decal
119144-04	Model Data Decal
119146-02	Wiring Decal
099504-08	Warning Decal
110267-02	DSI Control Harness

150,000 BTU Desa Natural Gas Heater

Model Numbers

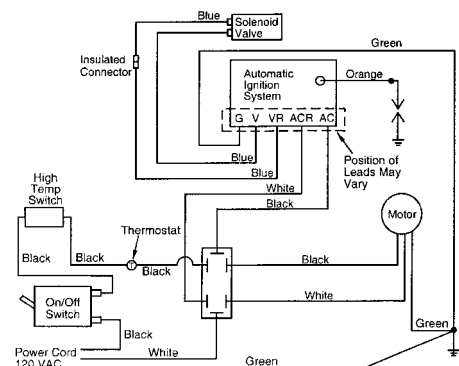
Master
BNG150T

Key No.	Part Number	Description
1	098511-114	Upper Shell
2	100647-01	Screw, #10-16 x 1/2" (qty. 8)
3	098512-53	Combustion Chamber Kit
4	103891-01	Nozzle
5	103934-01	Ignitor
6	M11084-39	Screw, #8-18 x 3/8" (qty. 2)
7	099334-03	Fuel Tube Kit
8	097806-02	Ignitor Cable
9	M51108-01	Heat Shield
10	M51153-01	Fan
11	103404-01	Motor
12	097776-01	Universal Bushing
13	078978-01	Sleeve Cap
14	103401-01	Male Connector
15	103403-01	Solenoid Valve
16	097966-12AA	Base
17	078896-02	Washer, Baffle
18	M12461-7	Screw, #6-32 x 1" (qty. 2)
19	099432-01	Hex Nut, #6-32 (qty. 2)
20	M11084-27	Screw, #10-16 x 1/2" (qty. 10)
21	M50104-05	Shorty Bushing
22	M50104-01	Shorty Bushing
23	101481-05	Thermal Limit Switch
24	097968-05	Screw, #4-40 x 1/2" (qty. 2)
25	097384-04	Hex Nut, #4-40 Captive Washer (qty. 2)
26	098511-129	Lower Shell
27	097965-02AA	Side Cover
28	098226-01	On/Off Switch
29	079010-38	Wire Assembly
30	103406-01	Regulator
31	M51104-01	Handle
32	M11084-29	Screw, #10-16 x 3/4" (qty. 2)
33	097964-03AA	Fan Guard
34	101206-01	Motor Support Brkt Assy
35	M11143-1	Strain Relief Bushing
36	098219-17	Power Cord
37	M50631	Rubber Bumper (qty. 2)
38	NTC-4C	Lock Nut (qty. 2)
39	099157-01	Break Mandrell Rivet, 3/16"
40	099125-01	Terminal Board
41	M12461-25	Screw, #10-32 x 1/4" (qty. 2)
42	103407-01	Fitting, Union 1/2 NPT to 1/2 NPT
43	M11271-8	Clip Nut (qty. 8)
44	101480-10	High Temperature Wire Assembly
45	101480-11	High Temperature Wire Assembly
46	098276-01	Plug 1/8 NPTF Hex
47	M10908-1	Screw, Hex TPG "F" 6-32 x .25 (qty. 2)
48	097657-03	Built-in Thermostat
49	104905-01	Thermostat Knob
50	103400-02	Screw, Baffle
51	M51605-02	DSI Control
52	110287-01	DSI Control No. 2003-45 1 Potted
53	110267-01	Wire Harness for 110267-01 Only
PARTS AVAILABLE - NOT SHOWN		
	097940-09	Tradename Decal (qty. 2)
	103886-01	General Info Decal
	099504-01	Warning Decal (qty. 2)
	103402-01	Wiring Decal
	103021-01	Thermostat Decal
	103889-01	NG Warning Decal
	5010	1/2" x 10' Hose
	54	1/2" x 1/2" Swivel Union
	10444	Hose Adaptor Fitting - 1/2" FFIR x 1/2" MPT



Note: Screws are standard hardware items

Electrical Connection Diagram

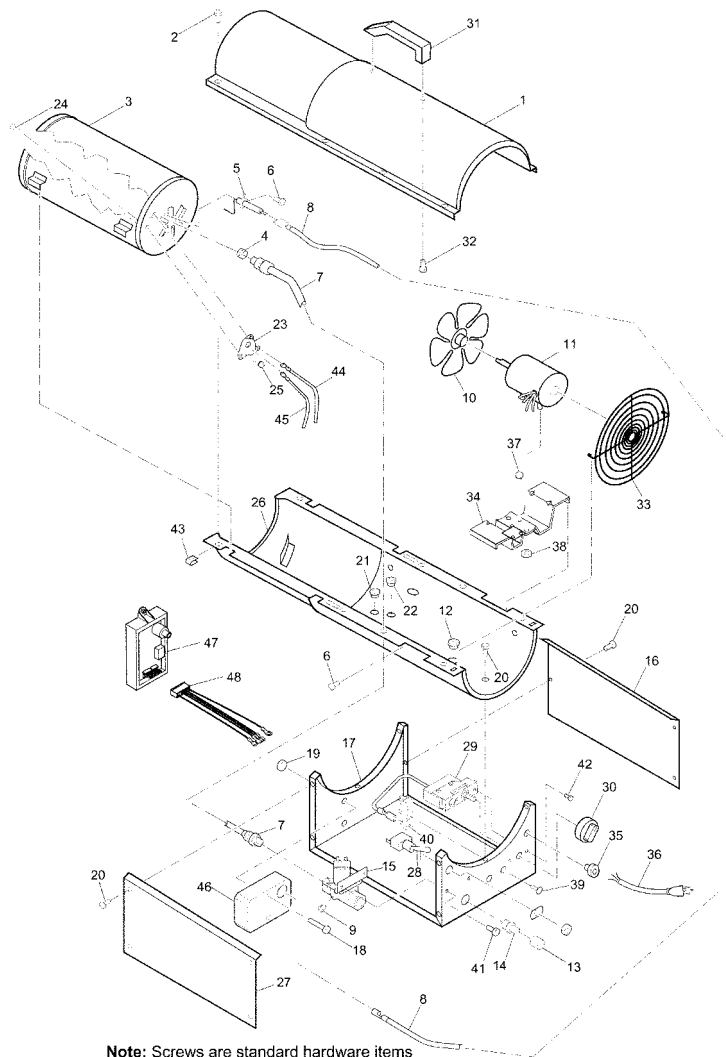
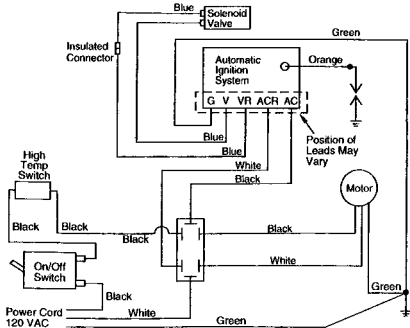


150,000 BTU Desa Propane Heater

Desa LP 150,000 BTU

Model Numbers

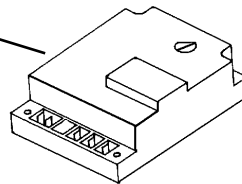
Reddy	Vanguard	Master
RLP155	VLP155	BLP155
RLP155A		BLP155A
		BLP155AT
Desa		
C155LP		



Note: Screws are standard hardware items

Key No.	Part Number	Description
1	098511-116	Upper Shell (Replacement Part Will Be Black)
2	M15823-27	Screw, #10-16 x 1/2" (qty. 8)
3	098512-35	Combustion Chamber Kit
4	099138-01	Nozzle
5	099133-01	Ignitor
6	M11084-38	Screw, #8-18 x 3/8" (qty. 2)
7	099334-01	Fuel Tube Kit
8	097806-02	Ignitor Cable
9	098276-01	Plug 1/8 NPTF Hex
10	M51153-01	Fan
11	105336-01	Motor
12	097776-01	Universal Bushing
13	078978-01	Sleeve Cap
14	M51572-02	Male Connector
15	103015-01	Solenoid Valve
16	098450-03	Side Cover (thermostat side)
17	099161-10	Base
18	M12461-7	Screw, #6-32 x 1" (qty. 2)
19	099432-01	Hex Nut, #6-32 (qty. 2)
20	107992-01	Screw, #10-16 x 3/8" (qty. 13)
21	M50104-05	Shorty Bushing
22	M50104-01	Shorty Bushing
23	101481-07	Thermal Limit Switch
24	097968-05	Screw, #4-40 x 1/2" (qty. 2)
25	097384-04	Hex Nut, #4-40 Captive Washer (qty. 2)
26	098511-129	Lower Shell (Replacement Part Will Be Black)
27	098447-03	Side Cover (solenoid side)
28	098226-01	On/Off Switch
29	097657-03	Built-in Thermostat (if applicable)
30	104905-01	Thermostat Knob
31	M51104-01	Handle
32	M11084-29	Screw, #10-16 x 3/4" (qty. 2)
33	097964-03AA	Fan Guard
34	101206-01	Motor Support Brkt Assy
35	M11143-1	Strain Relief Bushing
36	098219-17	Power Cord
37	M50631	Rubber Bumper (qty. 2)
38	NTC-4C	Lock Nut (qty. 2)
39	099157-01	Break Mandrell Rivet, 3/16"
40	099125-01	Terminal Board
41	M12461-25	Screw, #10-32 x 1/4" (qty. 2)
42	M10908-1	Screw Hex TPG "F" 6-32 x .25 (qty. 2)
43	M11271-8	Clip Nut (qty. 8)
44	101480-10	High Temperature Wire Assy
45	101480-11	High Temperature Wire Assy
46	M51605-02	DSI Control No. 2003-19
47	110287-01	DSI Control No. 2003-45
48	110267-01	DSI Wire Harness (2003-45 Only)

Key #46



DSI Control
Heater Part # M51605-02
Part number on DSI
Control Box:
10N-117-3-8.5-8.5-Q012

PARTS AVAILABLE - NOT SHOWN

097940-07	Tradename Decal (qty. 2)
103017-01	General Info Decal
LPA3070	Regulator & Hose Assy
LPA1010	10' Hose Assy
LPA2100	Regulator
G1690	Fuel Gas Connector (POL Fitting)
099504-01	Warning Decal (qty. 2)
102967-01	Wiring Decal
103021-01	Thermostat Decal (if applicable)
HA1210	Thermostat w/numbers on dial (non T-stat units)
KT121	Thermostat with warmer-colder
382550	25' Hose Assembly
P400	T-Block Manifold
1630RU	30" Propane Tank Pigtail
C100	100# LP cylinder (qty. 2)

*If you change the motor, eliminate the relay. If your relay goes bad, you have to change motors. New motors are equipped with a capacitor.

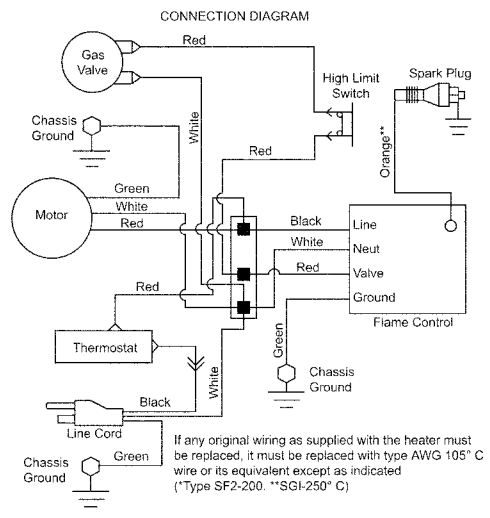
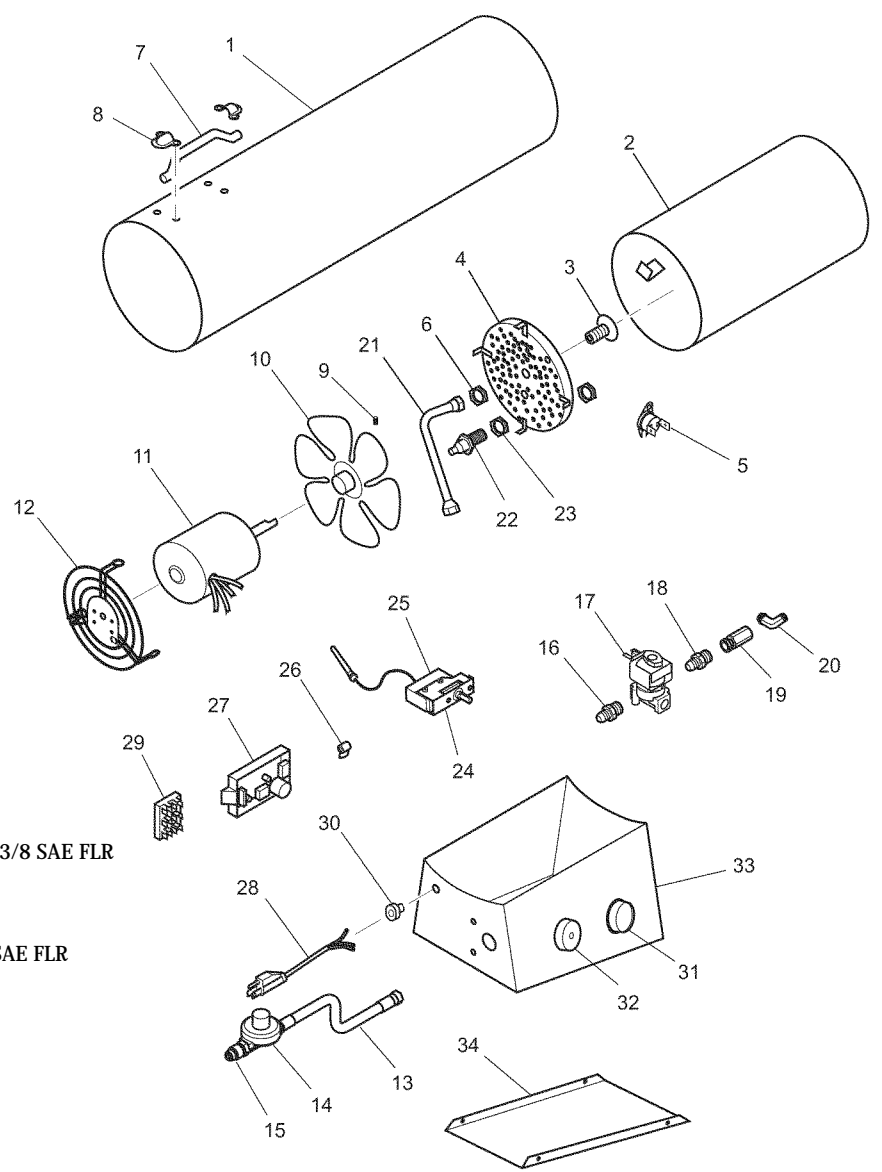
170,000 BTU Desa Propane Heater

Model Numbers		
Reddy	Remington	Master
RLP170VT	REM170VT	BLP170VT
All-Pro	Universal	
SPC170	170F	

Key No.	Part Number	Description
1	113938-01	Outer Shell, Orange
	113938-02	Outer Shell, Red
	113938-03	Outer Shell, Yellow
	113938-04	Outer Shell, Green
	113938-05	Outer Shell, Black
2	**	Middle Cylinder
3	113940-01	Ori•ce Assembly
4	113937-01	Flame Holder Assembly
5	115324-01	High Limit Switch
6	113888-01	Ori•ce Nut
7	097917-01	Handle
8	097918-01	Handle Mounting Clips 2
9	113948-01	Set Screw, Nyloc
10	113950-01	Fan
11	113941-01	Motor Assembly
12	113942-01	Inlet/Motor Mounting Grille
13	113776-01	Hose Assembly
14	113862-01	Regulator, 28" WC
15	113791-01	POL Excess Flow Valve
16	113952-01	Male Fitting Conn. 3/8 MPT x 3/8 SAE FLR
17	113951-01	Solenoid Valve, Goyen
18	113964-01	Fitting Close Nipple
19	113966-01	Burn Rate Adjustment Valve
20	113965-01	Elbow Fitting, 3/8 MPT x 1/2 SAE FLR
21	113943-01	Fuel Tube Assembly
22	113963-01	Spark Plug, Flame Sensor
23	113886-01	Spark Plug Nut
24	113947-01	Thermostat Mounting Bracket
25	113944-01	Thermostat Assembly
26	113949-01	Loop Clamp, 5/16
27	110287-01	Flame Control
28	113864-01	Power Cord Assembly
29	113960-01	Terminal Board
30	113865-01	Bushing Strain Relief
31	113961-01	Knob, Thermostat
32	113962-01	Burn Rate Adjustment Knob
33	113945-01	Control Box
34	113946-01	Access Panel

PARTS AVAILABLE - NOT SHOWN

113883-01	Snap Bushing, 5/8 2
113802-07	Model Data Decal
113933-04	Operating Instructions Decal
113984-03	Warning Decal, English/Spanish
099504-08	Thermostat Warning Decal
113907-01	Warning Electrical Decal
113953-01	Wiring Schematic Decal
097650-01	Tradename Decal, Master
113858-04	Tradename Decal, All-Pro
113858-05	Tradename Decal, Universal
109111-03	Tradename Decal, Reddy
110789-01	Tradename Decal, Remington
113914-01	Hang Tag, English



200,000 BTU Convection Desa Propane Heater

Desa LP 200,000 BTU

Model Numbers

Reddy	Master
RCP200V	TC200V

Key No.	Part Number	Description
1	103925-01	Top and Shell Assembly
2	103923-01	Burner Ring Assembly
3	101263-01	Burner Plate
4	097162-02	Burner Nozzle
5	103031-02	Base
6	103924-01	Knob Assembly
7	102445-01	Piezo Ignitor With Nut
8	099236-01	Thermocouple Kit
9	103906-01	Thermocouple Bracket
10	103927-01	Fuel Tube Kit
11	103926-01	Valve Assembly
12	103398-01	Ignitor Electrode With Lead
13	103396-01	Heat Shield

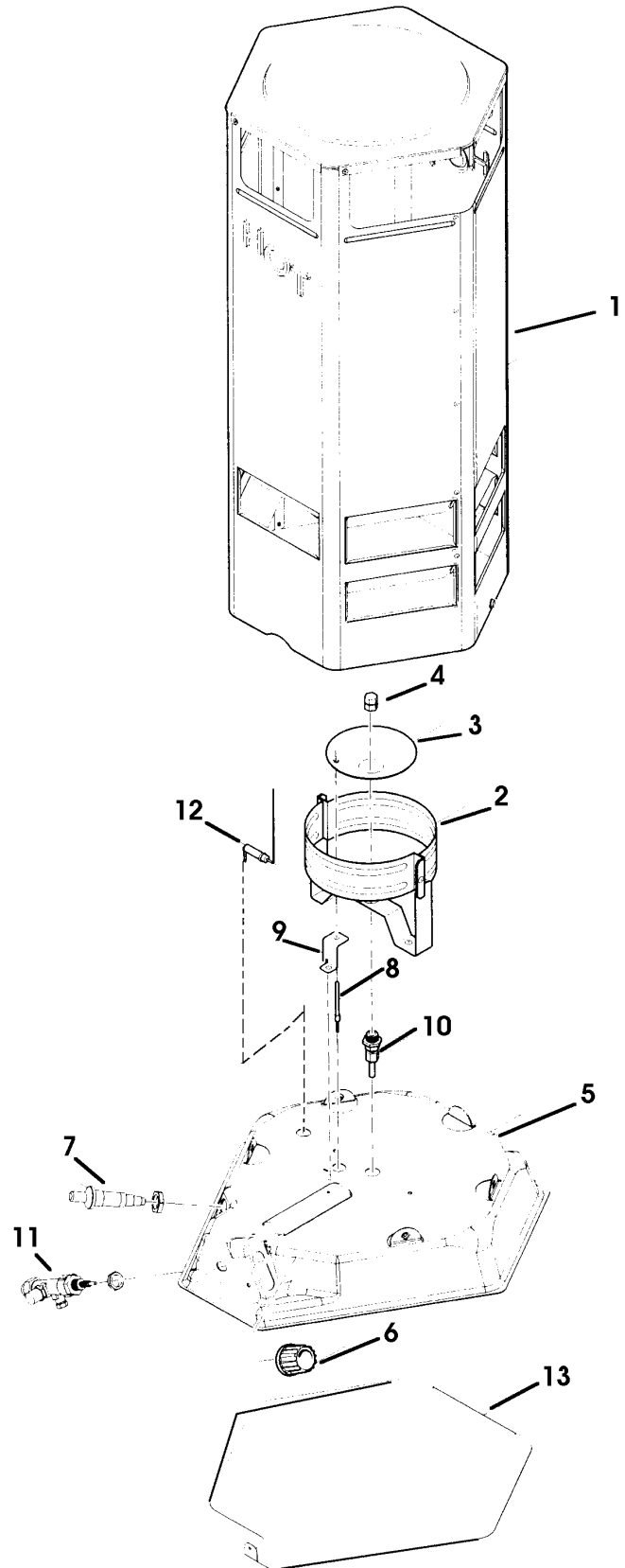
PARTS AVAILABLE - NOT SHOWN

098853-07	Tradename Decal (TC200V)
098851-06	Tradename Decal (RCP100V)
098831-03	Information Decal
101284-02	Operation Decal
7161NR	Piezo Nut

ACCESSORIES

LPA3005	Regulator & Hose Assembly
LPA2005	Regulator
LPA4020	Fuel Gas Connector
LPA1020	10 foot Hose
2525	25 foot Hose
C100	100# LP Bottle (qty. 2)
099237-01	Thermocouple Clip
P400	T-Block Manifold
G1630RU	30" Rubber Pigtail
7111NR	Control Valve Powercoil

Screws Are Standard Hardware Items



250,000 BTU Radiant Desa Natural Gas Heater

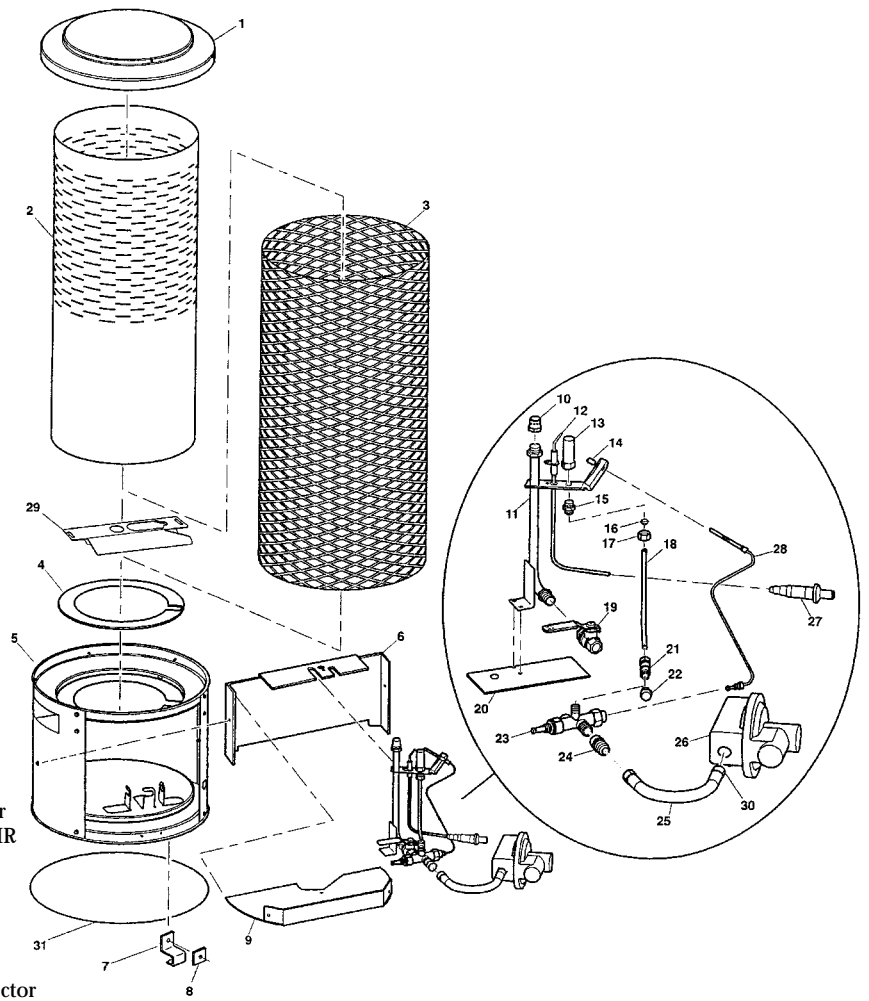
Model Numbers

Master
TC250RNG

Key No.	Part Number	Description
1	104145-02	Top Disk
2	103897-02	Emitter
3	103898-02	Shell
4	104116-01	Insulation Ring
5	104137-01	Outer Base Assembly
6	103935-01	Rear Burner Shield
7	103902-01	Leg (qty. 3)
8	103903-01	Spacer (qty. 6)
9	103900-02	Burner Shield
10	099138-05	Nozzle
11	104114-01	Burner Tube Assembly
12	104118-01	Ignitor Electrode
13	097163-07	Pilot Burner Assembly
14	099237-01	Thermocouple Clip
15	097161-01	Pilot Burner Orifice
16	M5788	Sleeve
17	M5787	Hex Nut
18	103028-02	Pilot Tube
19	097152-01	Manual Control Valve
20	103901-01	Burner Support
21	099461-01	Tee Compression Gauge
22	099460-01	Brass Hex Cap
23	097155-01	Automatic Control Valve
24	097157-03	1/4" FPT x 1/2" MFLR Connector
25	104142-01	Fuel Tube 1/2" MFIR x 1/2" MFIR
26	104141-01	Regulator (Fisher Type R522H) 200PSI Max., 4PSI Min.
27	102445-01	Piezo Ignitor
28	099236-01	Thermocouple With Clip
29	104143-02	Pilot Shield
30	103401-01	1/2 NPT to 1/2 45° Male Connector
31	103899-01	Base Shield

PARTS AVAILABLE - NOT SHOWN

104120-01	Hose Fitting Regulator Assembly
098853-10	Tradename Decal
104128-01	Operation Decal
5010	Hose 1/2" x 10'
099237-01	Thermocouple Nut
7161NR	Piezo Nut
7111NR	Control Valve Powercoil



Screws Are Standard Hardware Items

Remember, this is a high pressure heater meaning household natural gas pressure will not work with this heater!

SPECIFICATIONS

Output Rating	250,000 BTU/Hr	Supply Pressure to Heater	
Fuel	Natural Gas Only	Minimum	4 PSI
Fuel Consumption		Maximum without regulator	4 PSI
Cubic Feet per hour	243	Manifold Pressure	3.5 PSI
Supply Pressure to Regulator		Weight	33 lbs
Maximum	200 PSI	Shipping Weight	40 lbs
		Size (L/W/H)	46 x 16 x 16

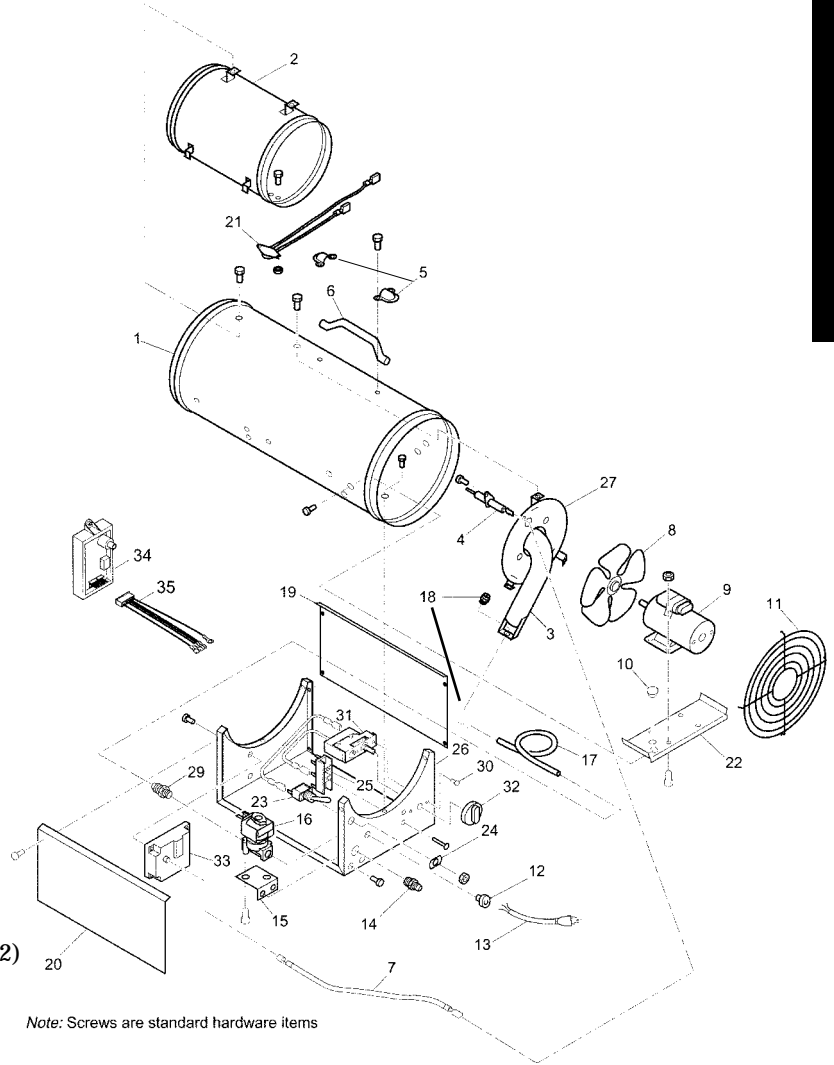
375,000 BTU Forced Air Desa Propane Heater

Desa LP 375,000 BTU

Model Numbers

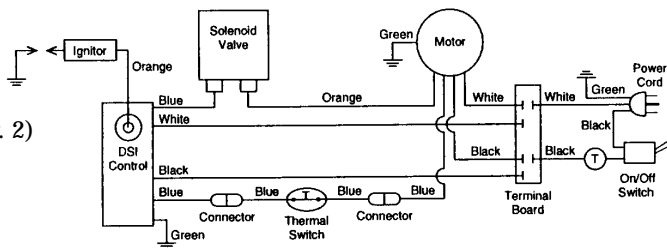
Reddy	Master
RLP375AT	BLP375AT

Key No.	Part Number	Description
1	097844-02	Outer Shell Assembly -yellow only
2	097847-01	Combustion Chamber Assembly
3	097849-01	Burner Assembly
4	097805-01	Ignitor
5	097918-01	Cleat (qty. 2)
6	097917-01	Handle
7	097806-02	Ignitor Cable
8	097811-01	Fan
9	097802-01	Motor
10	M50104-02	Shorty Bushing
11	097838-02	Fan Guard
12	M11143-1	Strain Relief Bushing
13	098219-17	Cord Assembly
14	097809-01	Male Fitting
15	097828-01	Solenoid Bracket
16	098201-01	Solenoid Valve
17	100145-01	Fuel Tube
18	099679-01	Nozzle
19	097833-04	Side Cover (thermostat side)
20	097833-03	Side Cover (solenoid side)
21	101732-03	Thermal Switch Kit
22	097829-02	Motor Mount
23	098226-01	On/Off Switch
24	M50941-01	Indicator Plate
25	099125-01	Terminal Board
26	100408-03	Base
27	097848-01	Rear Plate Assembly
29	098827-01	Compression Fitting
30	M10908-1	Screw, Hex TPG "F" 6-32x.25 (qty. 2)
31	097657-03	Thermostat
32	104905-01	Thermostat Knob
33	M51605-02	DSI Control No. 2003-19
34	110287-01	DSI Control No. 2003-45
35	110267-01	DSI Wire Harness (2003-45 Only)



PARTS AVAILABLE - NOT SHOWN

LPA3030	Regulator & Hose Assembly
103018-01	Owner's Manual
102971-01	Electrical Decal
103019-01	General Info Decal
097941-09	Tradename Decal (RLP375A)
097895-05	Tradename Decal (BLP375A) (qty. 2)
097916-01	Baffle
LPA1020	10' Hose
2525	25' Hose
LPA2020	Regulator
LPA4020	Fuel Gas Connector
099504-01	Warning Decal
103021-01	Thermostat Decal



SPECIFICATIONS

Output Rating	225,000 to 375,000 BTU/Hr	Hot Air Output Apprx (CFM)	1500
Fuel	Propane Vapor	Motor (Thermally Protected)	1725 RPM, 1/5 hp
Fuel Consumption (Approx.)		Electrical Input	120V, 60 Hz
Gallons per hour	2.5 Min/4.0 Max	Amperage	4.2
Pounds per hour	10.4 Min/17.4 Max	Ignition	Direct Spark
Gas Supply Pressure for the purpose of Input Adjustment		Weight Apprx (Lbs)	42
Minimum	25 psi	Shipping Weight Apprx (Lbs)	49
Maximum	Bottle Pressure	Size - Inches	
Regulator Outlet Pressure	7-20 psi	Length x Width x Height	32 x 13 x 19 1/2

REDDY LP GAS

Model#	Motor	Thermocouple/ Flame Sensor	Ignition Control/ D.S.I.	Valve, Safety/ Auto Control	Fan Blade	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Hose/Reg Assy	Spark Generator
RLP30	104156-01	104146-02 Thermocouple 100898-01 Nut (qty 2)	NA	104144-01 7111NR Power Coil	101478-02	101732-05 Limit	104784-01	LPA2170	See Valve	LPA1020 (10ft) 25.25 (25ft)	LPA3120	102445-01 Piezo
RLP30A	113849-01	115264-01	NA	113834-03	113851-01	113848-01	113847-01	113819-01	See Valve	LPA1020	113835-01	102445-01
RLP35	099521-01	099538-01 Thermocouple	NA	099728-01 7111NR Power Coil	099537-01	101732-05 Limit	099539-01	LPA2110	See Valve	LPA1020 (10ft) 25.25 (25ft)	LPA3090	102445-01 Piezo
RLP35A	113849-01	115264-01	NA	113834-01	113851-01	113848-01	113847-01	113819-01	See Valve	LPA1020	113835-01	102445-01
RM40LP	104156-01	104146-02 Thermocouple 100898-01 Nut (qty 2)	NA	104144-03 7111NR Power Coil	101478-02	101732-05 Limit	104784-01	LPA2170	See Valve	LPA1020 (10ft) 25.25 (25ft)	LPA2170	102445-01 Piezo
RLP40	113849-01	115264-01	NA	113834-02	113851-01	113848-01	113847-01	113819-01	See Valve	LPA1020	113835-01	102445-01
SPC35	113849-01	115264-01	NA	113834-02	113851-01	113848-01	113847-01	113819-01	See Valve	LPA1020	113835-01	102445-01
35FAC	113849-01	115264-01	NA	113834-01	113851-01	113848-01	113847-01	113819-01	See Valve	LPA1020	113835-01	102445-01
RLP45	079054-01	M51580-01 Flame Sensor	M51605-01	079473-02	M50893-01	079147-02 Sail	HA3013	LPA2070	078980-03	LPA1000 (10ft) 38.25 (25ft)	LPA3010	NA
RLP50	100589-01	099538-01 Thermocouple	NA	100591-01 7111NR Power Coil	099537-03	101732-01 Limit	100588-01	See Hose/Reg Assy	See Valve	LPA1020 (10ft) 25.25 (25ft)	LPA3055	102445-01 Piezo
RLP50A	103864-01	099538-01 Thermocouple	NA	100591-01 7111NR Power Coil	103861-01	101732-01 Limit	100588-01	See Hose/Reg Assy	See Valve	LPA1020 (10ft) 25.25 (25ft)	LPA3055	102445-01 Piezo
RLP50V	103864-01	099538-01 Thermocouple	NA	103921-01 7111NR Power Coil	099537-03	101481-05 Limit	100588-01	See Hose/Reg Assy	See Valve	LPA1020 (10ft) 25.25 (25ft)	LPA3055	102445-01 Piezo
RLP50VA	105332-01	104146-02 Thermocouple 100898-01 Nut (qty 2)	NA	103921-01 7111NR Power Coil	101478-03	101481-01 Limit	099539-01	See Hose/Reg Assy	See Valve	LPA1020 (10ft) 25.25 (25ft)	LPA3055	102445-01 Piezo
RLP55V	113880-01	113884-01	NA	113871-01	113881-01	113889-01	113885-01	113862-01	113890-01	113776-01	NA	113867-01
RLP55VA	121206-01	113884-01	NA	121230-01	121209-01	121244-01	121213-01	113862-01	121245-01	LPA1000	121205-01	113867-01
RLP80	079054-01	M51580-01 Flame Sensor	M51605-01	079473-02	M51107-01	079147-01 Sail	HA3013	LPA2080	078980-02 38.25 (25ft)	LPA1000 (10ft)	LPA3080	NA
RLP85V	113860-01	113884-01	NA	113871-01	113881-01	113889-01	113885-02	113862-01	113920-01	113776-01	NA	113867-01
RLP100	102366-01	099538-01 Thermocouple	NA	103846-01 7111NR Power Coil	M51153-01	101732-01 Limit 103847-01 Relay Kit	102487-01	LPA2150	099138-02	LPA1000 (10ft) 38.25 (25ft)	LPA3100	102601-01 Eaton
RLP100A	107373-01	104146-02 Thermocouple 100898-01 Nut (qty 2)	NA	102367-02 7111NR Power Coil	M51153-02	101481-04 Limit	099133-02	See Hose/Reg Assy	106188-01	See Hose/Reg Assy	079060-06	102601-01 Eaton
RLP125V	113860-01	113884-01	NA	113871-01	114160-01	113889-02	113885-02	113862-01	113890-02	113776-01	NA	113867-01
RLP125VA	121207-01	113884-01	NA	113871-01	121210-01	121244-01	121213-02	113862-01	121245-02	LPA1000	121205-01	113867-01
RLP150	105336-01	M51580-01 Flame Sensor	M51605-01	079473-01	M23147	079147-01 Sail	HA3013	LPA2090	078980-01	LPA1000 (10ft) 38.25 (25ft)	LPA3020	NA
RLP155	105336-01	NA	M51605-02	099132-01	M51153-01	097952-03 Limit	099133-01	LPA2100	099138-01	LPA1010(10ft) 38.25 (25ft)	LPA3070	NA
RLP155A	105336-01	NA	M51605-02	099132-01	M51153-01	101732-01 Limit	099133-01	LPA2100	099138-01	LPA1010(10ft) 38.25 (25ft)	LPA3070	NA
RLP155AT (2003)	105336-01	NA	110287-01 110267-01 Wire Harness	103015-01	M51153-01	101732-01 Limit	099133-01	LPA2100	099138-01	LPA1010(10ft) 38.25 (25ft)	LPA3070	NA
RLP170VTA	121208-01	NA	121233-01	113951-01	121211-01	113848-01	121213-03	113862-01	121245-04	LPA1000	121205-01	NA
RLP375A RLP375AT	097802-01	NA	M51605-02	098201-01	097811-01	101732-03 Limit	097805-01	LPA2020	099679-01	LPA1020 (10ft) 25.25 (25ft)	LPA3030	NA
RLP375AT (2003)	097802-01	NA	110287-01 110267-01 Wire Harness	098201-01	097811-01	101732-03 Limit	097805-01	LPA2020	099679-01	LPA1020 (10ft) 25.25 (25ft)	LPA3030	NA

MASTER LP GAS

Model#	Motor	Thermocouple/ Flame Sensor	Igniting Control/ D.S.I.	Valve/Safety Auto Control	Fan Blade	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Hose/Reg Assy	Spark Generator
BLP30	104156-01	104146-02 Thermocouple 100898-01 Nut (Qty 2)	NA	7111NR Power Coil	101478-02	101732-05 Limit	104784-01	LPA2170	See Valve	LPA1020 (1.0ft) 25.25 (25ft)	LPA3120	102445-01 Piezo
BLP35	099521-01	099538-01 Thermocouple	NA	7111NR Power Coil	099537-01	101723-02 Limit	099539-01	LPA2110	See Valve	LPA1020 (1.0ft) 25.25 (25ft)	LPA3090	102445-01 Piezo
BLP42	104156-01	104146-02 Thermocouple 100898-01 Nut (Qty 2)	NA	104144-03	101478-02	101732-05	104784-01	LPA2170	See Valve	LPA1020 (1.0ft) 25.25 (25ft)	LPA3120	102445-01 Piezo
BLP42A	113849-01	115264-01	NA	113834-02	113851-01	113848-01	113847-01	113819-01	See Valve	LPA1020	113835-01	102445-01
SPC40A	113849-01	115264-01	NA	113834-02	113851-01	113848-01	113847-01	113819-01	See Valve	LPA1020	113835-01	102445-01
BLP45	079054-01	M51580-01 Flame Sensor	M51605-01	079473-02	M50893-01	079147-02 Sail	HA3013	LPA2070	078980-03	LPA1020 (1.0ft) 38.25 (25ft)	LPA3010	NA
BLP50	100589-01	099538-01 Thermocouple	NA	100591-01 Power Coil	099537-03	101732-01 Limit	100588-01	See Hose/Reg Assy	See Valve	LPA1020 (1.0ft) 25.25 (25ft)	LPA3055	102445-01 Piezo
BLP50A	103864-01	099538-01 Thermocouple	NA	100591-01 Power Coil	103865-01	101732-01 Limit	100588-01	See Hose/Reg Assy	See Valve	LPA1020 (1.0ft) 25.25 (25ft)	LPA3055	102445-01 Piezo
BLP50V	103864-01	099538-01 Thermocouple	NA	103921-01 Power Coil	099537-03	101481-01 Limit	100588-01	See Hose/Reg Assy	See Valve	LPA1020 (1.0ft) 25.25 (25ft)	LPA3055	102445-01 Piezo
BLP50VA	105332-01	104146-02 Thermocouple 100898-01 Nut (Qty 2)	NA	103921-01 Power Coil	101478-01	101481-04 Limit	099539-01	See Hose/Reg Assy	See Valve	LPA1020 (1.0ft) 25.25 (25ft)	LPA3055	102445-01 Piezo
BLP55V	113880-01	113884-01	NA	113871-01	113881-01	113889-01	113885-01	113862-01	113890-01	113776-01	NA	113867-01
SPC55	113880-01	113884-01	NA	113871-01	113881-01	113889-01	113885-01	113862-01	113890-01	113776-01	NA	113867-01
55F	113880-01	113884-01	NA	113871-01	113881-01	113889-01	113885-01	113862-01	113890-01	113776-01	NA	113867-01
BLP55VA	121206-01	113884-01	NA	121230-01	121209-01	121244-01	121213-01	113862-01	121245-01	LPA1000	121205-01	113867-01
BLP80	079054-01	M51580-01 Flame Sensor	M51605-01	079473-02	M51107-01	079147-01 Sail	HA3013	LPA2080	078980-02	LPA1000 (1.0ft) 38.25 (25ft)	LPA3010	NA
BLP85V	113860-01	113884-01	NA	113871-01	113881-01	113889-01	113885-02	113862-01	113920-01	113776-01	NA	113867-01
SPC85	113860-01	113884-01	NA	113871-01	113881-01	113889-01	113885-02	113862-01	113920-01	113776-01	NA	113867-01
85FAC	113860-01	113884-01	NA	113871-01	113881-01	113889-01	113885-02	113862-01	113920-01	113776-01	NA	113867-01
BLP100	102366-01	099538-01 Thermocouple	NA	103846-01 Power Coil	M51153-01	101732-04 Limit 103847-01 Relay Kit	102487-01	LPA2150	099138-02	LPA1000 (1.0ft) 38.25 (25ft)	LPA3100	102601-01 Eaton
BLP100A	107373-01	104146-02 Thermocouple 100898-01 Nut (Qty 2)	NA	102367-02	M51153-02	101481-04 Limit	099133-02	See Hose/Reg Assy	106188-01	See Hose/Reg Assy	079060-06	102601-01 Eaton
BLP125V	113860-01	113884-01	NA	113871-01	114160-01	113889-02	113885-02	113862-01	113890-02	113776-01	NA	113867-01
SPC125	113860-01	113884-01	NA	113871-01	114160-01	113889-02	113885-02	113862-01	113890-02	113776-01	NA	113867-01
BLP125VA	121207-01	113884-01	NA	113871-01	121210-01	121244-01	121213-02	113862-01	121245-02	LPA1000	121205-01	113867-01
SPC125VA	121207-01	113884-01	NA	113871-01	121210-01	121244-01	121213-02	113862-01	121245-02	LPA1000	121205-01	113867-01
125FA	121207-01	113884-01	NA	113871-01	121210-01	121244-01	121213-02	113862-01	121245-02	LPA1000	121205-01	113867-01
BLP150	105336-01	M51580-01 Flame Sensor	M51605-01	079473-01	M23147	079147-01 Sail	HA3013	LPA2090	078980-01	LPA1000 (1.0ft) 38.25 (25ft)	LPA3020	NA
BLP155	105336-01	NA	M51605-02	099132-01	M51153-01	079752-03 Limit	099133-01	LPA2100	099138-01	LPA1010 (1.0ft) 38.25 (25ft)	LPA3070	NA
BLP155A	105336-01	NA	M51605-02	099132-01	M51153-01	101732-01 Limit	099133-01	LPA2100	099138-01	LPA1010 (1.0ft) 38.25 (25ft)	LPA3070	NA
BLP155AT	105336-01	NA	M51605-02	103015-01	M51153-01	101732-01 Limit	099133-01	LPA2100	099138-01	LPA1010 (1.0ft) 38.25 (25ft)	LPA3070	NA
BLP155AT (2003)	105336-01	NA	110287-01 Wire Harness	103015-01	M51153-01	101481-07 Limit	099133-01	LPA2100	099138-01	LPA1010 (1.0ft) 38.25 (25ft)	LPA3070	NA
BLP170VT	113941-01	NA	110287-01	113951-01	113950-01	6168NR	113963-01	113862-01	113940-01	6152NR	NA	113954-01
BLP170VTA	121208-01	NA	121233-01	113951-01	121211-01	113848-01	121213-03	113862-01	121245-04	LPA1000	121205-01	NA
SPC170FA	121208-01	NA	121233-01	113951-01	121211-01	113848-01	121213-03	113862-01	121245-04	LPA1000	121205-01	NA
170FA	121208-01	NA	121233-01	113951-01	121211-01	113848-01	121213-03	113862-01	121245-04	LPA1000	121205-01	NA
BLP375	097802-01	NA	098884-01	098201-01	097811-01	097952-01 Limit	097805-01	LPA2020	097810-01	LPA1020 (1.0ft) 25.25 (25ft)	LPA3030	NA
BLP375A	097802-01	NA	M51605-02	098201-01	097811-01	097952-01 Limit	097805-01	LPA2020	097810-01	LPA1020 (1.0ft) 25.25 (25ft)	LPA3030	NA
BLP375AT (2003)	097802-01	NA	110267-01 Wire Harness	098201-01	097811-01	101732-03 Limit	097805-01	LPA2020	099679-01	LPA1020 (1.0ft) 25.25 (25ft)	LPA3030	NA

MASTER LP GAS (TB SERIES)

Model#	Motor	Thermocouple/ Flame Sensor	Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan Blade	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Hose/Reg Assy	Spark Generator
TB100	113880-02	104146-05	NA	113871-01	113881-01	101481-12	097805-04	NA	118685-01	LPA1020	118774-04	113867-01
TB104	113880-02	104146-05	NA	113871-01	113881-01	101481-12	097805-04	NA	118685-01	LPA1020	118774-04	113867-01
TB106	113880-02	104146-05	NA	113871-01	113881-01	101481-12	097805-04	NA	118685-01	LPA1020	118774-04	113867-01
TB110	113880-02	104146-05	NA	113871-01	113881-01	101481-12	097805-04	NA	118685-01	LPA1020	118774-04	113867-01
TB102	113860-02	104146-05	NA	113871-01	113881-01	101481-04	097805-04	NA	118685-02	LPA1020	118774-01	113867-01
TB111	113860-02	104146-05	NA	113871-01	113881-01	101481-04	097805-04	NA	118685-02	LPA1020	118774-01	113867-01
TB114	113860-02	104146-05	NA	113871-01	113881-01	101481-04	097805-04	NA	118685-02	LPA1020	118774-01	113867-01
TB105	113860-02	104146-05	NA	113871-01	114160-01	101481-13	097805-03	NA	118685-03	LPA1020	118774-02	113867-01
TB107	113860-02	104146-05	NA	113871-01	114160-01	101481-13	097805-03	NA	118685-03	LPA1020	118774-02	113867-01
TB112	113860-02	104146-05	NA	113871-01	114160-01	101481-13	097805-03	NA	118685-03	LPA1020	118774-02	113867-01
TB103	113941-02	NA	110287-01	098201-01	113950-01	101481-05	097805-03	NA	118685-04	LPA1020	118774-03	NA
TB108	113941-02	NA	110287-01	098201-01	113950-01	101481-05	097805-03	NA	118685-04	LPA1020	118774-03	NA
TB113	113941-02	NA	110287-01	098201-01	113950-01	101481-05	097805-03	NA	118685-04	LPA1020	118774-03	NA
TB115	113880-01	113884-01	NA	113871-01	113889-01	113889-01	113885-01	113862-01	113890-01	113776-01	NA	113867-01
TB115A	121206-01	113884-01	NA	113871-01	121209-01	121244-01	121213-01	113862-01	121245-01	LPA1000	121205-01	113867-01
TB116	119753-01	NA	M51605-05	103015-01	See Motor	101481-12	103934-01	LPA2100	103845-15	381050	078923-04	NA
TB116A	119753-01	NA	M51605-05	103015-01	See Motor	101481-12	103934-01	LPA2100	103845-15	381050	078923-04	NA
TB117	119753-01	NA	M51605-05	103015-01	See Motor	101481-12	103934-01	LPA2100	103845-15	381050	078923-04	NA
TB117A	119753-01	NA	M51605-05	103015-01	See Motor	101481-12	103934-01	LPA2100	103845-15	381050	078923-04	NA
TB118	119753-01	NA	M51605-05	103015-01	See Motor	101481-12	103934-01	LPA2100	103845-15	381050	078923-04	NA
TB118A	119753-01	NA	M51605-05	103015-01	See Motor	101481-12	103934-01	LPA2100	103845-15	381050	078923-04	NA

REMINGTON LP GAS

Model#	Motor	Thermocouple/ Flame Sensor	Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan Blade	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Hose/Reg Assy	Spark Generator
REM30LP	104156-01	104146-02 Thermocouple 100898-01 Nut (Qty 2)	NA	104144-01 71111NR Power Coil	101478-02	101732-05 Limit	104784-01	LPA2170	See Valve	LPA1020 (10ft) 25.25 (2.5ft)	LPA3120	102445-01 Piezo
REM30LPA	113849-01	115264-01	NA	113834-03	113851-01	113848-01	113847-01	113819-01	See Valve	LPA1020	113835-01	102445-01
REM35LP	099521-01	099538-01 Thermocouple	NA	099228-01 71111NR Power Coil	099537-01	101732-02 Limit	099539-01	LPA2110	See Valve	LPA1020 (10ft) 25.25 (2.5ft)	LPA3090	102445-01 Piezo
REM50LP	100589-01	099538-01	NA	100591-01 71111NR Power Coil	099537-03	101732-01 Limit	100588-01	See Hose/Reg Assy	See Valve	LPA1020 (10ft) 25.25 (2.5ft)	LPA3055	102445-01 Piezo
REM50LPA	103864-01	099538-01	NA	100591-01 71111NR Power Coil	103865-01	101732-01 Limit	100588-01	See Hose/Reg Assy	See Valve	LPA1020 (10ft) 25.25 (2.5ft)	LPA3055	102445-01 Piezo
REM50PV	103864-01	099538-01	NA	103921-01 71111NR Power Coil	099537-03	101732-01 Limit	100588-01	See Hose/Reg Assy	See Valve	LPA1020 (10ft) 25.25 (2.5ft)	LPA3055	102445-01 Piezo
REM50PVA	105332-01	104146-02 Thermocouple 100898-01 Nut (Qty 2)	NA	103921-01 71111NR Power Coil	101478-03 71111NR Power Coil	101481-04 Limit	099539-01	See Hose/Reg Assy	See Valve	LPA1020 (10ft)	LPA3055 25.25 (2.5ft)	102445-01 Piezo
REM55PV	113880-01	113884-01	NA	113871-01	113881-01	113889-01	113885-01	113862-01	113890-01	113776-01	NA	113867-01
REM55PVA	121206-01	113884-01	NA	121230-01	121209-01	121244-01	121213-01	113862-01	121245-01	LPA1000	121205-01	113867-01
REM85PV	113860-01	113884-01	NA	113871-01	113881-01	113889-01	113885-02	113862-01	113920-01	113776-01	NA	113867-01
REM100LP	102366-01	099538-01	NA	103846-01 71111NR Power Coil	M51153-01	103847-01 Limit 101732-04 Limit	102487-01	LPA2150	099138-02	LPA1000 (10ft) 38.25 (2.5ft)	LPA3100	102601-01
REM100LPA	107373-01	104146-02 Thermocouple 100898-01 Nut (Qty 2)	NA	102367-02	M51153-02	101481-04 Limit	099133-02	See Hose/Reg Assy	106188-01	See Hose/Reg Assy	079060-06	102601-01 Eaton
REM125PV	113860-01	113884-01	NA	113871-01	114160-01	113889-02	113885-02	113862-01	113920-01	113776-01	NA	113867-01
REM125PVA	121207-01	113884-01	NA	113871-01	121210-01	121244-01	121213-02	113862-01	121245-02	LPA1000	121205-01	113867-01
REM150LP	105336-01	M51580-01	M51605-01	079473-01	M23147	079147-01 Sail	HA3013	LPA2090	078980-01	LPA1000 (10ft) 38.25 (2.5ft)	LPA3020	NA
REM170VTA	121208-01	NA	121233-01	113951-01	121211-01	113848-01	121213-03	113862-01	121245-04	LPA1000	121205-01	NA
BLP375	097802-01	NA	098884-01	098201-01	097811-01	097952-01 Limit	097805-01	LPA2020	097810-01	LPA1020 (10ft) 25.25 (2.5ft)	LPA3030	NA
BLP375A	097802-01	NA	M51605-02	098201-01	097811-01	097952-01 Limit	097805-01	LPA2020	097810-01	LPA1020 (10ft) 25.25 (2.5ft)	LPA3030	NA
BLP375AT	097802-01	NA	110287-01 110267-01 Wire Harness	098201-01	097811-01	101732-03 Limit	097805-01	LPA2020	099679-01	LPA1020 (10ft) 25.25 (2.5ft)	LPA3030	NA

VANGUARD LP GAS

Model#	Motor	Thermocouple/ Flame Sensor	Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan Blade	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Hose/Reg Assy	Spark Generator
VLP35	099521-01	099538-01	NA	099728-01 7111NR Power Coil	099537-01	101732-02 Limit	099539-01	LPA2110	See Valve	LPA1020 (10ft) 2525 (25ft)	LPA3090	102445-01
VLP45	079054-01	M51580-01	M51605-01	079473-02	M50893-01	079147-02 Sail	HA3013	LPA2070	078980-03	LPA1000 (10ft) 3825 (25ft)	LPA3010	NA
VLP80	079054-01	M51580-01	M51605-01	079473-02	M51107-01	079147-01 Sail	HA3013	LPA2080	078980-02	LPA1000 (10ft) 3825 (25ft)	LPA3010	NA
VLP150	105336-01	M51580-01	M51605-01	079473-01	M23147	079147-01 Sail	HA3013	LPA2090	078980-01	LPA1000 (10ft) 3825 (25ft)	LPA3020	NA
VLP155	105336-01	M51580-01	M51605-02	099132-01	M51153-01	097952-03 Limit	099133-01	LPA2100	099138-01	LPA1010(10ft) 382550 (25ft)	LPA3070	NA
VLP375	097802-01	NA	098884-01	098201-01	097811-01	097952-01 Limit	097805-01	LPA2020	097810-01	LPA1020 (10ft) 2525 (25ft)	LPA3030	NA
VLP375A	097802-01	NA	M51605-02	098201-01	097811-01	097952-01 Limit	097805-01	LPA2020	097810-01	LPA1020 (10ft)	LPA3030	NA

DESA LP GAS

Model#	Motor	Thermocouple/ Flame Sensor	Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan Blade	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Hose/Reg Assy	Spark Generator
C35LP	099521-01	099538-01	NA	099728-01 7111NR Power Coil	099537-01	101732-02 Limit	099539-01	LPA2110	See Valve	LPA1020 (10ft) 2525 (25ft)	LPA3090	102445-01 Piezo
C155LP	105336-01	NA	M51605-02	099132-01	M51153-01	097952-03 Limit	099133-01	LPA2100	099138-01	LPA1010 (10ft) 382550 (25ft)	LPA3070	NA
C375LP	097802-01	NA	098884-01	098201-01	097811-01	097952-01 Limit	097805-01	LPA2020	097810-01	LPA1020 (10ft) 2525 (25ft)	LPA3030	NA

SUNBELT LP GAS

Model#	Motor	Thermocouple/ Flame Sensor	Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan Blade	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Hose/Reg Assy	Spark Generator
SBLP155AT	105336-01	NA	110287-01 110267-01 Wire Harness	103015-01	M51153-01	101487-01 Limit	099133-01	LPA2100	099138-01	LPA1010(10ft) 382550 (25ft)	LPA3070	NA
SBLP170VTA	121208-01	NA	121233-01	113951-01	121211-01	113848-01	121213-03	113862-01	121245-04	LPA1000	121205-01	NA
SBLP375AT	097802-01	NA	110287-01 110267-01 Wire Harness	098201-01	097811-01	101732-03 Limit	097805-01	LPA2020	099679-01	LPA1020 (10ft) 2525 (25ft)	LPA3030	NA

MASTER NATURAL GAS

Model#	Motor	Thermocouple	Ignition Control/D.S.I.	Valve:Solenoid/Thermoelectric	Safety Switches	FAN	Igniter/Electrode	Regulator	Orifice: Pilot/Burner
BNG150T	105336-01	NA	M51605-02	103403-01 Solenoid	101481-05 High Limit	M51153-01	103934-01	103406-01	103891-01 Nozzle
BNG150T (2003)	105336-01	NA	110287-01 110267-01 Harness	103403-01 Solenoid	101481-05 High Limit	M51153-01	103934-01	103406-01	103891-01 Nozzle
TC100RNG	NA	099237-01 099236-01 Clip	NA	104119-01 Thermoelectric	NA	NA	102445-01 Piezo 104118-01 Electrode	103936-01	097161-04 Pilot 099138-03 Burner
TC100VRNG	NA	107374-01	NA	103930-03 Thermoelectric 7111NR Power Coil	NA	NA	102445-01 Piezo 106174-02 Electrode	103406-02	106184-02 Burner Kit
TC250RNG	NA	097151-01	NA	097155-01 Thermoelectric 7111NR Power Coil	NA	NA	102445-01 Piezo 104118-01 Electrode	104141-01	097161-01 Pilot 099138-05 Burner

REDDY PROPANE CONVECTION & RADIANT HEATERS

Model#	Thermocouple	T.E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
RCP25	099236-01 099237-01 Nut	101864-01 7111NR Power Coil	LPA4000 Piezo 101878-01 Electrode	LPA2025	097161-01 Pilot 097162-01 Burner	LPA1025 (10ft)	LPA3025 Hose & Reg Assy 101864-01 Complete Burner Assy
RCP80	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 099539-02 Electrode	LPA2130	097163-03 Pilot Assy 099679-01 Burner	LPA1000 (10ft) 3825 (25ft)	LPA3035 Hose & Reg Assy
RCP80V	099236-01 099237-01 Nut	103030-01 7111NR Power Coil	102445-01 Piezo 103904-01 Electrode	LPA2160	103032-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3110 Hose & Reg Assy 103036-01 Stealth Knob
RCP80VA	113790-01	113787-01	113797-01	113792-01	See Valve	113776-01 (10ft) 3825 (25ft)	113793-01 Ball Valve 113809-01 Ball Valve Knob
RCP80VB	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113792-01	113799-01 Pilot 113784-01 Burner	LPA1000	
RCP80VC	113790-01 100898-01 Nut	116554-01	102445-01 Piezo 116617-01 Electrode	113862-01	116556-01	LPA1000	115626-01 Hose & Reg Assy
RCP200	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2050	097161-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3060 Hose & Reg Assy 097152-01 Manual Control Valve
RCP2000	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 101278-01 Electrode	LPA2005	097161-01 Pilot 097162-02 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3005 Hose & Reg Assy 097152-01 Manual Control Valve
RCP200V	099236-01 099237-01 Nut	103926-01 7111NR Power Coil	102445-01 Piezo 103398-01 Electrode	LPA2005	097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3005 Hose & Reg Assy 103924-01 Knob
RCP200VA	113790-01	113787-01	113797-01	113819-01	See Valve	113815-01 (10ft) 2525 (25ft)	113793-01 Ball Valve 113809-01 Ball Valve Knob
RCP200VB	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113819-01	113799-01 Pilot 113784-01 Burner	LPA1020	113793-01 Manual Control Valve
RCP250	099236-01	097155-01	LPA4000 Piezo	LPA2010	097163-03 Pilot Assy	LPA1020 (10ft)	LPA3000 Hose & Reg Assy
RCP275	099237-01 Nut	7111NR Power Coil	097150-01 Electrode	097162-01 Burner	097162-01 Burner	2525 (25ft)	097152-01 Manual Control Valve

REMINGTON PROPANE CONVECTION & RADIANT HEATERS

Model#	Thermocouple	T.E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
REM25LP	099236-01 099237-01 Nut	101864-01 7111NR Power Coil	102445-01 Piezo 101878-01 Electrode	LPA2025	097161-01 Pilot 097162-01 Burner	LPA1025 (10ft)	LPA3025 Hose & Reg Assy 101864-01 Complete Burner Assy
REM200LP	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2010	097161-01 Pilot 097162-02 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3005 Hose & Reg Assy 097152-01 Manual Control Valve
REM2000	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	102445-01 Piezo 101278-01 Electrode	LPA2005	097161-01 Pilot 097162-02 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3060 Hose & Reg Assy 097152-01 Manual Control Valve
REM275	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	102445-01 Piezo 097150-01 Electrode	LPA2010	097161-01 Pilot 097162-02 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3000 Hose & Reg Assy 097152-01 Manual Control Valve

Model#	Thermocouple	T.E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
VCP80	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	102445-01 Piezo 099539-02 Electrode	LPA2130	097163-01 Pilot 099679-01 Burner	LPA1000 (10ft) 3825 (25ft)	LPA3035 Hose & Reg Assy 097152-01 Manual Control Valve
VCP200	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2050	097161-01 Pilot 097162-02 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3060 Hose & Reg Assy 097152-01 Manual Control Valve
VCP250	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	102445-01 Piezo 097150-01 Electrode	LPA2010	097163-03 Pilot Assy 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3000 Hose & Reg Assy 097152-01 Manual Control Valve
VCP250A	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2010	097161-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3000 Hose & Reg Assy 097152-01 Manual Control Valve
VCP275	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2010	097161-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3000 Hose & Reg Assy 097152-01 Manual Control Valve

VANGUARD PROPANE CONVECTION & RADIANT HEATERS

MASTER PROPANE CONVECTION & RADIANT HEATERS

Model#	Thermocouple	T.E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
TC25	099236-01 099237-01 Nut	101864-01 7111NR Power Coil	102445-01 Piezo 101878-01 Electrode	LPA2025	097161-01 Pilot 097162-01 Burner	LPA1025 (10ft)	LPA3025 Hose & Reg Assy 101864-01 Complete Burner Assy
TC80	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	102445-01 Piezo 099539-02 Electrode	LPA2130	097163-03 Pilot Assy 099682-01 Burner	LPA1000 (10ft) 3825 (25ft)	LPA3035 Hose & Reg Assy 097152-01 Manual Control Valve
TC80V	099236-01 099237-01 Nut	103030-01 7111NR Power Coil	102445-01 Piezo 103904-01 Electrode	LPA2160	103032-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3110 Hose & Reg Assy 103036-01 Sleath Knob
TC80VA	113790-01	113787-01	113797-01	113792-01	See Valve	113776-01 (10ft) 3825 (25ft)	113793-01 Bail Valve 113809-01 = Bail Valve Knob
TC80VB	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113792-01	113799-01 Pilot 113784-01 Burner	LPA1000	
SPC80C	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113792-01	113799-01 Pilot 113784-01 Burner	LPA1000	
SPC80CB	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113792-01	113799-01 Pilot 113784-01 Burner	LPA1000	
80GB	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113792-01	113799-01 Pilot 113784-01 Burner	LPA1000	
TC80VC	113790-01 100898-01 Nut	116554-01	102445-01 Piezo 116617-01 Electrode	113862-01	116556-01	LPA1000	115626-01 Hose & Reg Assy
SPC80CC	113790-01 100898-01 Nut	116554-01	102445-01 Piezo 116617-01 Electrode	113862-01	116556-01	LPA1000	115626-01 Hose & Reg Assy
80C	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113792-01	113799-01 Pilot 113784-01 Burner	LPA1000	
80CB	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113792-01	113799-01 Pilot 113784-01 Burner	LPA1000	
80CC	113790-01 100898-01 Nut	116554-01	102445-01 Piezo 116617-01 Electrode	113862-01	116556-01	LPA1000	115626-01 Hose & Reg Assy
TC100R	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	102445-01 Piezo 104718-01 Electrode	LPA2150	097161-03 Pilot Assy 099138-03 Burner	LPA1000 (10ft) 3825 (25ft)	LPA3100 Hose & Reg Assy 097152-01 Manual Control Valve
TC100VR	107374-01	109930-02	102445-01 Piezo 106174-01 Electrode	LPA2160	103032-02 Burner	LPA1000 (10ft) 3825 (25ft)	LPA3110 Hose & Reg Assy 099393-03 Control Knob
TC106	113790-01	116554-01	102445-01 116617-01	NA	116556-01	LPA1000	115626-01 Hose & Reg Assy
TC112	113790-01	116554-01	102445-01 116617-01	NA	116556-01	LPA1000	115626-01 Hose & Reg Assy
TC113	113790-01	116554-01	102445-01 116617-01	NA	116556-01	LPA1000	115626-01 Hose & Reg Assy
TC114	113790-01	116554-01	102445-01 116617-01	NA	116556-01	LPA1000	115626-01 Hose & Reg Assy
TC115	113790-01	116554-01	102445-01 116617-01	NA	116556-01	LPA1000	115626-01 Hose & Reg Assy
TC101	099236-01	101864-01	102445-01 Piezo 101878-01 Electrode	NA	See Valve	NA	LPA3025 Hose & Reg Assy
TC102	099236-01	101864-01	102445-01 Piezo 101878-01 Electrode	NA	See Valve	NA	LPA3025 Hose & Reg Assy
TC103	099236-01	101864-01	102445-01 Piezo 101878-01 Electrode	NA	See Valve	NA	LPA3025 Hose & Reg Assy
TC104	099236-01	101864-01	102445-01 Piezo 101878-01 Electrode	NA	See Valve	NA	LPA3025 Hose & Reg Assy
TC105	099236-01	101864-01	102445-01 Piezo 101878-01 Electrode	NA	See Valve	NA	LPA3025 Hose & Reg Assy
TC106A	113790-01 100898-01 Nut	116554-01	102445-01 Piezo 116617-01	NA	121513-01	LPA1000	121992-01 Hose & Reg Assy

MASTER PROPANE CONVECTION & RADIANT HEATERS (CONTINUED)

Model#	Thermocouple	T. E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
TC112A	113790-01 100898-01 Nut	116554-01	102445-01 Piezo	NA	121513-01	LPA1000	121992-01 Hose & Reg Assy
TC113A	113790-01 100898-01 Nut	116554-01	102445-01 Piezo	NA	121513-01	LPA1000	121992-01 Hose & Reg Assy
TC114A	113790-01 100898-01 Nut	116554-01	102445-01 Piezo	NA	121513-01	LPA1000	121992-01 Hose & Reg Assy
TC115A	113790-01 100898-01 Nut	116554-01	102445-01 Piezo	NA	121513-01	LPA1000	121992-01 Hose & Reg Assy
TC107	113790-01 100898-01 Nut	113787-01	102445-01 Piezo 113797-01 Electrode	113819-01	113820-01 Pilot 113816-01 Burner	LPA1020	113835-01 Hose & Reg Assy 113793-01 Manual Control Valve
TC200	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2050	097161-03 Pilot Assy 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3060 Hose & Reg Assy 097152-01 Manual Control Valve
TC200V	099236-01 099237-01 Nut	103926-01 7111NR Power Coil	102445-01 Piezo 103398-01 Electrode	LPA2005	097161-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3005 Hose & Reg Assy 103924-01 Knob
TC200VA	113790-01	113787-01	113797-01	113819-01	See Valve	113815-01 (10ft) 2525 (25ft)	113793-01 Ball Valve 113809-01 = Ball Valve Knob
TC200VB	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113819-01	113799-01 Pilot 113784-01	LPA1020	113793-01 Manual Control Valve
SPC200C	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113819-01	113799-01 Pilot 113784-01	LPA1020	113793-01 Manual Control Valve
SPC200CB	113790-01 113786-01 Clip	113787-01	102445-01 Piezo 113797-01 Electrode	113819-01	113799-01 Pilot 113784-01	LPA1020	113793-01 Manual Control Valve
TC250	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2010	097163-03 Pilot Assy 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3000 Hose & Reg Assy 097152-01 Manual Control Valve
TC250A	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2010	097161-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3000 Hose & Reg Assy 097152-01 Manual Control Valve
TC275	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	102445-01 Piezo 097150-01 Electrode	LPA2010	097161-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3000 Hose & Reg Assy 097152-01 Manual Control Valve
TC275J	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	102445-01 Piezo 101278-01 Electrode	LPA2005	097161-01 Pilot 097162-02 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3005 Hose & Reg Assy 097152-01 Manual Control Valve

DESA PROPANE CONVECTION & RADIANT HEATERS

Model#	Thermocouple	T. E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
CP200	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2050	097163-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3060 Hose & Reg Assy 097152-01 Manual Control Valve
CP250	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2010	097161-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3060 Hose & Reg Assy 097152-01 Manual Control Valve
DESA250	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2010	097161-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3060 Hose & Reg Assy 097152-01 Manual Control Valve
CP275	099236-01 099237-01 Nut	097155-01 7111NR Power Coil	LPA4000 Piezo 097150-01 Electrode	LPA2010	097161-01 Pilot 097162-01 Burner	LPA1020 (10ft) 2525 (25ft)	LPA3060 Hose & Reg Assy 097152-01 Manual Control Valve

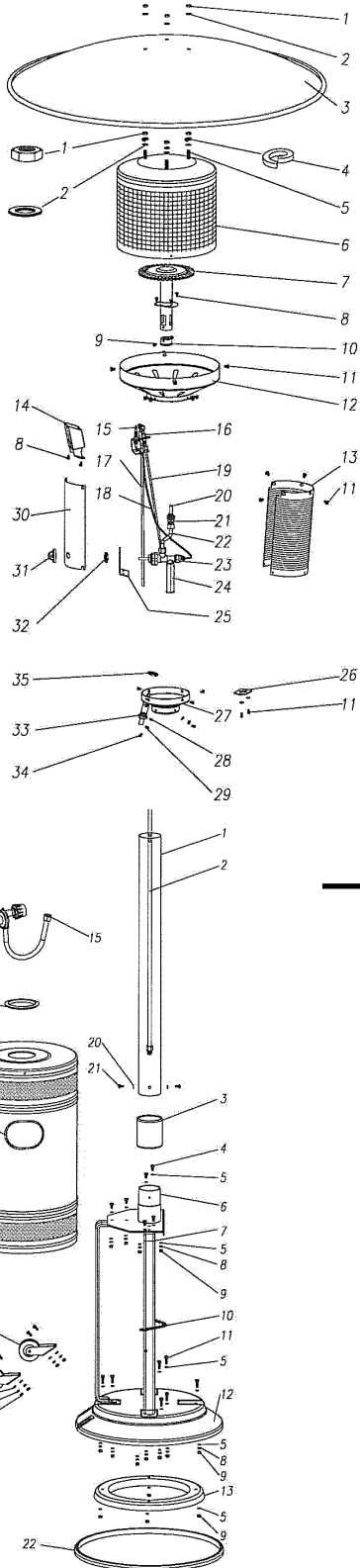
TANK TOPS

Model#	Thermocouple	Orifice	Gas Valve	Hose	Regulator
HD12	100886-01	NA	NA	NA	LPA2025
HD12A	E73117	NA	NA	NA	E73410
HD12B	100886-01	100889-01	NA	NA	LPA2025
HD12C	100886-01	NA	NA	NA	LPA2025
HD12C-A	E73117	NA	NA	P4122	NA
HD12C-B	100886-01	NA	NA	NA	LPA2025
HD15	100886-01	100889-03	NA	NA	LPA2025
HD15A	114100-01	NA	NA	NA	LPA2025
HD15G	114100-01	NA	NA	NA	LPA2025
TC108	114100-01	NA	NA	NA	LPA2025
TC110	100886-01	NA	NA	NA	LPA2025
TC111	100886-01	NA	NA	NA	LPA2025
HD24A	E73117	NA	NLA 7111NR Power Coil (Qty 2)	NA	E73410
HD24B	100886-01	108889-01	NLA 7111NR Power Coil (Qty 2)	100921-01 (Qty 2)	LPA2025
HD30	114100-01	NA	NA	NA	LPA2025
HD30B	100886-01	NA	NA	NA	LPA2025
HD30G	114100-01	NA	NA	NA	LPA2025
TC109	114100-01	NA	NA	NA	LPA2025
TT15	100886-01	100889-03	NLA 7111NR Power Coil	NA	LPA2025
TT15A	114100-01	NA	NA	NA	LPA2025
TT15G	114100-01	NA	NA	NA	LPA2025
TT24B	100886-01	108889-01	NLA 7111NR Power Coil (Qty 2)	100921-01 (Qty 2)	LPA2025
TT30B	100886-01	NA	NA	NA	LPA2025
TT30G	114100-01	NA	NA	NA	LPA2025

Patio Comfort Heater

40,000 BTU Radiant Patio Comfort Heater

Model Number
PC02SS



Key No.	Part No.	Description
1	1001PC	Mex-Nut M8 S/S
2	1002PC	Flat Washer 8mm dia. S/S
3	1003PC	Reflector
4	1004PC	Lock Washer 8mm dia. S/S
5	1005PC	Hex-Bolt M8 x 20 mm S/S
6	1006PC	Emitter Grid
7	1007PC	Burner Assy with shield
8	1008PC	Self-tapping T Screw for Pilot Shield M4 x 8mm S/S
9	1009PC	Screw for Burner Retention M4 x 6mm S/S
10	1010-07PC	Base Fitting for Orifice/Main Burner
11	1011PC	Pan Head Screw M5 x 8mm S/S
12	1012PC	Pan Assy S/S
13	1013PC	Perforated Body
14	1014PC	Pilot Shield
15	1015PC	Electrode
16	1016PC	Pilot Assy
17	1017PC	Wire Insulation
18	1018PC	Thermocouple
19	1019PC	Pilot Tube Assy
20	1020-07PC	Orifice for Main Burner
21	1010-07PC	Base Fitting for Orifice/Main Burner
22	1022-07PC	Tube Assy for Burner
23	1023PC	Thermoelectric Control Valve
24	1024PC	Extension Fitting at Valve Base
25	1025PC	Bracket for Valve Mounting
26	1026PC	Bracket for Fuel-Tube
27	1027PC	Base Assy for Heater Head
28	1028PC	Flat Washer 6mm dia. S/S
29	1029PC	Lock Washer 6mm dia. S/S
30	1030PC	Faceplate for Lighting Instruction S/S
31	1031PC	Knob
32	1032PC	Specific Nut for Valve
33	1033PC	Piezo Igniter
34	1034PC	Pan Head Screw M6 x 12mm S/S
35	1035PC	Specific Nut for Igniter
36	1036PC	Pilot Orifice
37	1037PC	Self-tapping Pan Head Screw M5x10 S/S

Key No.	Part No.	Description
1	4101PC	Post 3" x 36" S/S
2	1102PC	Fuel Tube
3	4103PC	Slip Socket Cover S/S
4	1104-04PC	Hex Bolt M6 x 20mm S/S
5	1105PC	Flat Washer 6mm dia. S/S
6	4106PC	Socket Assy for S/S
7	4107PC	"L" Brckt for S/S
8	1108PC	Lock Washer 6mm dia. S/S
9	1109PC	Hex-Nut M6 S/S
10	1110PC	Chain Assy for Tank Restraint
11	1111PC	Hex-Bolt M6 x 40mm S/S
12	4112PC	Base S/S
13	1113PC	Ballast Weight for all Bases
14	1114PC	Regulator with type 1 QCC Tank Adapter
15	1115PC	Hose Assy 3/8" Female Flare
16	1116PC	Molding for Decorative Socket
18	4118PC	Decorative Cover S/S
19	4119PC	Wheel Assy w/Bracket (1 ea.) S/S
20	NSNPC	Flat Washer 6mm dia. S/S
21	1122PC	Pan Head Screw M6 x 12mm S/S
22	1123PC	Molding for Base Bottom

Paito Comfort

Scheu Gas Fired Heaters

The bestway to replace the ignition control board in your heater is to obtain the manufacturer's part number off of the top of the board for reference.

Name Brands Include:
All-Pro
Universal

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section.

The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater. If your model number does not appear in the breakdowns, please refer to the Quick Parts Reference Parts Guide for common replacement parts.

If you need technical assistance, feel free to call **PHP Technical Service** at **1-800-362-6951 ext 2**. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service. You may also email your technical service questions to us at techservice@phpdistribution.com.

HEATER INDEX

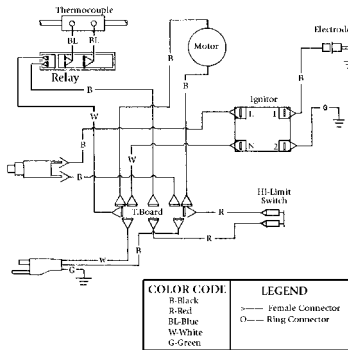
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30,000 BTU Forced Air Scheu Heater

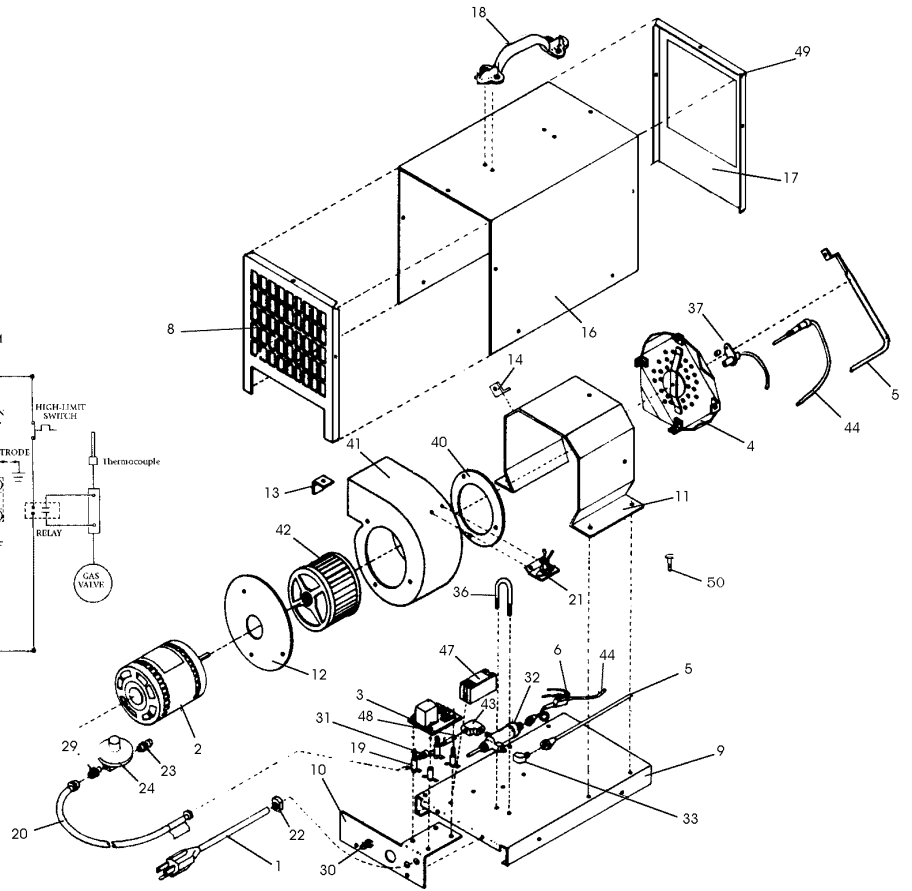
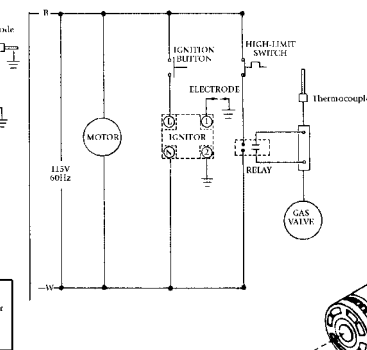
Model Numbers

Universal AllPro
30FAS SPC30

CONNECTION DIAGRAM



30FAS I/R SCHEMATIC DIAGRAM



Key No.	Part No.	Description
1	1036NR	Power Cord Assembly
2	1368NR	Motor Assembly
3	0540NR	Relay Board Assembly - 1811NR Relay
4	1345NR	Flame Holder Assembly
5	1640NR	Fuel Tube Assembly
6	1042NR	Lead Wire Assy. Blue 6" FS x R (qty. 2)
*	1370NR	HT Wire Assy. Red 7" F x FF (qty. 2)
8	3455NR	Front Cover Assembly (30FAS)
	3486NR	Front Cover Assembly (SPC30)
9	3480NR	Base
10	3456NR	Relax Mounting Bracket, 30FAS
11	3478NR	Burner Box
12	3371NR	Motor Plate Mounting
13	3372NR	Blower Exit Bracket
14	3388NR	Blower Bracket
16	3392NR	Housing, (30FAS)
	3367NR	Housing, (SPC30)
17	3393NR	Rear Cover, Housing (30FAS)
	3369NR	Rear Cover, Housing (SPC30)
18	7095NR	Handle (Handle Clip #7094NR qty. 2)
19	6671NR	PC Standoff Nylon Spacer (qty. 4)
20	Call	LP Hose Assembly, 1/4" ID
21	6168NR	High Limit Control 240°F
22	6223NR	Strain Relief Bushing, 5/8
23	6252NR	P.O.L. Excess Flow Check Valve
24	6255NR	Regulator, 11" W.C.
*	7492NR	Label, Fuel/Ignition
*	6369NR	Label, Warning Fuel
*	6373NR	Label, Fan Rotation
*	6374NR	Label, Electrical Grounding

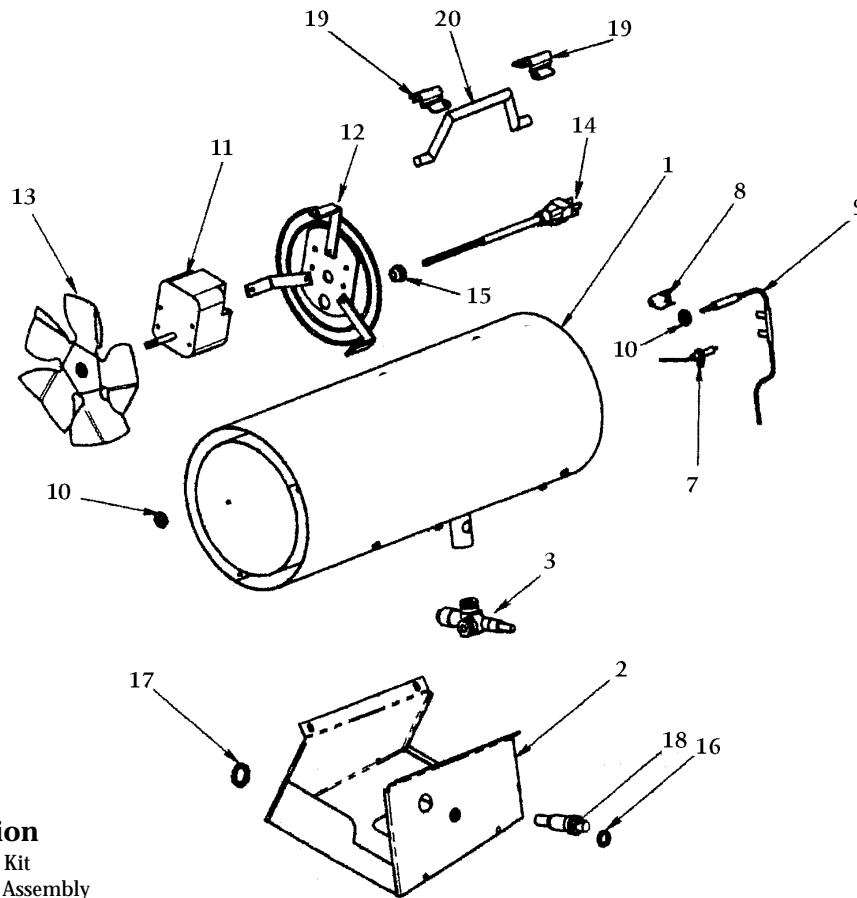
Key No.	Part No.	Description
29	Call	Fitting, Bushing
30	6171NR	Switch, Push Button
31	6652NR	Fitting, Male Conn 1/4 FLR x 1/8 FPT
32	7285NR	Thermoelectric Valve
33	6566NR	Fitting, Male Elbow 1/4 FLR x 1/8 MPT
*	6916NR	Label, Universal 7"
*	6938NR	Label, All Pro
*	6712NR	Label, Hangtag LP Hose
36	6721NR	"U" Bolt, 1.25 Diameter
37	1377NR	Electrode Assembly
*	6725NR	Label Warning Start-up
*	6419NR	Label, Wiring 30FAS
40	6730NR	Blower Inlet Ring
41	6731NR	Blower Housing
42	6732NR	Blower, 3.75" CCW
43	6788NR	Fitting, Elbow 1/8 FPT x FPT
44	6803NR	Thermocouple, 15" with Junction Box
*	6811NR	Label, Model/Opr Instructions
*	6813NR	Operating Instruction Manual
47	3275NR	Ignitor Hi Lo 801 Mini
48	6823NR	Fitting Nipple 1/8 MPT x 1.5 Long
49	6825NR	Foil AL 2-3 Adhesive Back
50	N/A	Screw
*	C20	20 lb. Propane Cylinder
*	C40	40 lb. Propane Cylinder
*	7111NR	Control Valve Powercoil
*	TFI	Propane Tank Stabilizer

* Not shown on exploded view

35,000 BTU Forced Air Scheu Propane Heater

Model Numbers

SPC35



Scheu LP 35,000 BTU

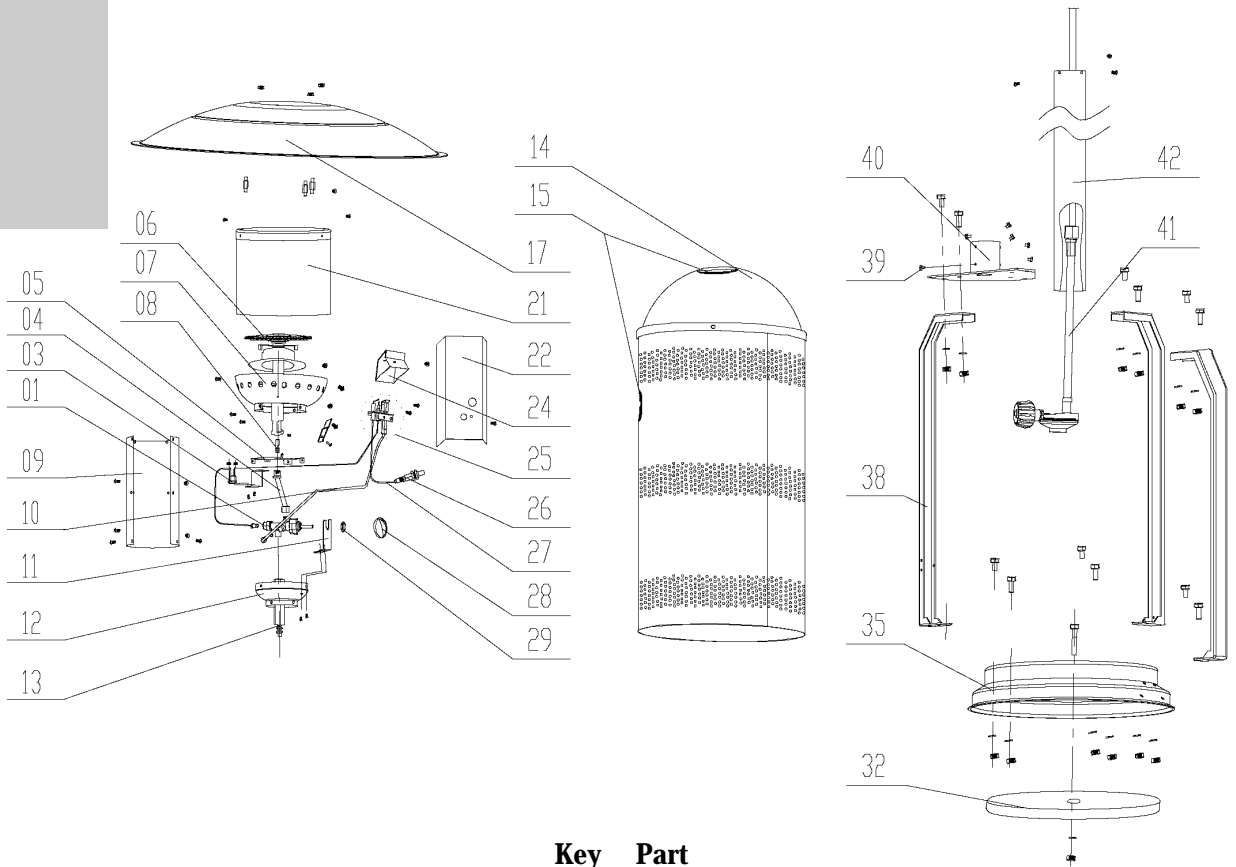
Key No.	Part No.	Description
1	10720NR	Heater Body Kit
2	2100NR	Control Box Assembly
3	8079NR	Thermocouple and Valve Assembly
7	8080NR	Electrode
8	6168NR	High Limit Switch 240°F
9	8079NR	Thermocouple 17.5" in Fast Reacting
10	8091NR	Nut Hex M8 x 1 Fine Thd Thermocouple (qty. 2)
11	8076NR	Motor 0.74A
12	2101NR	Grille Assembly
13	8077NR	Fan Blade, 6.75 x .75 Pitch
14	2113NR	Power Cord Assembly
15	8136NR	Bush Strain Relief, .25
16	6503NR	Nut Hex 5-28 TE Valve (qty. 2)
17	7161NR	Nut, Piezo
18	6473NR	Piezo Ignitor
19	7094NR	Clip Handle (qty. 2)
20	7095NR	Handle
*	8098NR	Parts List/Wiring Diagram
*	6256NR	Regulator
*	1591NR	Hose
*	6252NR	P.O.L.
*	1007NR	Hose & Regulator Assembly
*	C20	20 lb. Propane Cylinder
*	C40	40 lb. Propane Cylinder
*	7111NR	Control Valve Powercoil
*	TFI	Propane Tank Stabilizer

*Not shown on exploded view

40,000 BTU Radiant Scheu Propane Heater

Model Numbers

Scheu
SPC54PHW
SPC54PHB
SPC54PHT



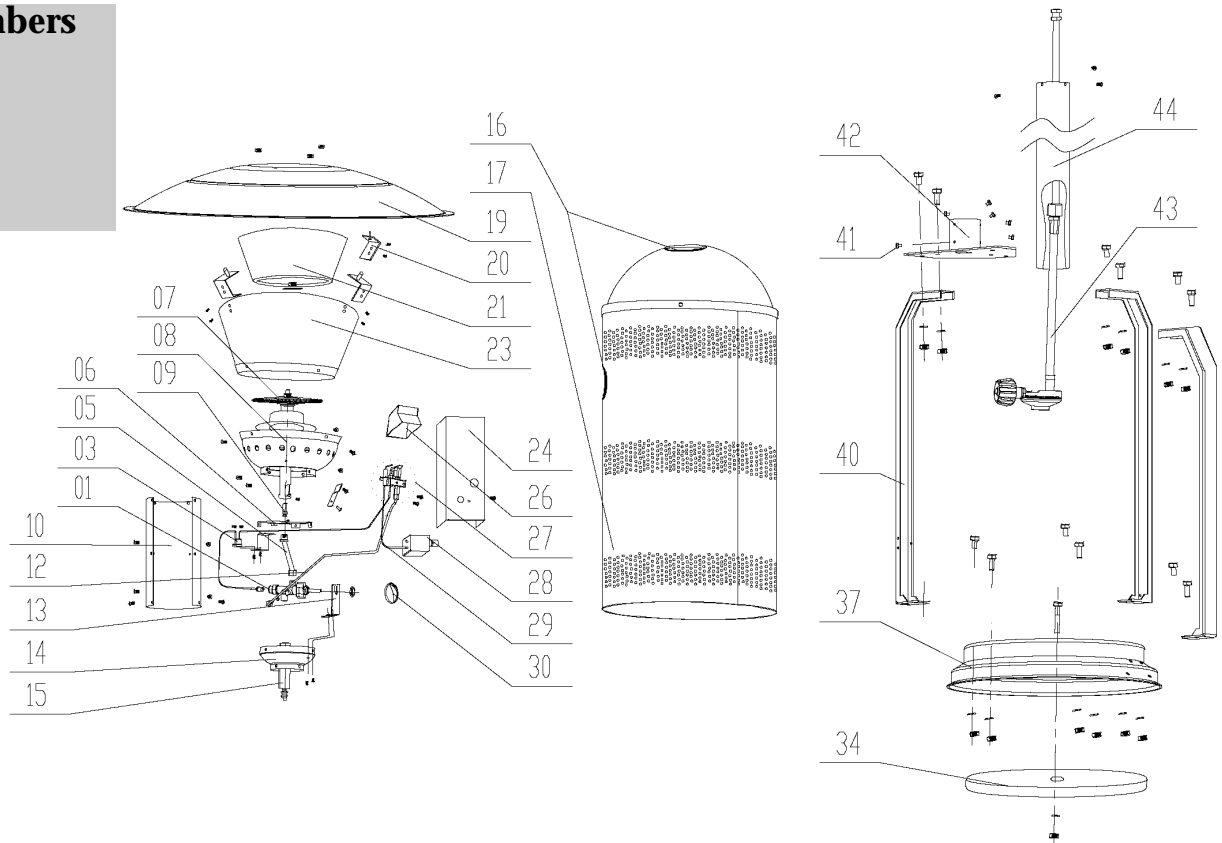
Scheu LP 40,000 BTU

Key No.	Part No.	Description	Key No.	Part No.	Description
1	8603NR	Valve	*	8583NR	Nut, M10
*	8604NR	Bolt, 1/8-40 (qty. 2)	*	8584NR	Lock Washer, Ø = 10
3	8605NR	Tip Switch	32	8585NR	Ballast Plate
4	8607NR	Fuel Tube	*	8586NR	Nut, 1/4-20 (qty. 12)
5	8608NR	Adiabatic Plate	*	8587NR	Lock Washer, Ø = 6 (qty. 12)
6	8708NR	Mushroom Burner Assembly	35	8625NR	Base (White)
7	8616NR	Burner Cover Bottom		8625T NR	Base (Bronze)
8	8611NR	Orifice, Main Burner		8587NR	Base (Black)
9	8602NR	Valve Housing Cover	*	8589NR	Carriage Bolt
10	8600NR	Pilot Tube	*	8590NR	Bolt, 1/4-20 (qty. 12)
11	8599NR	Bracket, Valve Mtg	38	8690NR	Base Legs (White) (qty. 3)
12	8598NR	Valve Cover Base		8690TNR	Base Legs (Bronze)
13	8597NR	Fuel Line Adaptor		8591NR	Base Legs (Black)
14	2209NR	Tank Cover Assembly (White)	39	8592NR	Set Screws, 1/4-20 (qty. 6)
	2209BNR	Tank Cover Assembly (Black)	40	8691NR	Pole Support (White)
	2209TNR	Tank Cover Assembly (Bronze)		8691TNR	Pole Support (Bronze)
15	8705NR	Guards, Rubber Handle		8593NR	Pole Support (Black)
*	8567NR	Nut, M8 (qty. 6)	41	2242NR	Manifold (fuel line), hose, regulator
17	8617NR	Reflector	42	8626NR	Pole (White)
*	8618NR	Bolt, Bi-Convex (qty. 3)		8626B NR	Pole (Black)
*	8601NR	Bolt, 3/16-24 (qty. 23)		8626TNR	Pole (Bronze)
21	2241NR	Emitter Assembly	*	8596NR	Bolt, 3/16-24 (qty. 3)
22	8573NR	Front Cover Panel	*	8764NR	Instructions & Parts List
*	8574NR	Bolt, 3/16-24 (qty. 2)	*	8630NR	Label, Operating Instruction
24	8575NR	Shield, Pilot Wind	*	8628NR	Label, Model SPC-54
25	8576NR	Pilot Ass'y (electrode, pilot, thermocouple)	*	8627NR	Label, Warning
26	6473NR	Ignitor, piezo	*	8692NR	Wheel Assembly
27	8578NR	Ignition Wire	*	8698NR	Nut and Bolt Pack
28	8579NR	Knob	*	G1851	Acme Tank Connector
29	8580NR	Nut - 1, G1/4			

40,000 BTU Radiant Scheu Propane Heater

Model Numbers

Scheu
55PHS
SPC55S



Scheu LP 40,000 BTU

Key No.	Part No.	Description
1	8603NR	Valve
*	8604NR	Bolt, 1/8-40 (qty. 2)
3	8605NR	Tip Switch
*	8606NR	Nut, 1/8-40 (qty. 2)
5	8607NR	Fuel Tube
6	8608NR	Adiabatic Plate
7	8609NR	Mushroom Burner Ass'y
8	8610NR	Burner Cover Bottom
9	8611NR	Orifice, Main Burner
10	8602NR	Valve Housing Cover
*	8601NR	Bolt, 3/16-24 (qty. 6)
12	8600NR	Pilot Tube
13	8599NR	Bracket, Valve Mtg
14	8598NR	Valve Cover Base
15	8597NR	Fuel Line Adaptor
16	8705NR	Guards, Rubber Handle
17	2208NR	Tank Cover Ass'y
*	8567NR	Nut, M8 (qty. 6)
19	8617NR	Reflector
20	8569NR	Reflector Support (qty. 3)
21	8570NR	Heat Insulator
*	8571NR	Bolt, 5/32-32 (qty. 6)
23	2244NR	Emitter Ass'y
24	8572NR	Front Cover Panel
*	8574NR	Bolt, 3/16-24 (qty. 2)
26	8575NR	Shield, Pilot Wind
27	8576NR	ODS Pilot Assy. (electrode, pilot, thermocouple)

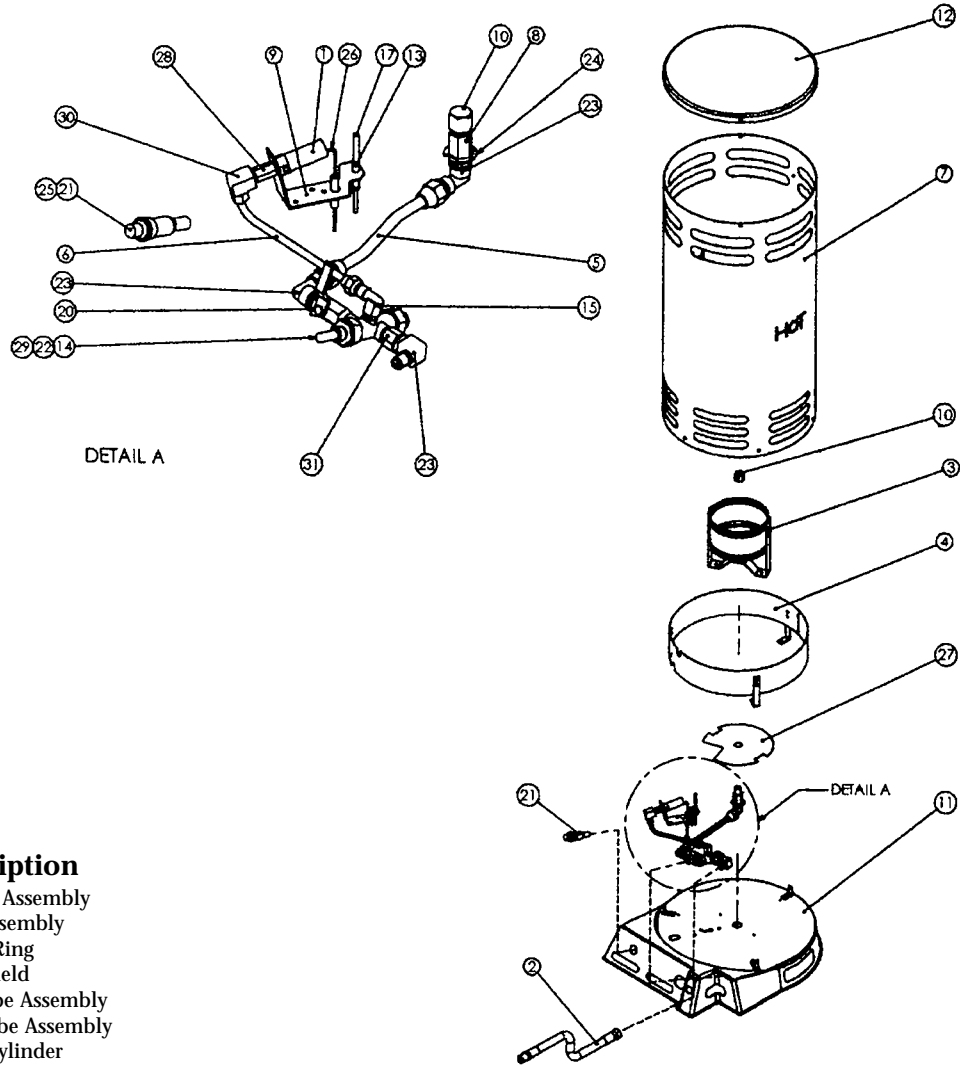
Key No.	Part No.	Description
28	8577NR	Pulse Ignitor
29	8578NR	Ignition Wire
30	8579NR	Knob
*	8580NR	Nut - 1, G1/4
*	8583NR	Nut, M10
*	8584NR	Lock Washer, Ø = 10
34	8585NR	Ballast Plate
*	8586NR	Nut, 1/4-20 (qty. 12)
*	8587NR	Lock Washer, Ø = 6 (qty. 12)
37	8588NR	Base
*	8589NR	Carriage Bolt
*	8590NR	Bolt, 1/4-20 (qty. 12)
40	8591NR	Base Legs 3
41	8592NR	Set Screws, 1/4-20 (qty. 6)
42	8593NR	Pole Support
43	2242NR	Manifold (fuel line, hose, regulator)
44	8595NR	Pole
*	8596NR	Bolt, 3/16-24 (qty. 3)
*	8764NR	Instructions & Parts List
*	8628NR	Label, Operating Instruction
*	8631NR	Label, Model SPC-55
*	8627NR	Label, Warning
*	8693NR	Wheel Ass'y
*	8699NR	Nut and Bolt Pack
*	G1851	Acme Tank Connector

* Not shown on exploded view

30-80,000 BTU Propane Convection Scheu Heater

Model Number

Scheu
80VCA
SPC80-VCA



Key No.	Part Number	Description
1	1510NR	Pilot LP Assembly
2	6152NR	Hose Assembly
3	1889NR	Burner Ring
4	2160NR	Ring Shield
5	2156NR	Fuel Tube Assembly
6	2157NR	Pilot Tube Assembly
7	2161NR	Outer Cylinder
8	4279NR	Orifice Adapter
9	3865NR	Bracket, Pilot Mounting
10	3557NR	Orifice, LP
11	4250NR	Base
12	4223NR	Cap
13	6045NR	Clip, TC
14	6104NR	TE Valve
15	6137NR	Ftg., Elbow Female 1/4 FLR x 1/8 FPT
*	8217NR	Manual, Operating Instructions
17	6233NR	Thermocouple
18	6433NR	POL Excess Flow
*	6568NR	Fitting, Adapter 1/4 FPT x 1/4 MPT
*	8018NR	Fitting, Elbow 1/8 FPT x 1/4 MPT
19	6255NR	Regulator
20	6269NR	Valve, Ball
21	6473NR	Piezo Ignitor
22	6503NR	Nut Hex 1/2-28 TE Valve
23	7172NR	Ftg., Elbow Female 1/4 FPT x 3/8 FLR (qty. 3)
24	8162NR	External Retaining Ring
25	7161NR	Piezo Nut
26	7652NR	Electrode with 7" wire
27	4293NR	Heat Shield
*	8216NR	Label, Model

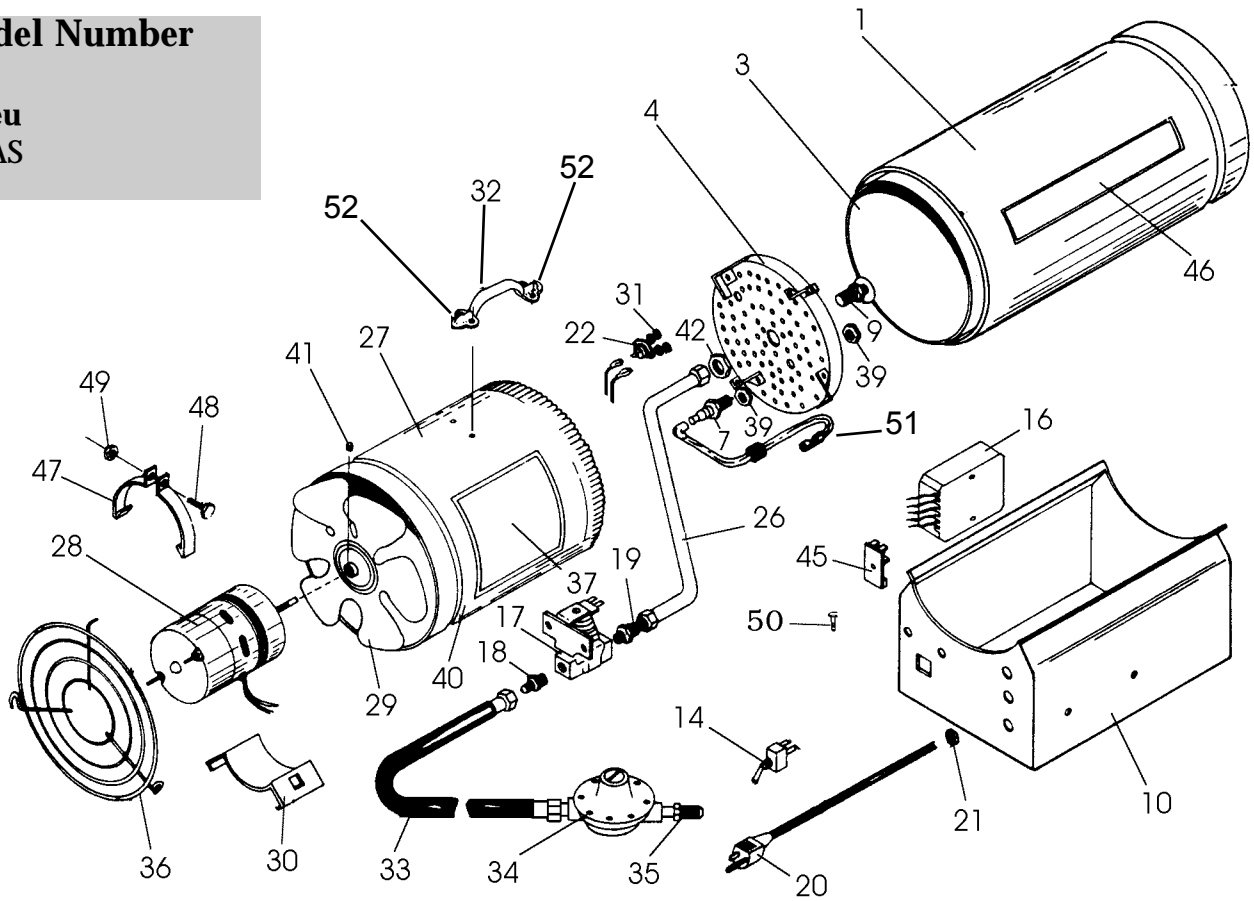
Key No.	Part Number	Description
28	7157NR	Pilot Orifice
29	6689NR	Washer, Flat 9/16 SAE
30	8187NR	Ftg., Elbow 1/8 FPT x 1/4 CPSN
*	8213NR	Label, Safety Precautions
*	8214NR	Label, Start Instructions
*	8215NR	Label, Warnings
*	8218NR	Label, Safety Precautions
*	8216NR	Label, Model
*	7438NR	Label, BTU Rating
*	7111NR	Thermoelectric Valve Powercoil
*	C100	100 lb. Propane Cylinder
*	3825	25' Gas Hose
*	6045NR	Thermocouple Nut

* Not shown on exploded view
Screws are standard hardware items

80,000 BTU Forced Air Scheu Propane Heater

Model Number

Scheu
80FAS



For wiring diagram see page. 228.

Key Part No. Number

Key No.	Part Number	Description
1	1060NR	Burner Shell Assembly
3	1061NR	Middle Cylinder Assembly
4	1146NR	Flame Holder Assembly
7	1082NR	Spark Plug
9	1063NR	Orifice Assembly
10	1161NR	Control Box Assembly
14	6170NR	Toggle Switch
16	Call	DSI
17	6100NR	Solenoid Valve
18	6122NR	Fitting, 3/8" MFIR x 3/8" MPT
19	6143NR	Fitting, Male Conn, 5/16" MFLR x 3/8" MPT
20	1036NR	Power Cord Assembly
21	6223NR	Bushing, Strain Relief, 5/8"
22	6168NR	High Limit Switch, 240°F
*	6369NR	Label, Warning, Fuel
*	6373NR	Label, Fan Rotation
*	6422NR	Label, On/Off Switch
26	1162NR	Fuel Tube Assembly
27	1371NR	Motor Shell Assembly
28	1361NR	Motor Assembly
29	6086NR	Fan
30	3132NR	Support, Motor Saddle
31	6068NR	Washer (qty. 4)
32	7095NR	Handle

Key Part No. Number

Key No.	Part Number	Description
33	6152NR	Hose Assembly, 10'
34	6255NR	Regulator, 11" W.C.
35	6252NR	POL/Excess Flow Check Valve
36	3087NR	Grill
37	6364NR	Label, Model, Operating Instr.
*	6374NR	Label, Electrical Ground
39	3037NR	Nut, Spark Plug 14mm (qty. 2)
40	6995NR	Label, Wiring
41	6010NR	Set Screw, Nylock, 1/4-28
42	3038NR	Nut, Orifice 3/4-16
*	6994NR	Parts List / Wiring Diagram
*	7065NR	Label, BTU
45	6444NR	Terminal Board
46	6383NR	Label, Universal Logo
47	3133NR	Support, Motor Strap (qty. 2)
*	6332NR	Manual, Operating Instructions
*	6712NR	Label, Hangtag, Hose
48	6030NR	Screw, Machine 5/16"-18 x 1 Hex Head
49	6041NR	Nut Lock 5/16 x 18
*	7094NR	Clip, Handle
50	NLA	Screw (qty. 2)
51	1362NR	Wire Ign Assy (11in)
52	7094NR	Handle Clip (qty. 2)
*	C100	100# L.P. Bottle
*	KT121	Thermostat, warmer-cooler dial
*	HA1210	Thermostat with degrees on dial
*	3825	3/8" x 25' Hose

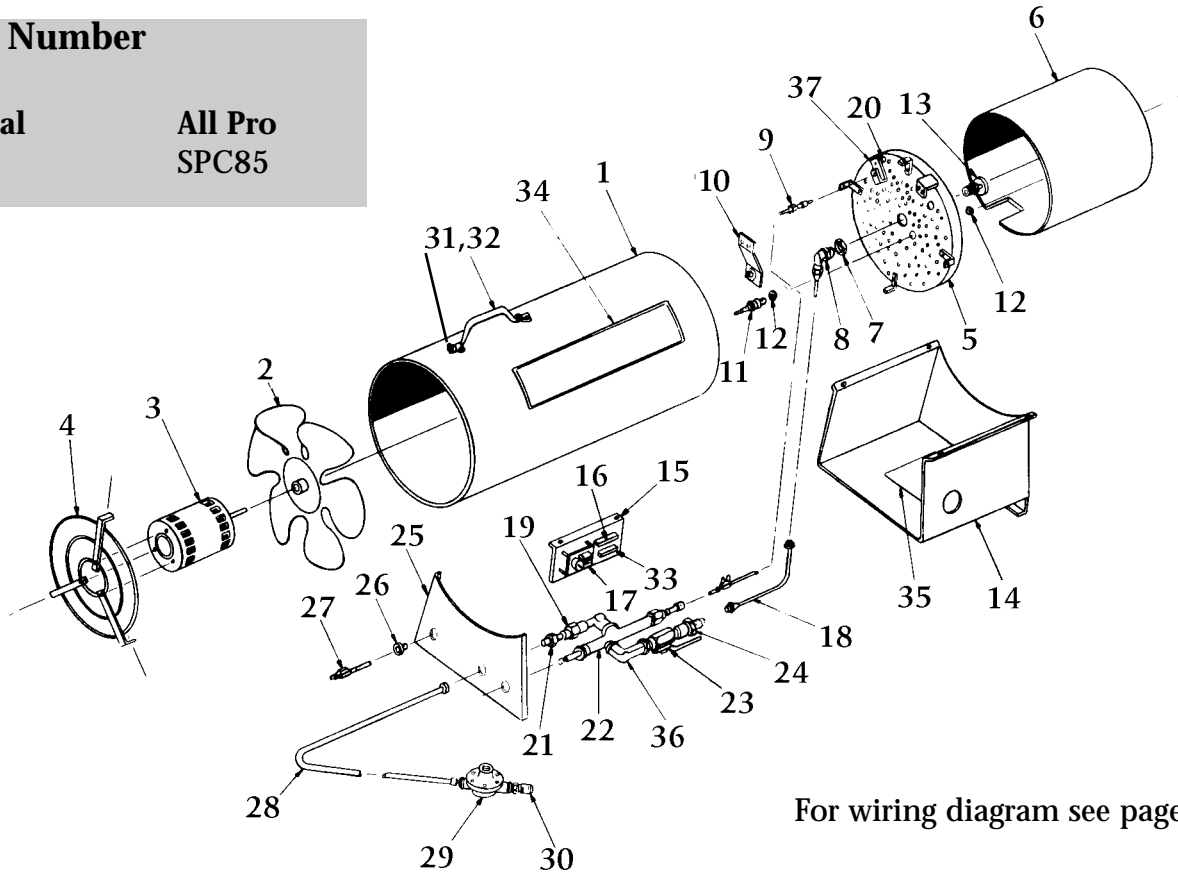
Scheu LP 80,000 BTU

50-80,000 BTU Forced Air Scheu Propane Heater

Model Number

Universal
85FAC

All Pro
SPC85



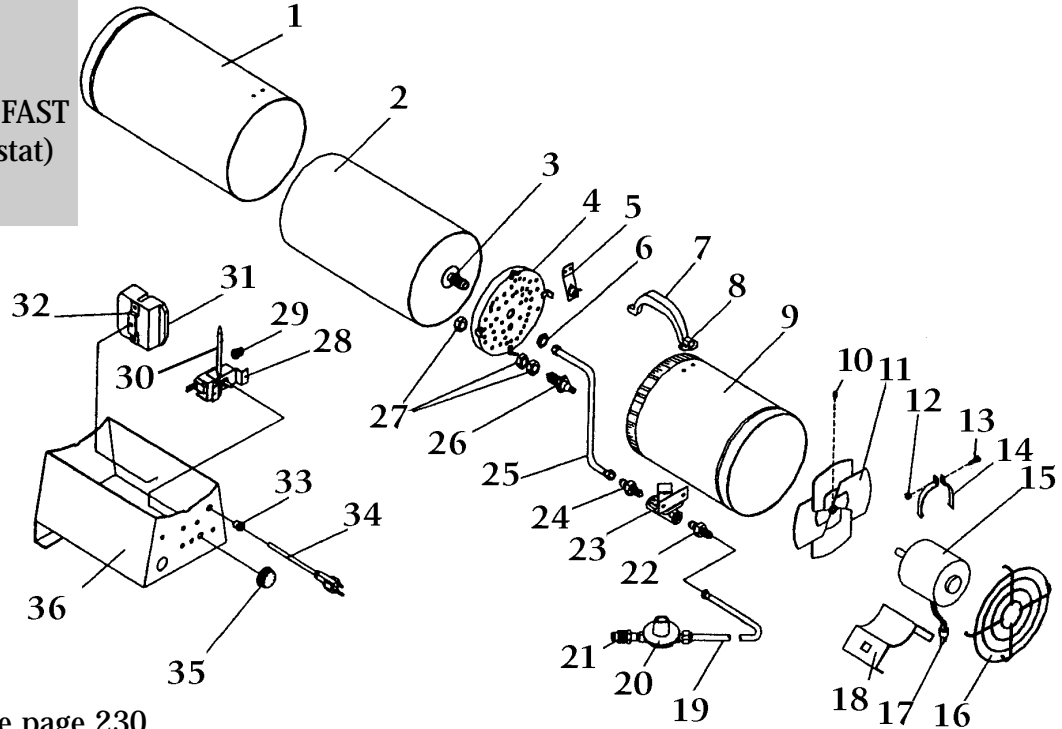
For wiring diagram see page 227.

Key No.	SPC-85 Part No.	85-FAC Part No.	Description	Item	SPC-85 Part No.	85-FAC Part No.	Description
1	1670NR	1730NR	Cylinder, Outside Assy.	24	7405NR	7405NR	Fitting, Female Conctr
2	6086NR	6086NR	Fan, 7 inch	25	3690NR	3690NR	Control Panel Assy
3	1551NR	1551NR	Motor Assembly, 80-FAS	26	6223NR	6223NR	Strain Relief Bushing
4	1671NR	1671NR	Grille, Motor Mtg	27	1036NR	1036NR	Power Cord
5	1750NR	1750NR	Flame Holder Assy	28	6152NR	6152NR	Hose Assembly
6	1674NR	1674NR	Cylinder, Middle Assy	29	6257NR	6257NR	Regulator 28" W.C.
7	3038NR	3038NR	Nut, Orifice Mounting	30	6433NR	6433NR	POL Excess Flow
8	7433NR	7433NR	Fitting, Male Elbow	31	7094NR	7094NR	Clip Handle Mounting
9	6654NR	6654NR	Thermocouple	32	7095NR	7095NR	Handle
10	1751NR	1751NR	High Limit Control Assy	33	1811NR	1811NR	Relay
11	1083NR	1083NR	Spark Plug	34	6752NR	6383NR	Label, Logo
12	3037NR	3037NR	Nut-Spark Plug (qty. 3)	35	7503NR	7503NR	Label, Wiring
13	1673NR	1673NR	Orifice Assembly	36	6265NR	6265NR	Fitting Elbow (qty. 2)
14	1752NR	1752NR	Control Box Assembly	37	3036NR	3036NR	Bracket, TC
15	3044NR	3044NR	Ignition Relay Bracket	*	7385NR	7385NR	Manual, Operating Inst.
16	6641NR	6641NR	Terminal Board	*	7450NR	7450NR	Label, Model
17	3275NR	3275NR	Spark Ignition, 115V	*	7451NR	7451NR	Label, Operating Inst
18	1668NR	1668NR	Fuel Tube Assembly	*	7432NR	7432NR	Label, BTU Rating (qty. 2)
19	6133NR	6133NR	Fitting, Coupling	*	6374NR	6374NR	Label, Elec. Grounding
20	3787NR	3787NR	Spacer, TC Bracket	*	7491NR	7491NR	Label, Fuel Ignition
21	6127NR	6127NR	Fitting, Male Connector	*	3825	3825	3/8"x25' Hose
22	7285NR	7285NR	TE Valve	*	C100	C100	100 lb. L.P. Bottle
23	7404NR	7404NR	Ball Valve, Variable Rate				

150,000 BTU Forced Air Scheu Propane Heater

Model Number

Universal **All Pro**
150FAST **SPC150FAST**
 (with built-in thermostat)



For wiring diagram see page 230.

Key No.	Part No.	Description
1	1700NR	Burner Shell Assembly (150FAST)
	1712NR	Burner Shell Assembly (SPC150FAST)
2	1672NR	Middle Cylinder Assembly
3	1168NR	Orifice Assembly
4	1146NR	Flame Holder Assembly
5	1550NR	High Limit Control Assembly
6	3038NR	Nut, Orifice
7	7095NR	Handle
8	7094NR	Handle Mounting Clip (qty. 2)
9	1939NR	Motor Shell Assembly (150FAST)
	1940NR	Motor Shell Assembly (SPC150FAST)
10	6010NR	Set Screw, Nyloc
11	6074NR	Fan
12	6041NR	Nut, Lock
13	6030NR	Screw, Machine
14	3133NR	Support, Motor Strap (qty. 2)
15	1561NR	Motor Assembly
16	3087NR	Grille Inlet
17	6225NR	Snap Bushing, 5/8"
18	3132NR	Saddle, Motor Support
19	6152NR	Hose Assembly
20	6255NR	Regulator, 11" WC
21	6433NR	POL Excess Flow
22	6122NR	Fitting, Male Connector
23	6100NR	Solenoid Valve
24	6123NR	Fitting, Male Connector
25	1171NR	Fuel Tube Assembly
26	1083NR	Spark Plug

Key No.	Part No.	Description
27	3037NR	Nut, Spark Plug 14 mm (qty. 3)
28	3441NR	Thermostat Mounting Bracket
29	6070NR	Clamp Loop, 5/16
30	1734NR	Thermostat Assembly
31	M51605-02	DSI Control, 10N-117-3-8.5-8.5-Q012
	7499NR	White or Gray Ram 1M5-01
	7801NR	Black gaslighter, 4 wire
	7808NR	Black gaslighter, Potted, 4 wire
32	3333NR	Flame Control Bracket (7499)
	3210NR	Bracket (M51605-02)
	3983NR	Bracket (7801NR,7808NR)
33	6223NR	Bushing, Strain Relief, 1/4
34	1036NR	Power Cord Assembly
35	1942NR	Thermostat Knob Assembly
36	1937NR	Control Box Assembly
*	5189NR	Terminal, "Y" Adaptor (qty. 2)
*	6712NR	Label, Hangtag
*	7744NR	Label, Operating Instructions
*	6374NR	Label, Electrical Ground
*	7789NR	Label, Wiring Diagram
*	7067NR	Label, BTU Rating (qty. 2)
*	6383NR	Label, Logo (150FAST) (qty. 2)
*	6752NR	Label, Logo (SPC150FAST) (qty. 2)
*	7743NR	Manual, Operating Instructions
*	6410NR	Label, Thermostat
*	6641NR	Terminal Board (7801NR,7808NR)
*	3825	3/8" x 25' Hose
*	C100	100 lb. Porpane Cylinder

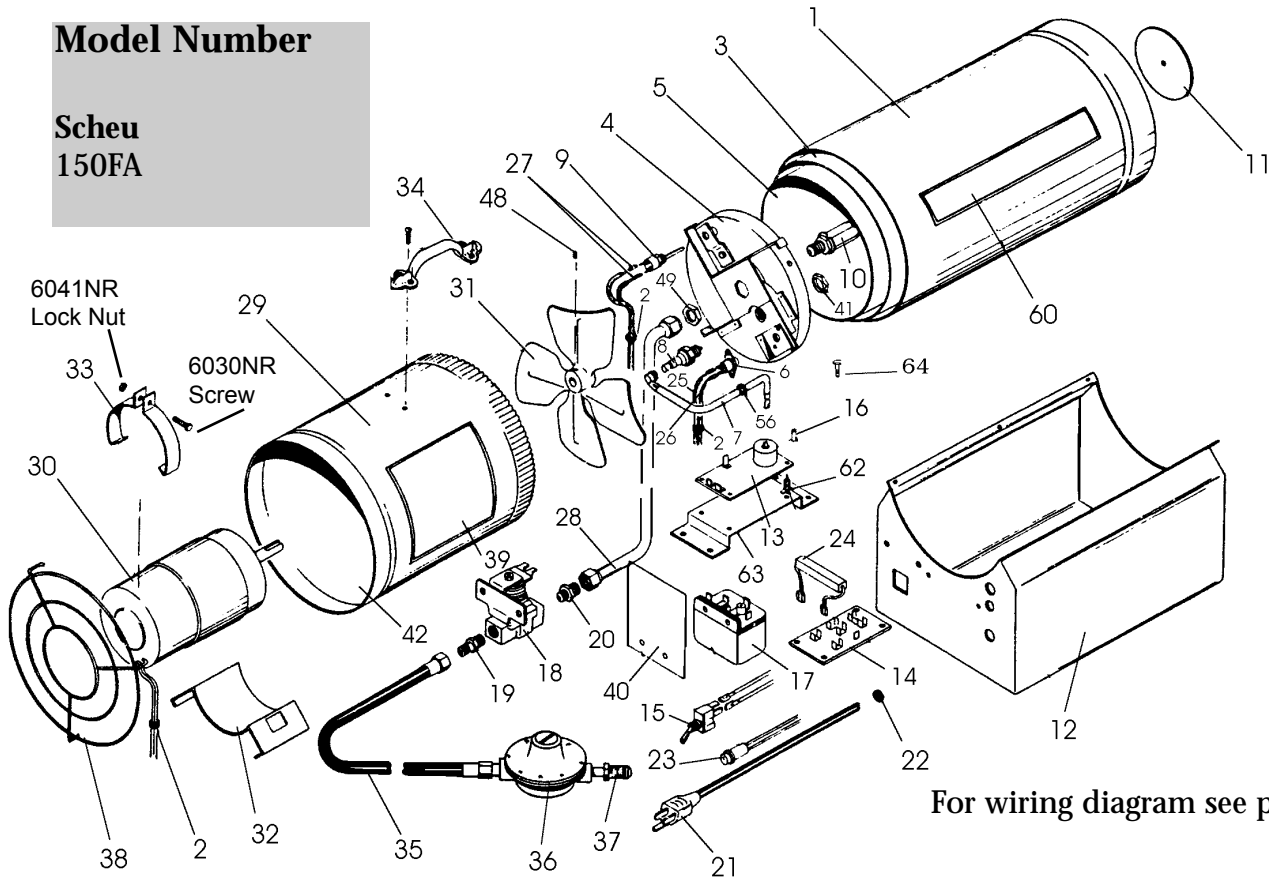
* Not shown on exploded view

Scheu LP 150,000 BTU

150,000 BTU Forced Air Scheu Propane Heater

Model Number

Scheu
150FA



For wiring diagram see page 228.

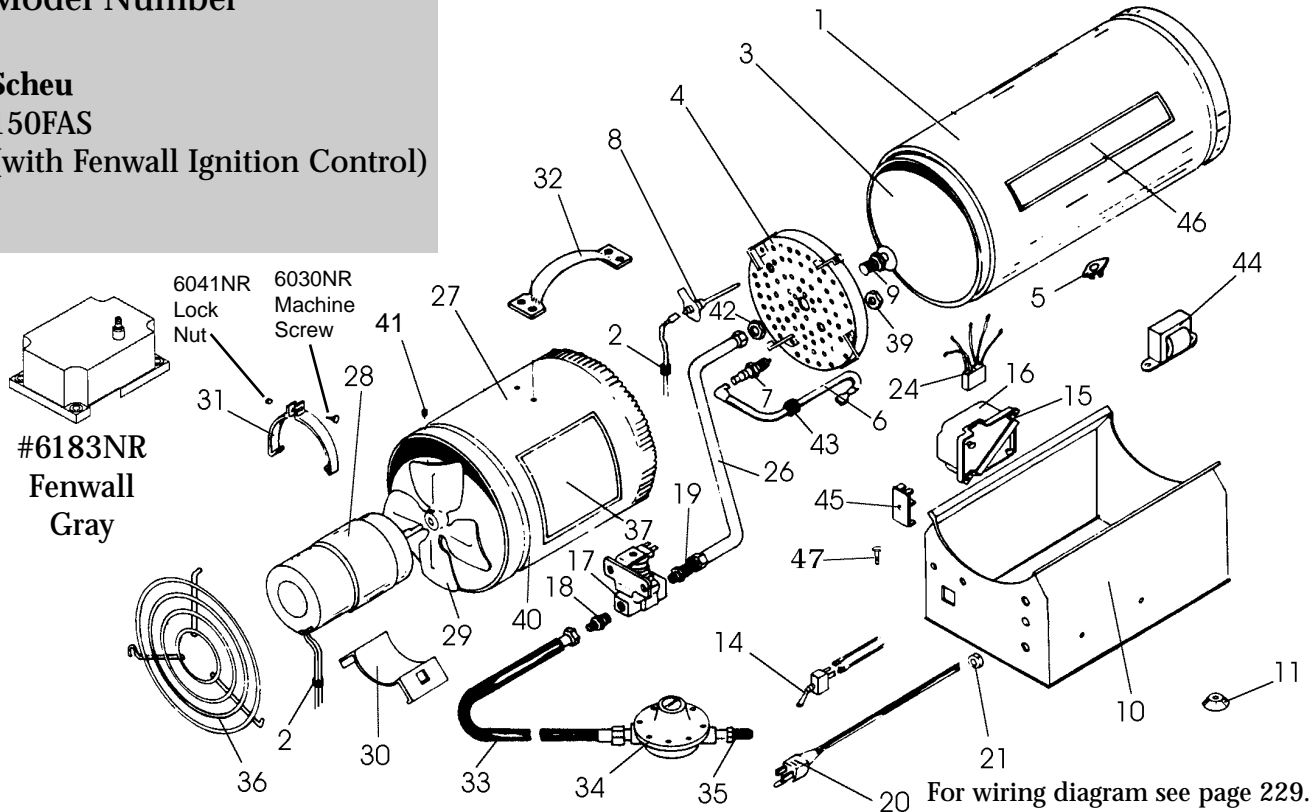
Key No.	Part No.	Description	Key No.	Part No.	Description
1	1078NR	Burner Shell Assembly	34	7095NR	Handle (#7094NR Handle Clip qty. 2)
2	6225NR	Grommet, 5/8" (qty. 4)	35	6152NR	Hose Assembly, 10'
3	3750NR	Middle Liner Assembly		3825NR	3/8" x 25' Hose
4	1080NR	Burner Intake Assembly	36	6255NR	Regulator
5	NLA	Combustion Chamber Assembly	37	6252NR	POL/Excess Flow Check Valve
6	6168NR	High Limit Switch, 240°F	38	3087NR	Grill, Inlet
7	1111NR	Wire Assembly, Spark Plug	39	6423NR	Label, Model Plate w/Instruction
8	1083NR	Spark Plug, 1/8" Gap	40	3129NR	Rain Shield, Plastic
9	6169NR	Flame Sensor	41	3037NR	Nut, Spark Plug, 14mm
10	3122NR	Orifice, w/Retaining Ring	42	6389NR	Label, Wiring Diagram
11	3124NR	Flame Spreader	*	6422NR	Label, On/Off Switch
12	N/A	Control Box Assembly	*	6044NR	Locknut, Switch
13	See Key #17		*	6185NR	Terminal, U Adapter, 1/4"
14	6244NR	Terminal Board	*	1109NR	Wire Assembly, Black, Ignitor
15	6170NR	Toggle Switch	*	1110NR	Wire Assembly, Green, Ignitor
16	6065NR	Spacer	48	6010NR	Set Screw, 1/4-28 Nylock
17	10742NR	Conversion Kit	49	3038NR	Nut, Orifice 3/4-16
18	6100NR	Gas Valve	*	1100NR	Wire Assembly, White, Valve
19	6122NR	Male Connector, 3/8" MPT x 3/8" Flare	*	1101NR	Wire Assembly, Grey, Toggle Switch
20	6123NR	Male Connector, 3/8" MPT x 1/2" Flare	*	1102NR	Wire Assembly, Blue, Valve
21	1036NR	Power Cord Assembly	*	1103NR	Wire Assembly, Purple, Relay
22	6223NR	Power Cord Grommet (qty. 2)	*	1104NR	Wire Assembly, Orange, Relay
23	1089NR	Amber Light Assembly	*	1100NR	Wire Assembly, White, Ignitor
24	1090NR	Resistor Assembly	56	6226NR	Grommet, Spark Plug Wire
25	1226NR	Wire Assembly, Limit Switch, Red	60	6383NR	Label, Universal Trademark
26	1153NR	Wire Assembly, Limit Switch, Black	62	6079NR	Standoff (qty. 4)
27	1044NR	Wire Assembly, Flame Sensor, White (qty. 2)	63	3128NR	Support, Ignitor
28	1099NR	Fuel Line Assembly	*	6369NR	Label, Safety
29	1096NR	Motor Shell Assembly	*	6373NR	Label, Fan Rotation
30	1166NR	5 Wire Motor Assembly, 1/12hp, 3000rpm	*	6374NR	Label, Electrical Grounding
31	6074NR	Fan Blade w/Set Screw	*	KT121	Thermostat
32	3132NR	Saddle, Motor	*	C100	100 lb. L.P. Bottle
33	3133NR	Strap, Motor (qty. 2)			

Scheu LP 150,000 BTU

150,000 BTU Forced Air Scheu Propane Heater

Model Number

Scheu
150FAS
 (with Fenwall Ignition Control)



Scheu LP 150,000 BTU

Key No.	Part No.	Description	Key No.	Part No.	Description
1	1078NR	Burner Shell	28	1166NR	Motor Assembly - 5 Wire
2	6225NR	Grommet, 5/8" (qty. 2)	29	6074NR	Fan
3	1672NR	Combustion Chamber Assembly	30	3132NR	Saddle, Motor Support
4	1146NR	Flame Holder Assembly	31	3133NR	Strap, Motor Support (qty. 2)
5	6168NR	High Limit Switch, 240°F	32	7095NR	Handle (# 7094NR Handle Clip qty. 2)
6	1154NR	Wire Assembly, Spark Plug	33	6152NR	Hose
7	1082NR	Spark Plug	3825	3825	3/8" x 25' Hose
8	6172NR	Flame Rod	34	6255NR	Regulator, 11" W.C.
9	1168NR	Orifice Assembly	35	6252NR	POL/Excess Flow Check Valve
10	1167NR	Control Box Assembly	36	3087NR	Grill
11	6576NR	Rubber Bumper Feet (qty. 2)	37	6423NR	Label, Model/Operating Instructions
14	6170NR	Toggle Switch	*	6374NR	Label, Electrical Ground
15	3210NR	Bracket, Flame Control	39	3037NR	Nut, Spark Plug, 14mm
16	10741NR	Ignition Control	40	NLA	Label, Wiring
17	6100NR	Solenoid Valve	41	6010NR	Set Screw, Nylock 1/4-28
18	6122NR	Fitting Male Connector 3/8" FLR x 3/8" MPT	42	3038NR	Nut, Orifice, 3/4-16
19	6123NR	Fitting Male Connector 1/2" Flare x 3/8" MPT	43	6226NR	Bushing, Universal, 5/8" (Spark Wire)
20	1036NR	Power Cord Assembly	44	1145NR	Transformer Assembly
21	6223NR	Bushing, Strain Relief, 5/8" (Power Cord)	45	6444NR	Terminal Board
*	6369NR	Label, Warning Fuel	46	6383NR	Label, Logo
*	6373NR	Label, Fan Rotation	*	6386NR	Label, On/Off Valve
24	1160NR	Wire Harness, Flame Control (For 6183NR Fenwall Only)	*	6422NR	Label, On/Off Switch
26	1171NR	Fuel Tube Assembly	*	6044NR	Locknut, Switch, 15/32-32
27	1096NR	Motor Shell Assembly	*	HA1210	Thermostat w/temp on dial
			47	N/A	Screw
			*	C100	100 lb. Propane Cylinder
			*	KT121	Thermostat Warmer/Cooler

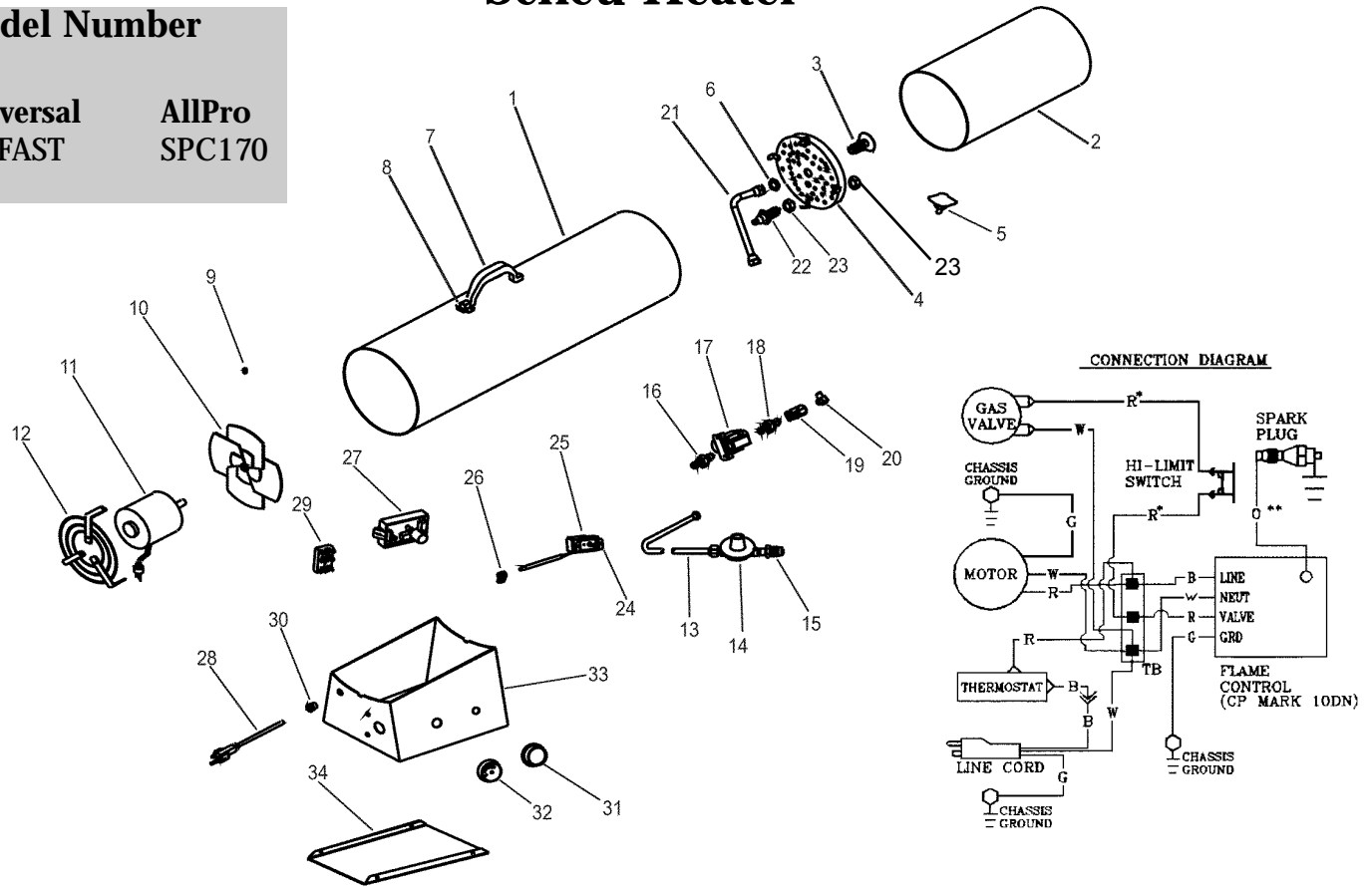
* Not shown on drawing.

125-170,000 BTU Forced Air Propane Scheu Heater

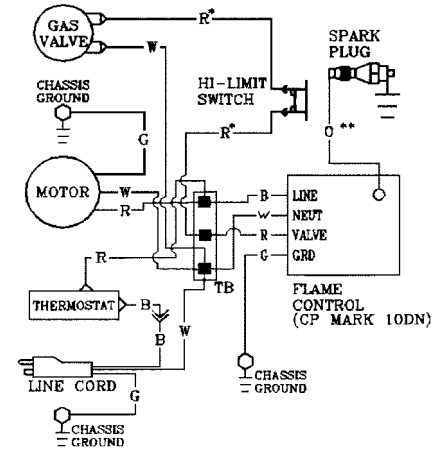
Model Number

Universal
170FAST

AllPro
SPC170



CONNECTION DIAGRAM



Key No.	Part No.	Description
1	2247NR	Outer Shell -Universal (Red)
	2248NR	Outer Shell - All Pro (Orange)
2	2249NR	Middle Cylinder
3	2250NR	Orifice Assembly
4	1146NR	Flame Holder Assembly
5	6168NR	High Limit Switch
6	3038NR	Orifice Nut
7	7095NR	Handle
8	7094NR	Handle Mounting Clips (qty. 2)
9	6010NR	Set Screw, Nyloc
10	6074NR	Fan
11	2251NR	Motor Assembly
12	2252NR	Grille, Inlet/Motor Mounting
13	6152NR	Hose Assembly
14	6257NR	Regulator, 28" WC
15	6433NR	POL Excess Flow Valve
16	6122NR	Male Fitting Conn. 3/8MPT x 3/8SAE FLR
17	6101NR	Solenoid Valve, Goyen
18	8775NR	Fitting Close Nipple
19	8777NR	Burn Rate Adjustment Valve
20	8776NR	Fitting, Elbow, 3/8MPT x 1/2 SAE FLR
21	2253NR	Fuel Tube Assembly
22	8774NR	Spark Plug, Flame Sensor
23	3037NR	Spark Plug Nut (qty. 2)
24	4340NR	Thermostat Mounting Bracket

Key No.	Part No.	Description
25	2254NR	Thermostat Assembly
26	6070NR	Loop Clamp, 5/16
27	7808NR	Flame Control, Potted
28	1036NR	Power Cord Assembly
29	8771NR	Terminal Board
30	6223NR	Bushing Strain Relief
31	1507NR	Knob, Thermostat
32	8773NR	Knob, Burn Rate Adjustment
33	2255NR	Control Box
34	2256NR	Base, Control Box
*	8769NR	Label, Safety Precautions
*	8755NR	Label, General Hazard Warning
*	8733NR	Label, Model
*	8731NR	Label, Operating Instructions
*	6410ANR	Label, Thermostat Warning
*	7704NR	Label, Warning Massachusetts
*	6374NR	Label, Warning Electrical
*	7789NR	Label, Wiring Schematic
*	8203NR	Label, Hang Tag
*	8679NR	Label, BTU 170,000
*	8770NR	Manual, Operating Instructions
*	6225NR	Snap Bushing, 5/8 (qty. 2)
*	C100	100 lb. Propane Cylinder (qty. 2)
*	1630RU	30" Propane Tank Pigtail
*	P400	T-Block Manifold

* Item not shown on exploded view

75-200,000 BTU Convection Scheu Propane Heater

Model Number

Scheu

200C - Universal

SPC200C - All Pro

Key No.	Part No.	Description
1	113814-01	Pilot Assembly
2	113815-01	Hose Assembly, 10 foot
3	113777-01	Burner Ring Assembly
4	113778-01	Ring Shield
5	113779-01	Fuel Tube Assembly
6	113780-01	Pilot Tube Assembly
7	113781-01	Upper Shell
8	113782-01	Orifice Adapter
9	113783-01	Bracket, Pilot Mounting
10	113816-01	Orifice, LP
11	**	Base
12	113875-01	Cap
13	113876-01	Thermocouple Clip
14	113787-01	Control Valve
15	113788-01	Female Elbow Fitting, 1/4 FLR x 1/8 FPT
16	113789-01	Female Elbow Fitting, 1/4 FLR x 1/4 FPT
17	113790-01	Thermocouple
18	113818-01	POL, Excess Flow
19	113819-01	Regulator
20	113793-01	Ball Valve
21	102445-01	Piezo Ignitor
22	113794-01	Valve Nut, 1/2-28
23	113795-01	Female Elbow Fitting, 1/4 FPT x 3/8 FLR (qty. 3)
24	113796-01	Retaining Ring
25	113797-01	Ignitor Electrode
26	113798-01	Heat Shield
27	113799-01	Pilot Ori•ce
28	113800-01	Washer, Flat
29	113801-01	Elbow Fitting, 1/8 FPT x 1/4 CPSN
30	113821-01	Lower Shell
31	113812-01	Fitting, 1/4 FPT x 1/4 MPT

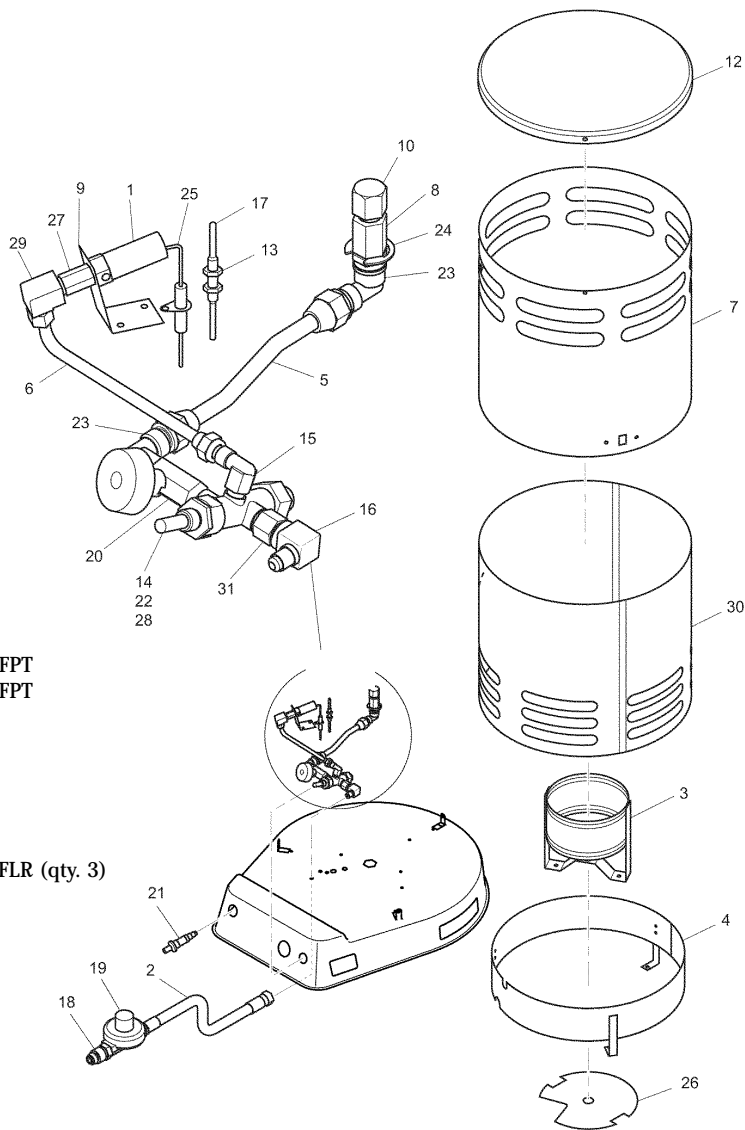
PARTS AVAILABLE - NOT SHOWN

113809-01	Ball Valve Knob
113810-01	Ball Valve Knob Insert
113822-03	Tradename Decal, Reddy
113822-04	Tradename Decal, Master
113822-07	Tradename Decal, All-Pro
113822-08	Tradename Decal, Universal
113822-10	Tradename Decal, Remington
113808-01	Hang Tag (English)
113808-02	Hang Tag (Spanish)
113808-03	Hang Tag (French)
113805-01	Installation Decal (English)
113805-02	Installation Decal (Spanish)
113805-03	Installation Decal (French)
113802-18	Model Decal

*Items not shown on exploded view

**Not a field replaceable part.

Screws Are Standard Hardware Items



Output Rating	75-200,000 BTU/Hr
Fuel	Propane Vapor
Manifold Pressure	10 PSIG
Orifice Size	.0320"

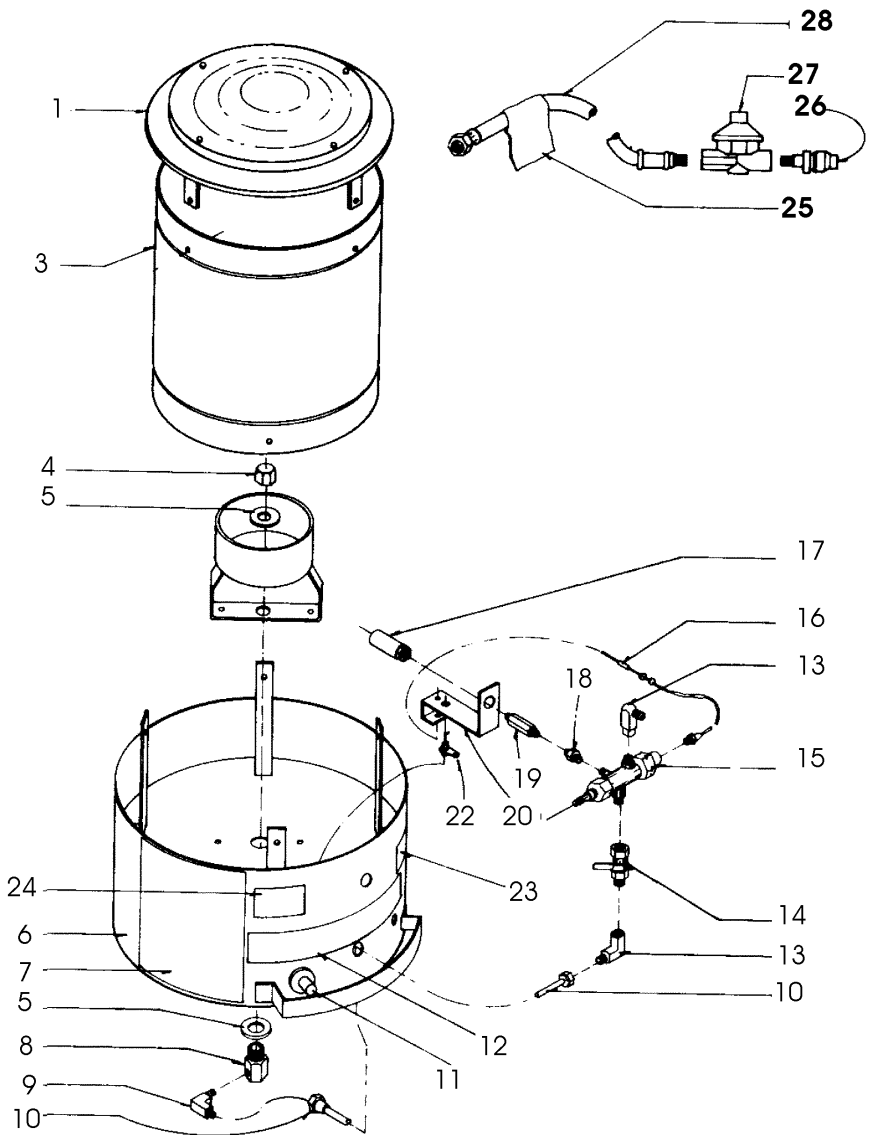
75-200,000 BTU Convection Scheu Propane Heater

Model Number

Universal
250
250A

Scheu LP 200,000 BTU

Key No.	Part No.	Description
1	1530NR	Hood Assembly
3	3348NR	Outer Shell
4	3145NR	Orifice
5	6689NR	Flat Washer (qty. 2)
6	1525NR	Base Assembly
7	7163NR	Operating Instructions (250A)
7	7180NR	Operating Instructions (250)
8	7012NR	Fitting, Orifice Mtg
9	6566NR	Fitting, Male Elbow
10	1523NR	Fuel Tube Assembly
11	6473NR	Piezo Ignitor (250A only) (#7161NR Piezo Nut)
12	7181NR	Label, Model
13	6138NR	Fitting, Female Elbow (qty. 2)
14	6269NR	Valve, Ball
15	6104NR	TE Valve (Power Coil for Valve #7111NR)
16	6233NR	Thermocouple (#6045NR Thermocouple Clip)
17	1004NR	Pilot, LP Assembly
18	6714NR	Fitting, Coupling
19	6716NR	Orifice
20	3550NR	Pilot, TC Bracket
22	7160NR	Electrode w/ Wire (250A only)
23	7177NR	Label, BTU Rating
24	6369NR	Label, Warning Fuel
25	6712NR	Label, Hangtag, LP Hose
26	6252NR	POL Excess Flow
27	6256NR	Regulator
28	1591NR	Hose Assembly, LP
*	C100	100 lb. Propane Cylinder (qty. 2)
*	P400	Propane Tank Manifold
*	1630RU	30" Propane Tank Pigtail



Type of Gas
Input Rating
Manifold Pressure
Orifice Size

For use with Propane Only
75,000-250,000 BTU/hr
10 psig
No. 64 Drill - 6 Holes

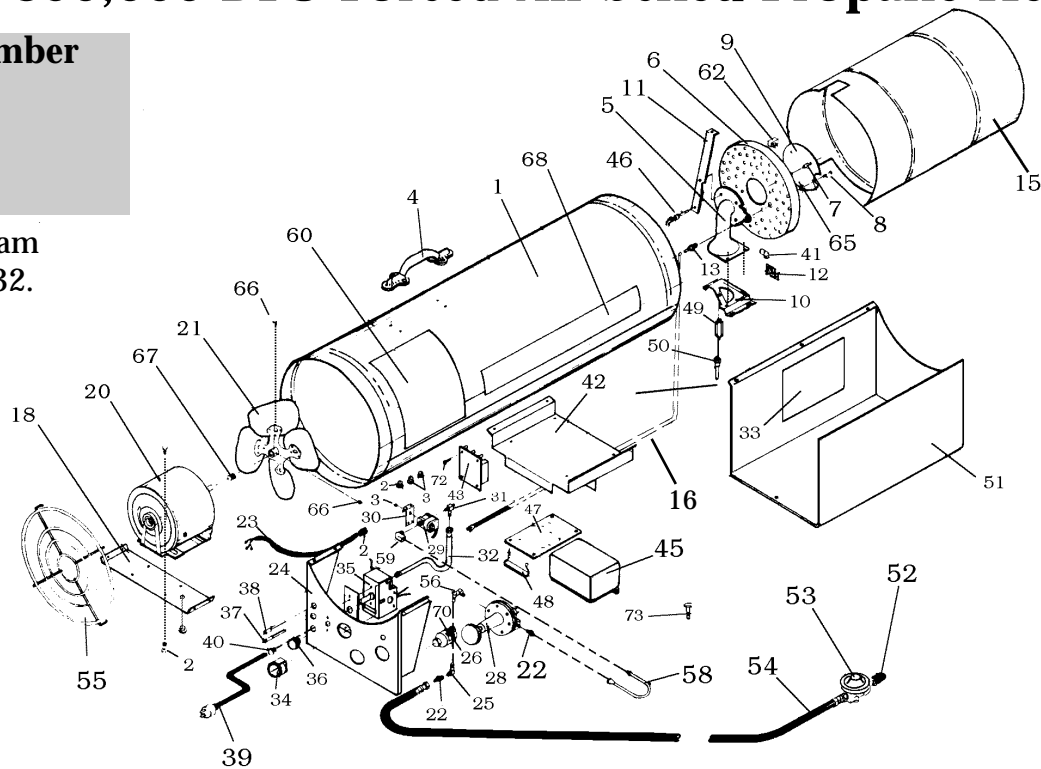
* Not Shown
Screws Are Standard Hardware Items

175-350,000 BTU Forced Air Scheu Propane Heater

Model Number

**Universal
3500FA**

Wiring diagram
is on page 232.



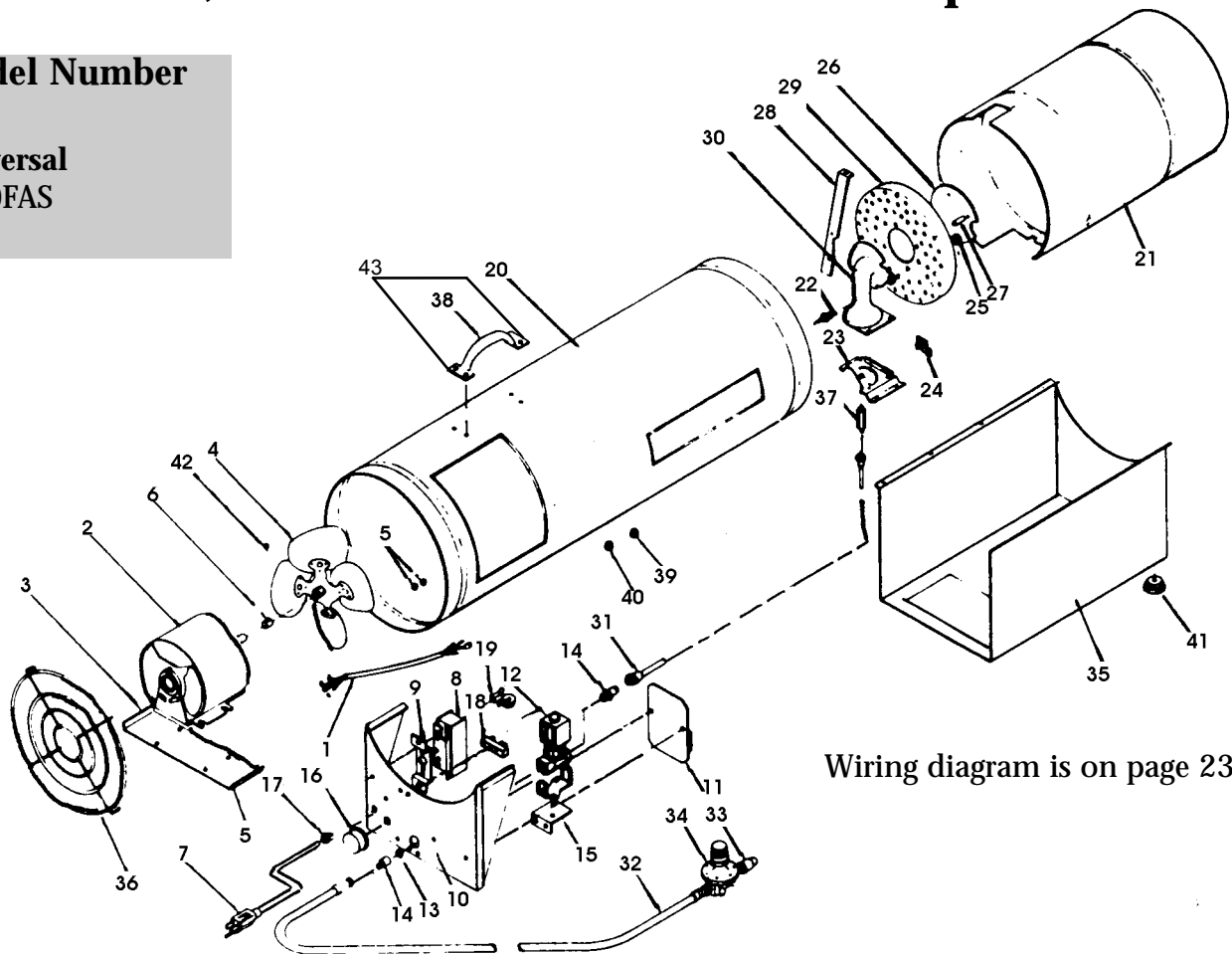
Key No.	Part No.	Description	Key No.	Part No.	Description
1	1114NR	Body Shell	40	6223NR	Power Cord Grommet
2	6225NR	Grommet, 5/8" (qty. 5)	41	6071NR	3/8 Loop Clamp (Thermostat Bulb) qty. 3
3	6224NR	Grommet, 1/2" (qty. 3)	42	3187NR	Component Platform
4	7095NR	Handle (Handle Clips #7094NR qty. 2)	43	10741NR	Ignition Control
5	6148NR	Burner Casting	*	0945NR	Tipover Switch Assembly
6	3219NR	Flame Holder, Stainless Steel	45	10741NR	Replacement Conversion Kit
7	3173NR	Spacer, Stainless Steel, 1" Long (qty. 4)	46	6169NR	Flame Sensor Switch
8	6025NR	Screw, 10-24 x 1-7/8" Stainless Steel (qty. 4)	47	6244NR	Terminal Board
9	3172NR	Flame Spreader, Stainless Steel	48	1127NR	Resistor Assembly (1000 Ohm)
10	1116NR	Support Member Assembly	49	3191NR	Orifice #45 Drill
11	3176NR	Burner Support Arm	50	1130NR	Fuel Line Assembly
12	1118NR	High Limit Switch Assembly, 240°F	51	1131NR	Cover Assembly Control Box
13	1083NR	Spark Plug, 1/8" gap	52	6252NR	POL/Excess Flow Valve
*	6226NR	Grommet, 5/8", Spark Plug	53	6253NR	Pressure Regulator, 40 psi, Preset
15	1120NR	Inner Liner	54	6151NR	1/4" x 10' Hose
16	1133NR	Wire Assembly, Spark Plug	2525		1/4" x 25' Hose
*	1206NR	Wire Assembly, Limit Switch, Black	55	3180NR	Grill
18	3178NR	Motor, Mounting Plate	56	1137NR	Manifold, Filter to Regulator
19	NLA	Heat Shield, Thermostat Bulb	58	1128NR	Tube, Valve-Filter
20	1174NR	Motor, 1/6 hp, 1725 rpm	59	6136NR	Elbow, 90°, 1/4" MPT x 1/4" Inverted Flare
21	6073NR	Fan Blade w/Set Screws	60	6426NR	Label, Operating Instructions
22	6124NR	Male Connector, 1/4" MPT x 1/4" Flare (qty. 2)	*	6382NR	Label, Thermostat Knob
23	1119NR	Motor Cord Assembly	62	1117NR	Heat Shield, Flame Sensor
24	1121NR	Control Panel	*	1134NR	Wire Assembly, Flame Sensor, Brown
25	6142NR	Street EI, 1/4" Short Taper 1/4 MPT x 1/4 FPT	*	1135NR	Wire Assembly, Flame Sensor, Yellow
26	6119NR	Filter	65	3037NR	Nut, Spark Plug, 14mm
*	3186NR	Filter Bracket	66	6010NR	Set Screw, Nylock 1/4-28 (qty. 2)
28	6254NR	Regulator (second stage)	67	6229NR	Spacer, Fan Retention
29	1125NR	Solenoid Gas Valve Assembly	68	6383NR	Label, Universal Trademark
30	3188NR	Gas Valve Bracket	*	6410NR	Label, Thermostat Warning
31	6132NR	Tee, Brass, 1/4" MPT x 1/4" Flare x 1/4" Flare	70	6387NR	Label, Filter
32	1129NR	Tubing Assembly, Pressure Gauge	*	6070NR	Loop Clamp, 5/16" (Flame Sensor)
33	6388NR	Label, Wiring Diagram	72	6079NR	Standoff (qty. 3)
34	6271NR	Pressure Gauge (1/4" Flare Inlet)	73		Screw, N/A
35	1122NR	Thermostat Assembly	*	6065NR	Spacer, .2ID x 1/2"
36	1507NR	Thermostat Knob	*	6185NR	Terminal, "U" Adapter
37	1089NR	Amber Light Assembly	*	C100	100 lb. Propane Cylinder (qty. 3)
38	1123NR	Red Light Assembly	*	P400	Propane Cylinder Manifold (qty. 2)
39	1036NR	Power Cord Assembly	*	1630RU	30" Rubber Pigtail (qty. 2)

Scheu LP 350,000 BTU

175-350,000 BTU Forced Air Scheu Propane Heater

Model Number

**Universal
3500FAS**



Wiring diagram is on page 231.

Key No.	Part No.	Description
1	1119NR	Motor Cord Assembly
2	1174NR	Motor Assembly
3	3178NR	Motor Support
4	6073NR	Fan 12", CCW 1/2 ID HUB
5	6225NR	Snap bushing, 5/8" Nylon (qty. 3)
6	6229NR	Spacer, Fan 1/2 x 5/8
7	1036NR	Power Cord Assembly
8	1122NR	Thermostat Assembly
9	3441NR	Bracket Thermostat Mounting
10	1451NR	Panel Control Assembly Ram
11	Call	
12	1193NR	Valve Assembly
13	6118NR	Filter 1/4 pipe insert
14	6124NR	FTG Male Conn 1/4 FLR x 1/4 MPT (qty. 2)
15	3516NR	Valve Mounting Bracket
16	1507NR	Thermostat Knob Assembly
17	6223NR	Strain Relief Bushing, 5/8"
18	6641NR	Terminal Board
19	6946NR	Tip Switch Mounting, Nylon (use 0945NR conversion assembly)
20	1114NR	Outer Shell Assembly
21	1120NR	Middle Cylinder Assembly
22	1083NR	Spark Plug, 1/8" gap
23	1116NR	Support Assembly, Venturi/Orifice
24	1176NR	High Limit Control Assembly
25	3037NR	Nut, Spark Plug, 14mm
26	3172NR	Flame Spreader
27	3173NR	Spacer, Flame Spreader 1/4 x 1 (qty. 4)
28	3216NR	Burner Support

Key No.	Part No.	Description
29	3219NR	Flame Holder
30	6148NR	Venturi Casting
31	1177NR	Fuel Tube Assembly
32	6151NR	Hose Assembly LP 1/4 x 1/4 MPT x 1/4 FPT
33	6252NR	POL Excess Flow
34	6258NR	Regulator 5-20 psi 1/4"x1/4"FPT
35	1372NR	Control Box Assembly
36	3180NR	Inlet Grill Assembly
37	3191NR	Orifice LP #45 Drill
38	7095NR	Handle
39	6224NR	Snap Bushing, 1/2"
40	6226NR	Universal Bushing, 5/8" Nylon
41	6576NR	Bumper Rubber Feet (qty. 2)
42	6010NR	Set Screw, 1/4-28 Nyloc*
*	6025NR	Screw, 1-7/8" S.S.
*	6070NR	Loop Clamp, 5/16" (qty. 2)
43	7094NR	Clip Handle Mounting (qty. 2)
*	6312NR	Manual, Operating Instructions
*	6052NR	Nut, Flex Lock #10-24 Thin
*	2525	25' Hose
*	C100	100 lb. Propane Cylinder (qty. 3)
*	P400	Propane Cylinder Manifold (qty. 2)
*	1630RU	30" Rubber Pigtail (qty. 2)

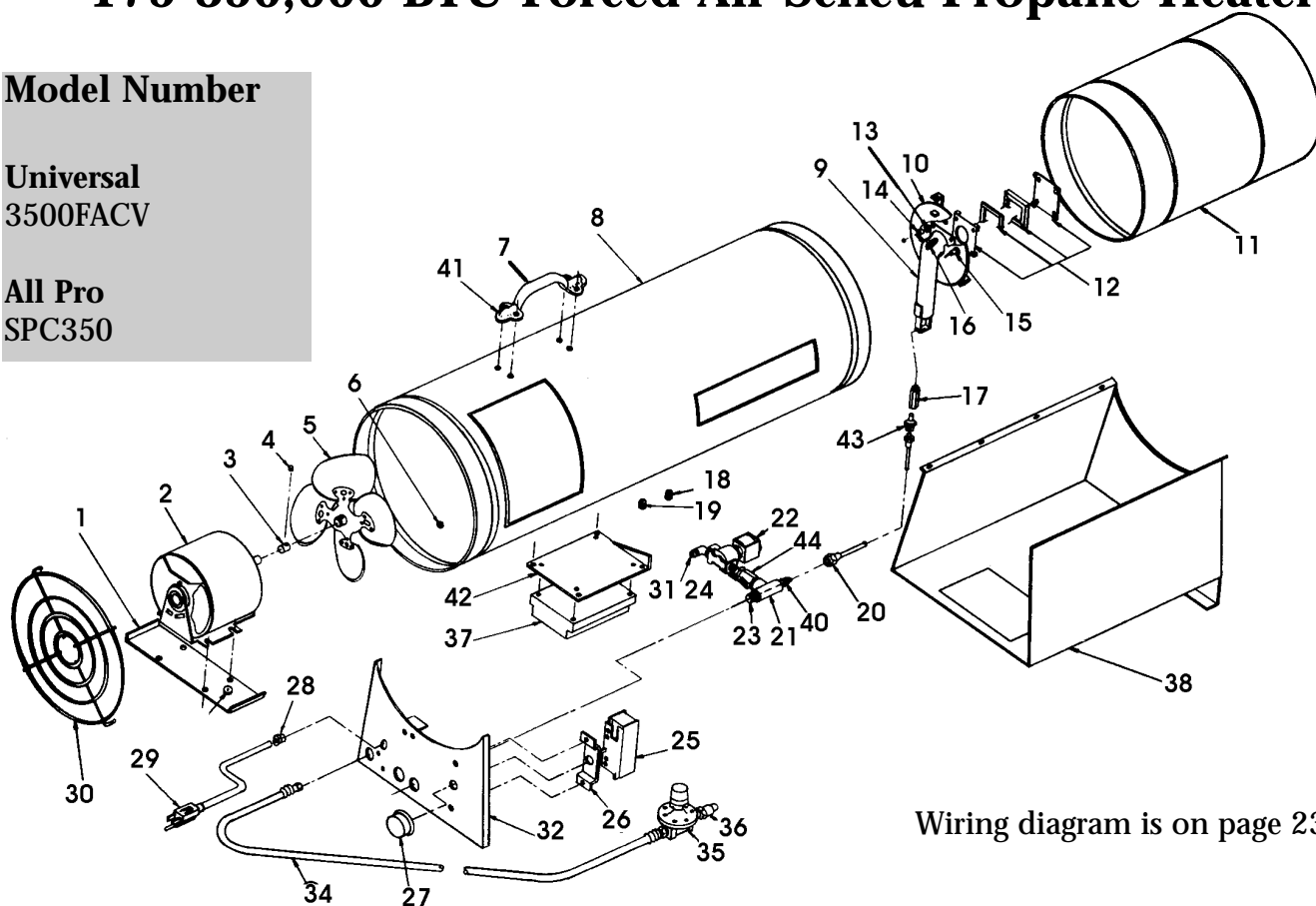
Scheu LP 175-350,000 BTU

175-350,000 BTU Forced Air Scheu Propane Heater

Model Number

Universal
3500FACV

All Pro
SPC350



Wiring diagram is on page 232.

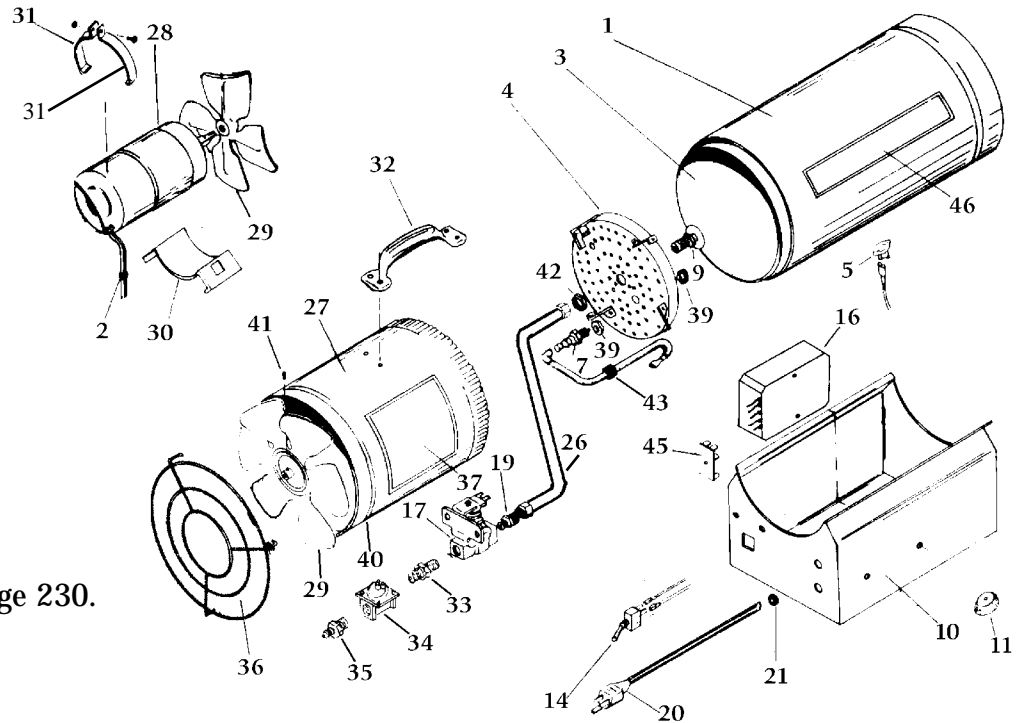
Key No.	Part No.	Description	Key No.	Part No.	Description
1	3178NR	Motor Support	29	1036NR	Power Cord Assembly
2	1174NR	Motor Assembly	30	3180NR	Inlet Grill Assembly
3	6229NR	Spacer, Fan	31	6118NR	Filter, 1/4 Pipe Insert
4	6010NR	Set Screw (qty. 2)	32	1614NR	Panel, Control Assembly Ram
5	6073NR	Fan 12" CCW 1/2 ID HUB	*		
6	6225NR	Snap Bushing (qty. 3)	34	6151NR	Hose Assembly LP
7	7095NR	Handle	35	7406NR	Regulator 20 psi
8	1486NR	Burner Shell Assy (3500FACV)	36	6252NR	POL Excess Flow
	1466NR	Burner Shell Assy (SPC350)	37	Call	DSI
9	1546NR	Burner Tube Assembly	38	1731NR	Control Box Assembly
10	1491NR	Flame Holder Assembly	40	6144NR	Male Connector 5/16 FLR x 1/4 MPT
11	1487NR	Middle Cylinder	41	7094NR	Clip Handle Mounting (qty. 2)
12	1663NR	Grid Assembly	42	Call	
13	3017NR	Keeper (qty. 4)	43	7372NR	Male Connector 5/16 FLR x 1/8 MPT
14	7121NR	Spacer (qty. 4)	*	6070NR	Loop Clamp, 5/16" (qty. 2)
15	7118NR	Electrode (#1617-Wire Assembly)	*	7338NR	Manual, Operating Instruction
16	6168NR	High Limit Control Assembly	44	7431NR	Ball Valve
17	3652NR	Fuel Nozzle	*	C100	100 lb. Propane Cylinder (qty. 3)
18	6224NR	Snap Bushing	*	P400	Propane Cylinder Manifold (qty. 2)
19	6226NR	Universal Bushing	*	1630RU	30" Rubber Pigtail (qty. 2)
20	1616NR	Fuel Tube Assembly	*	2525	25' Gas Hose
21	7343NR	Fitting, Female Tee, 1/4"	*	1617	Electrode Wire Assembly
22	1125NR	Valve Assembly			
23	7355NR	Fitting, Male Plug, 1/4 MPT			
24	6121NR	Male Elbow, 1/4 FLR x 1/4 MPT			
25	1734NR	Thermostat Control Assembly - NLA			
26	3441NR	Bracket, Thermostat Mounting			
27	1507NR	Thermostat Knob Assembly			
28	6223NR	Strain Relief Bushing			

Scheu LP 175-350,000 BTU

80-150,000 BTU Forced Air Natural Gas Scheu Heater

Model Number

Scheu
80/150FASNG



For wiring diagram see page 230.

Scheu NG 80-150,000 BTU

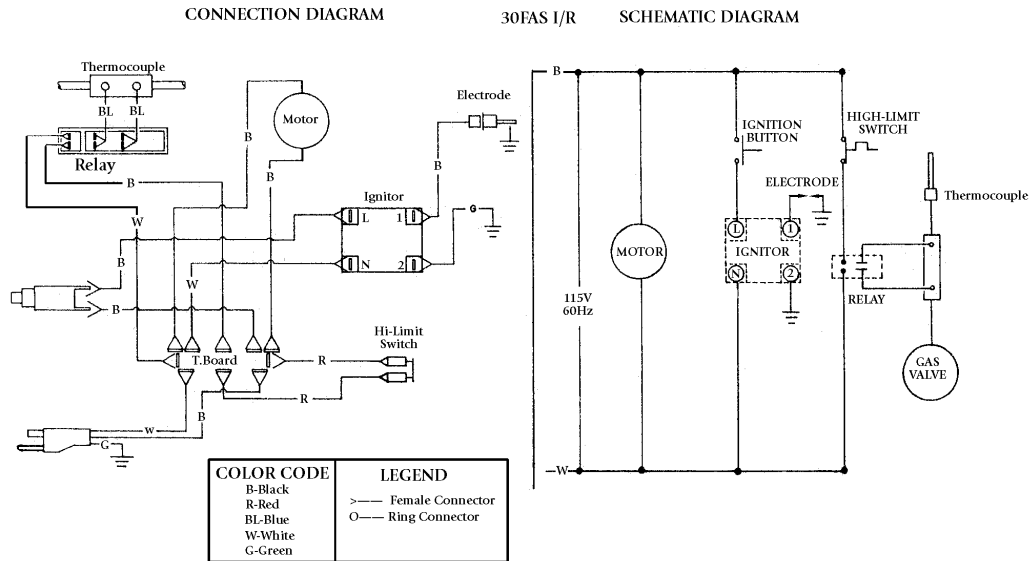
Key No.	80FAS-NG Part No.	150FAS-NG Part No.	Description	Key No.	80FAS-NG Part No.	150FAS-NG Part No.	Description
1	1060NR	1078NR	Burner Shell Assy	30	3132NR	3132NR	Lower Motor Support
2	6225NR	6225NR	Snap Bushing 5/8"	31	3133NR	3133NR	Strap, Motor Support (qty. 2)
3	1061NR	3750NR	Middle Cylinder Assy	32	7095NR	7095NR	Handle
4	1146NR	1146NR	Flame Holder Assy	33	6146NR	6146NR	Fitting, Reducing Nple
5	6168NR	6168NR	High Limit Switch, 240°F	34	6259NR	6259NR	Regulator, 4" W.C.
*	6384NR	6384NR	Label, Natural Gas Only	35	6125NR	6125NR	Fitting, Male
7	1082NR	1083NR	Spark Plug	36	3087NR	3087NR	Grill
9	1227NR	1216NR	Orifice Assembly	37	6418NR	6428NR	Label, Model/Operating
10	1161NR	1167NR	Control Box Assembly	*	6374NR	6374NR	Label, Electrical Grnd
11		6576NR	Rubber Bumper Feet (qty. 2)	39	3037NR	3037NR	Spark Plug Nut 14mm (qty. 3)
14	6170NR	6170NR	Toggle Switch	40	6646NR	6646NR	Label, Wiring
16	Call		DSI	41	6010NR	6010NR	Set Screw, Nylock
17	6100NR	6100NR	Solenoid Valve	42	3038NR	3038NR	Nut, Orifice 3/4-16
19	6143NR		Fitting Male Connector	43			Ignition Lead (call)
		6123NR	Fitting Male Connector	45	6444NR	6444NR	Terminal Board
20	1036NR	1036NR	Power Cord Assembly	46	6383NR	6383NR	Label, Universal Logo
21	6223NR	6223NR	Bushing Strain Relief (Power Cord)	*	6044NR	6044NR	Nut, Thin Hex, Switch
*	6369NR	6369NR	Warning Label, Fuel	*	6328NR	6328NR	Manual, Op. Inst.
*	6373NR	6373NR	Label, Fan Rotation	*	6189NR	6189NR	Terminal, "Y" Adptr
*	6422NR	6422NR	Label, On/Off Switch	*	7094NR	7094NR	Clip, Handle
26	1162NR	1171NR	Fuel Tube Assembly	5010	5010	5010	1/2" x 10 ft Hose
27	1064NR	1096NR	Motor Shell Assembly	5025	5025	5025	1/2" x 25 ft Hose
28	1361NR	1166NR	Motor Assembly (5 Wire)	KT121	KT121	KT121	Thermostat, warmer-cooler dial
		1561NR	Motor Assy (3 Wire)	*	10444	10444	1/2" FFIR x 1/2" FPT
29	6086NR	6074NR	Fan	*	54	54	1/2" Swivel Union

* Not shown on exploded view.

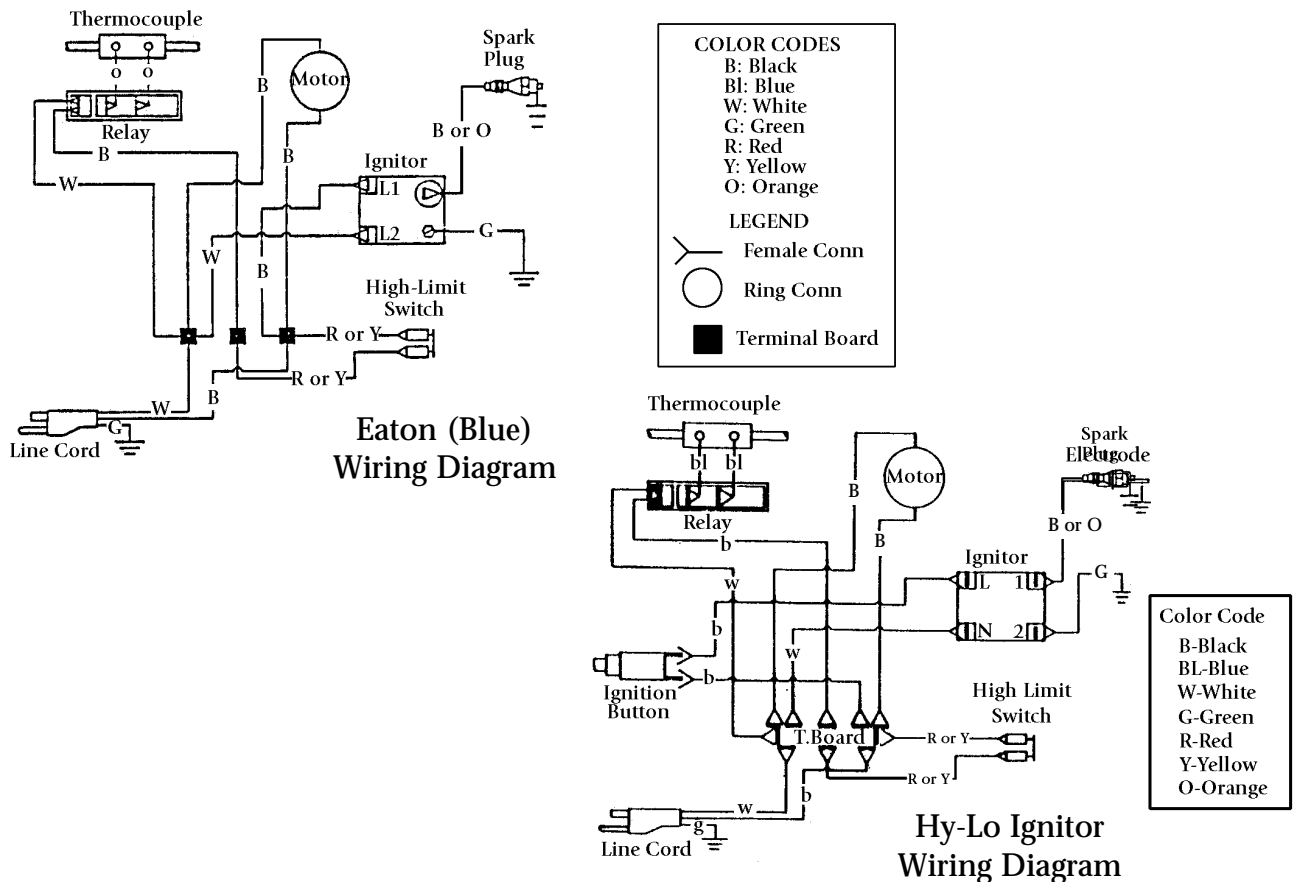
Universal Wiring Diagrams

If you do not see your exact schematic, please call 800-362-6951.

Model 30FAS/SPC30/SPC55/55F



Model 40FAC/45FAC/85FAC/SPC85/125FAC/SPC125



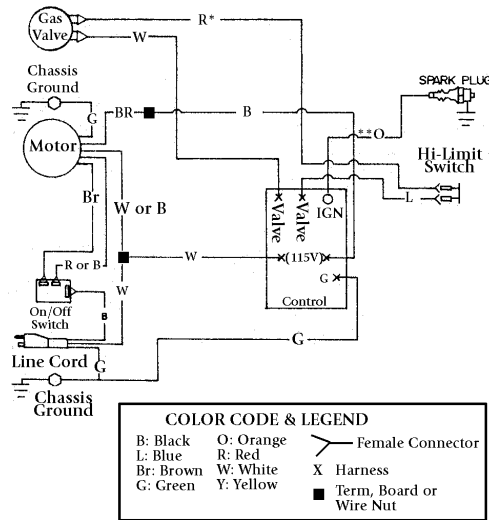
Scheu Wiring Diagrams

Universal Wiring Diagrams

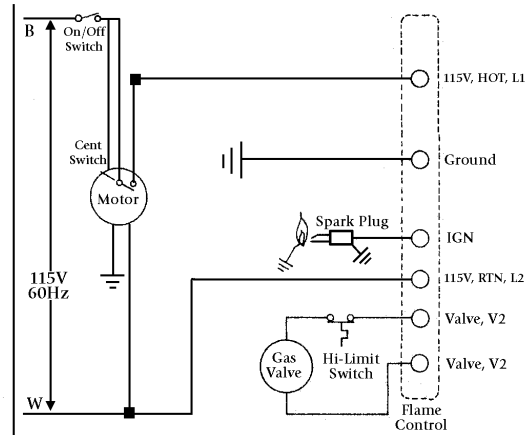
If you do not see your exact schematic, please call 800-362-6951.

Model 80FAS

CONNECTION DIAGRAM

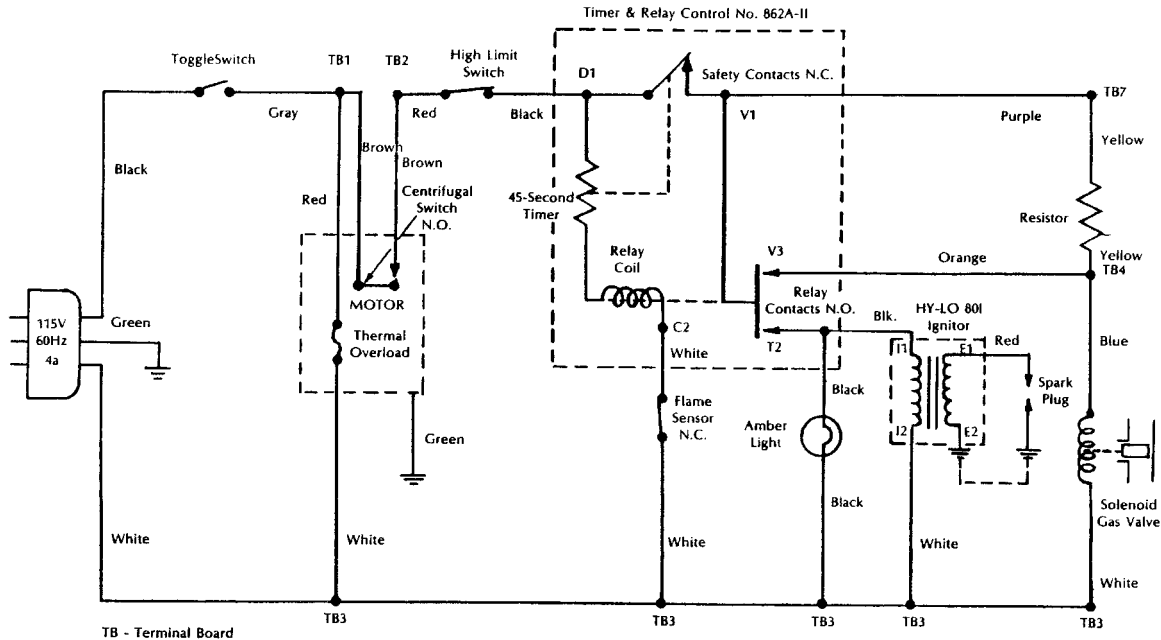


SCHEMATIC DIAGRAM



If any original wiring as supplied with the heater must be replaced, it must be replaced with type AWG 105°C wire or its equivalent except as indicated (*type SF2-2000, **SGI 250°C)

Model 150FA

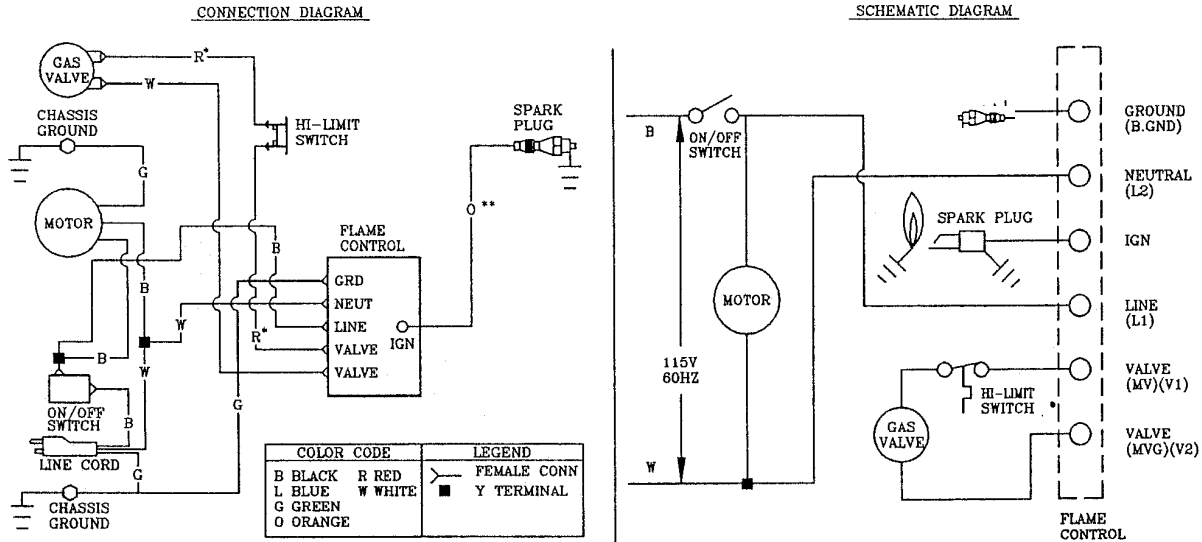


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Universal Wiring Diagrams

If you do not see your exact schematic, please call 800-362-6951.

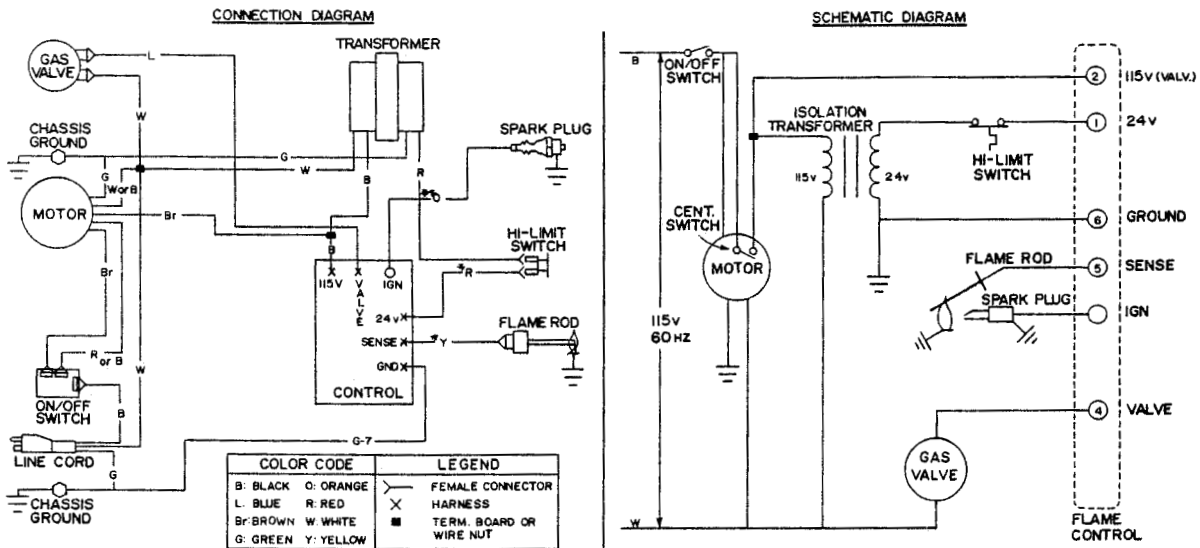
Model 150FAS (with 5 wire control)



If any original wiring as supplied with the heater must be replaced, it must with type AWG 105° C wire or its equivalent except as indicated (*type SF 2-200, ** SGI 250° C)

Scheu Wiring Diagrams

Model 150FAS w/Fenwall



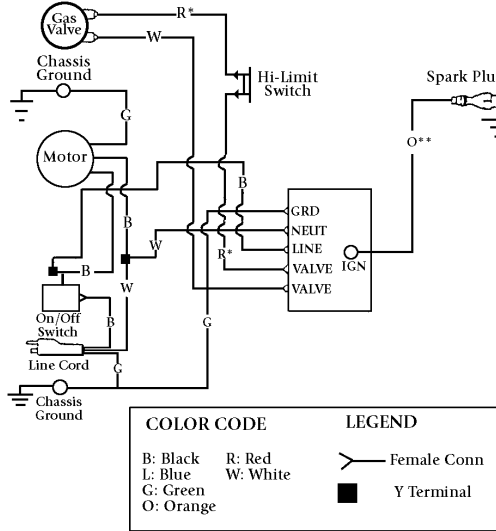
If any original wiring as supplied with the heater must be replaced, it must be replaced with type AWG 105°C wire or its equivalent except as indicated (*type SF-2 200, **SGI 250°C)

Universal Wiring Diagrams

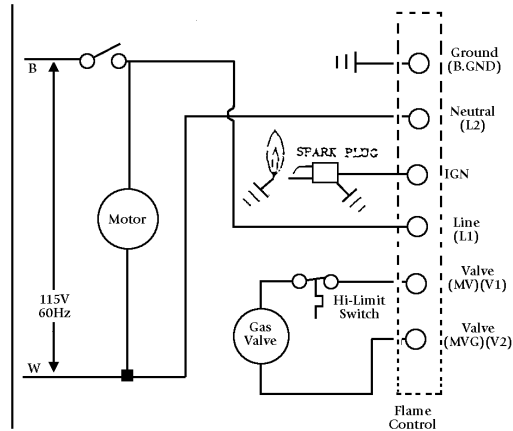
If you do not see your exact schematic, please call 800-362-6951.

Model 150FASNG

CONNECTION DIAGRAM



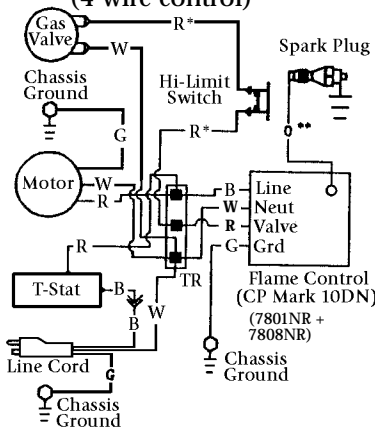
SCHEMATIC DIAGRAM



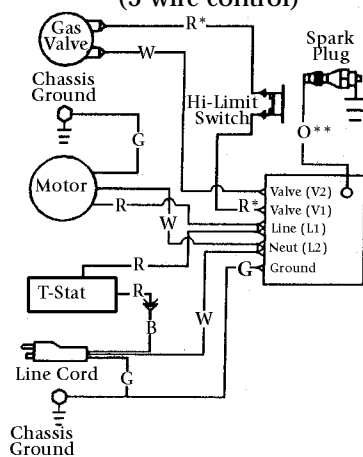
If any original wiring as supplied with the heater must be replaced, it must with type AWG 105° C wire or its equivalent except as indicated (*type SF 2-200, ** SGI 250° C)

Model 150FAST

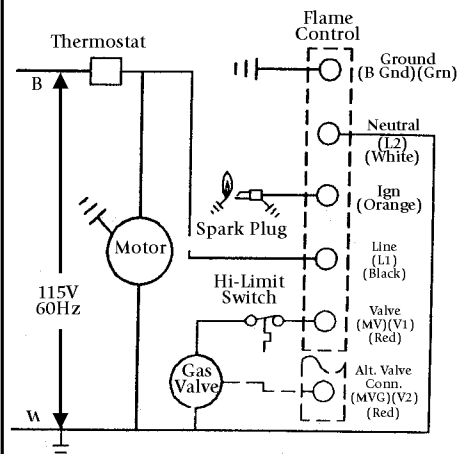
Connection Diagram (4 wire control)



Connection Diagram (5 wire control)



Schematic Diagram

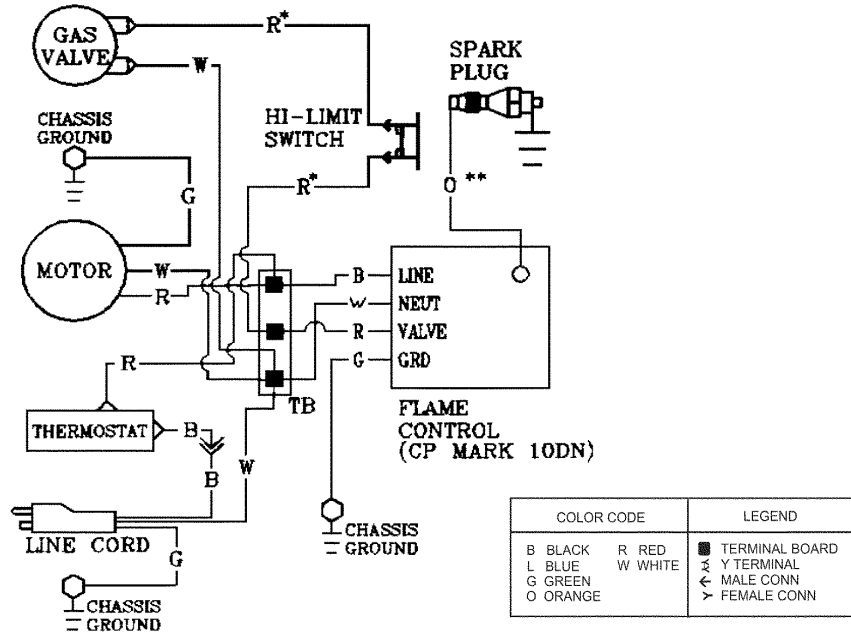


Universal Wiring Diagrams

If you do not see your exact schematic, please call 800-362-6951.

Model SPC170T/170FAST

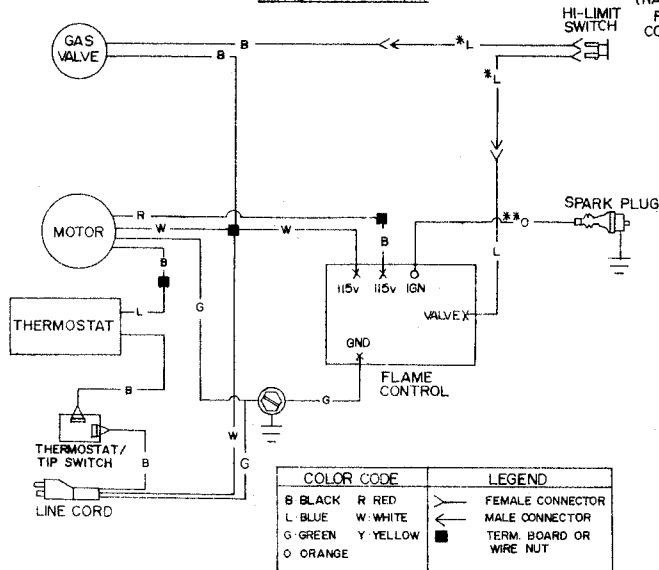
CONNECTION DIAGRAM



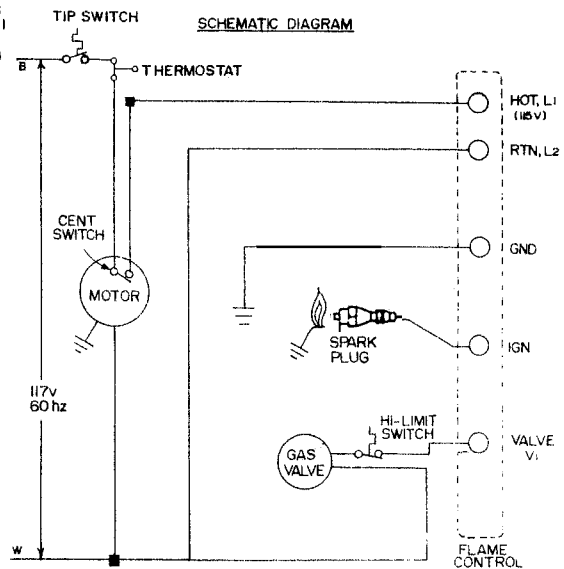
Scheu Wiring Diagrams

Model 3500FAS

CONNECTION DIAGRAM



SCHEMATIC DIAGRAM



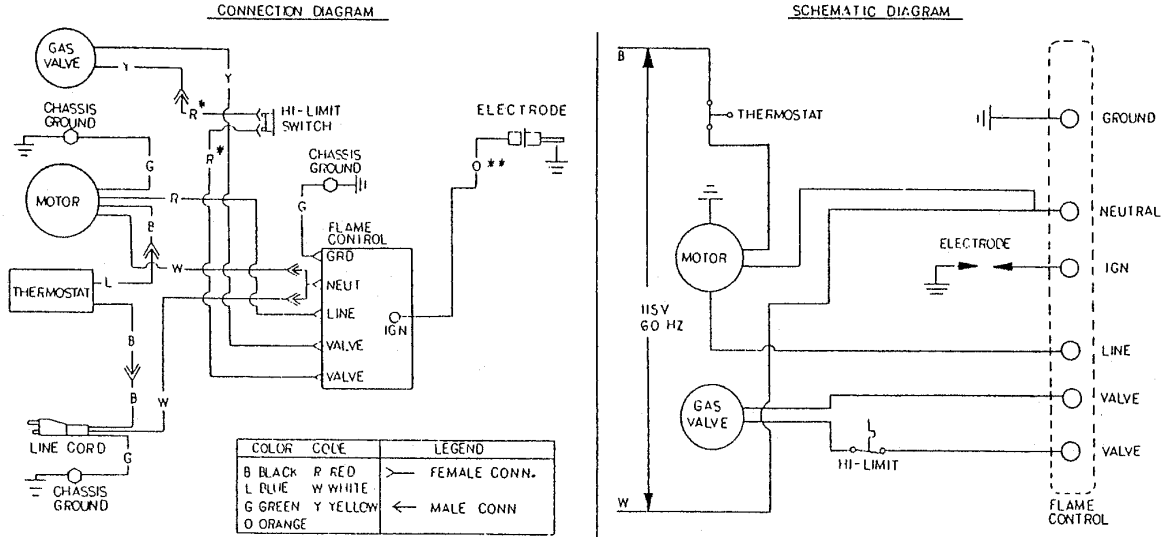
If any original wiring as supplied with the heater must be replaced, it must be replaced with type AWG 105°C wire or its equivalent except as indicated (*type SF-2 200, **SGI 250°C - 25KVDC).

Universal Wiring Diagrams

If you do not see your exact schematic, please call 800-362-6951.

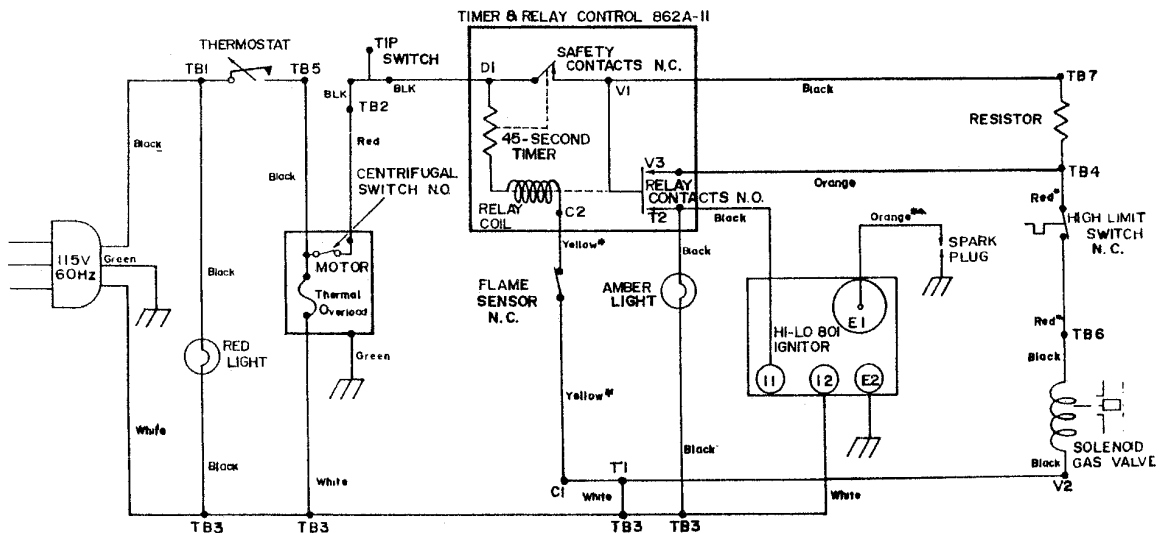
Model 3500FACV

Model 3500FACNG



IF ANY ORIGINAL WIRING AS SUPPLIED WITH THE HEATER MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE AWG 105°C WIRE OR ITS EQUIVALENT EXCEPT AS INDICATED>(*TYPE SF-2 200°C, **SGI 250°C, -25KVDC).

Model 3500FA/3500FANG



IF ANY ORIGINAL WIRING AS SUPPLIED WITH THE HEATER MUST BE REPLACED, IT MUST BE REPLACED WITH type AWG 105°C wire or its equivalent except as indicated>(*type SF-2 200°C, **type SGI 250°C)

Scheu Quick Parts Reference (Propane)

Model#	Motor	Thermocouple/ D.S.I.	Ignition Control/ Auto Control	Valve: Safety/ 7111NR Power Coil	Fan/Squirrel Cage	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Spark Generator	Other
30FAS/SPC30 1986	0751NR	6803NR	NA	1641NR Valve 7111NR Power Coil	6732NR	6168NR Limit	1377NR Electrode	6255NR	1640NR	7152NR (10ft)	6473NR Peizo	0966NR Relay Replacement 6171NR Push Button Cannot Use A Thermostat
30FAS/SPC30 1987	0751NR	6803NR	NA	1641NR Valve 7111NR Power Coil	6732NR	6168NR Limit	1377NR Electrode	6255NR	1640NR	7152NR (10ft)	6250NR Eaton or 3275NR HY-LO 801	0966NR Relay Replacement 6171NR Push Button Cannot Use A Thermostat
30FAS/SPC30 (1988-1992)	1368NR	6803NR	NA	1641NR Valve 7111NR Power Coil	6732NR	1440NR Limit	1377NR Electrode	6255NR	1640NR	7152NR (10ft)	6250NR Eaton or 3275NR HY-LO 801	1811 Relay 6171NR Push Button 6641NR Terminal Board
30FAS/SPC30 (1993-2002)	1368NR	6803NR	NA	7285NR Valve 7111NR Power Coil	6732NR	1440NR Limit	1377NR Electrode	6255NR	1640NR	7152NR (10ft)	6250NR Eaton or 3275NR HY-LO 801	1811NR Relay 6171NR Push Button 6641NR Terminal Board
30DFAS 1988	1429NR	NA	1446NR (Call)	6974NR	6732NR	1440NR Limit	6172NR Flame Rod	6255NR	1426NR	6151NR 2525 (25ft)	NA	Can Use A Thermostat
30DFAS (1988-1991)	1429NR	NA	1446NR (Call)	6100NR	6732NR	1440NR Limit	6172NR Flame Rod	6255NR	3618NR	6151NR 2525 (25ft)	NA	Can Use A Thermostat
30DFAS (1992-1995)	1429NR	NA	M51605-02 (Call)	6100NR	6732NR	6168NR Limit	1565NR Electrode	6255NR	3618NR	6151NR 2525 (25ft)	NA	Can Use A Thermostat
35FAC/SPC35 (1997-2002)	8076NR	8090NR	NA	8079NR 7111NR Power Coil	8077NR	6168NR Limit	8080NR Electrode	6256NR	See Valve	1591NR (10ft)	6473NR Peizo	Cannot Use A Thermostat 1007NR Hose and Regulator Assy
40FA (1978-1982)	1037NR	6542NR	NA	6105NR 7111NR Power Coil	6086NR	6168NR Limit	1083NR Spark Plug	6255NR	1259NR	6152NR (10ft) 3825 (25ft)	0761NR HI-Lo 801 Kit	0540NR Relay 6171NR Push Button Cannot Use A Thermostat
40FAS (1981-1983)	1037NR	6654NR	NA	1641NR 7111NR Power Coil	6086NR	6168NR Limit	1082NR Spark Plug	6255NR	1032NR	7152NR (10ft)	3275NR HY-LO 801	0540NR Relay 6171NR Push Button Cannot Use A Thermostat
40FAS (1983-1988)	1037NR	6654NR	NA	1641NR 7111NR Power Coil	6086NR	6168NR Limit	1082NR Spark Plug	6255NR	1032NR	7152NR (10ft)	6250NR Eaton	1068NR Relay 6171NR Push Button Cannot Use A Thermostat
40FAS (1988-1994)	1652NR	6654NR	NA	1641NR 7111NR Power Coil	6086NR	6168NR Limit	1082NR Spark Plug	6255NR	1032NR	7152NR (10ft)	6250NR Eaton	1811NR Relay 6171NR Push Button 6641NR Terminal Board
40FAC/SPC40 (1995-2002)	1652NR	6654NR	NA	7285NR 7111NR Power Coil	6086NR	6168NR Limit	1082NR Spark Plug	6255NR	1032NR	7152NR (10ft)	3275NR HY-LO 801	1811NR Relay Cannot Use A Thermostat
45FAC/SPC45 (1997-2002)	1652NR	6654NR	NA	7285NR 7111NR Power Coil	6086NR	1751NR Limit	1082NR Spark Plug	6257NR	1930NR	6152NR (10ft) 3825 (25ft)	3275NR HY-LO 801	1811NR Relay 7431NR Ball Control Valve Cannot Use A Thermostat
55F/SPC55 2003	1652NR	6654NR	NA	7285NR 7111NR Power Coil	6086NR	1751NR Limit	1082NR Spark Plug	6257NR	2236NR	6152NR (10ft) 3825 (25ft)	3275NR HY-LO 801	1811NR Relay 7431NR Ball Control Valve Cannot Use A Thermostat
60FA-BE 1984	1315NR	6238NR	NA	6106NR	6084NR	6175NR Limit	1057NR (Manual)	6255NR	6107NR Pilot 6111NR Burner	6152NR (10ft) 3825 (25ft)	NA	Can Use Thermostat Limit Switch Is 350 Degrees
60FAS (1978-1989)	1315NR	6540NR	NA	1047NR Combo Valve	6085NR	6535NR Limit	6657NR Electrode	6255NR	6108NR Pilot 1301NR Burner Tube	6152NR (10ft) 3825 (25ft)	6473NR Peizo	Can Use Thermostat Limit Switch Is 250 Degrees
60DFAS (1985-1991)	1315NR	NA	1475NR (Call)	6100NR	6084NR	1316NR Limit	1083NR Spark Plug	6255NR	1310NR Burner Tube	6152NR (10ft) 3825 (25ft)	NA	Can Use Thermostat

Scheu Quick Parts Reference (Propane)

Model#	Motor	Thermocouple/ Ignition Control/ D.S.I.	Valve: Safety/ Auto Control	Fan/Squirrel Cage	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Spark Generator	Other
75FAS (1990-1991)	1431NR	NA	6100NR	6953NR	1440NR Limit 1436NR Sail	6172NR Flame Rod	6255NR	1433NR Burner Tube 3825 (25ft)	6152NR (10ft) 3825 (25ft)	NA	Can Use Thermostat 6961NR Capacitor
75DFAS (1988-1991)	1431NR	NA	6100NR	6953NR	6168NR Limit	6172NR Flame Rod	6255NR	1433NR Burner Tube 3825 (25ft)	6152NR (10ft) 3825 (25ft)	NA	Can Use Thermostat 6961NR Capacitor
75DFAS (1992-1995)	1065NR	NA	6101NR	6953NR	6168NR Limit	1565NR Electrode	6255NR	3617NR	6152NR (10ft) 3825 (25ft)	NA	Can Use Thermostat 6961NR Capacitor
80FA (1979-1981)	0751NR	NA	6100NR	6086NR	6168NR Limit 1165NR Flame Rod	1083NR Spark Plug	6255NR	1257NR	6152NR (10ft) 3825 (25ft)	0761NR (Call)	1245NR 115 Volt Transformer (Call) 6170NR Toggle Switch 6180NR Time Delay Relay (Call)
VX80 (1981-1982)	0751NR	NA	6100NR	6086NR	6168NR Limit 1165NR Flame Rod	1082NR Spark Plug	6557NR	1063NR	6152NR (10ft) 3825 (25ft)	0761NR (Call)	1145NR 24Volt Transformer (Call) 6170NR Toggle Switch 1243NR Amber Light Assembly
80FAS (1981-1984)	0751NR	NA	6100NR	6086NR	6168NR Limit 6172NR Flame Rod	1082NR Spark Plug	6255NR	1063NR	6152NR (10ft) 3825 (25ft)	0761NR (Call)	1145NR 24 Volt Transformer (Call) 6170NR Toggle Switch Can Use Thermostat
80FAS 1885	0751NR	NA	6100NR	6086NR	3207NR Air Switch 6172NR Flame Rod	1082NR Spark Plug	6255NR	1063NR	6152NR (10ft) 3825 (25ft)	NA	6170NR Toggle Switch Can Use Thermostat
80FAS (1986-1987)	0751NR	NA	6100NR	6086NR	6168NR Limit 3207NR Air Switch	1082NR Spark Plug	6255NR	1063NR	6152NR (10ft) 3825 (25ft)	NA	6170NR Toggle Switch Can Use Thermostat
80FAS (1988-1990)	1361NR	NA	6100NR	6086NR	6168NR Limit	1082NR Spark Plug	6255NR	1063NR	6152NR (10ft) 3825 (25ft)	NA	6170NR Toggle Switch Can Use Thermostat
80FAS (1991-1993)	1551NR	NA	6100NR	6086NR	1550NR Limit	1082NR Spark Plug	6255NR	1063NR	6152NR (10ft) 3825 (25ft)	NA	6170NR Toggle Switch Can Use Thermostat
80FAC (1994-1999)	1551NR	NA	6100NR	6086NR	1550NR Limit	1083NR Spark Plug	6255NR	1755NR	6152NR (10ft) 3825 (25ft)	NA	6170NR Toggle Switch 1671NR Motor Mounting Grill Can Use Thermostat
80FAC (2000-2002)	1551NR	NA	6100NR	6086NR	1550NR Limit	1083NR Spark Plug	6255NR	1755NR	6152NR (10ft) 3825 (25ft)	NA	6170NR Toggle Switch 1959NR Wiring Harness Can Use Thermostat
85FAC/SPC85 1992	1551NR	6654NR	7285NR 7111NR Power Coil	6086NR	1751NR Limit	1083NR Spark Plug	6257NR	1673NR	6152NR (10ft) 3825 (25ft)	6250NR Eaton	1811NR Relay 7404NR Variable Ball Valve 6171NR Push Button Switch
85FAC/SPC85 (1993-2002)	1551NR	6654NR	7285NR 7111NR Power Coil	6086NR	1751NR Limit	1083NR Spark Plug	6257NR	1673NR	6152NR (10ft) 3825 (25ft)	3275NR HI-LO 801	1811NR Relay 7404NR Variable Ball Valve Cannot Use A Thermostat
125FAC/SPC125 (1997-2002)	1551NR	6654NR	7285NR 7111NR Power Coil	7898NR	2003NR Limit	1083NR Spark Plug	6257NR	2002NR	6152NR (10ft) 3825 (25ft)	3275NR HI-LO 801	1811NR Relay 7897NR Variable Control Valve Cannot Use A Thermostat
150FA (1975-1983)	1166NR	NA	6100NR	6074NR	6168NR Limit 6169NR Flame Sensor	1083NR Spark Plug	6255NR	3122NR	6152NR (10ft) 3825 (25ft)	0761NR (Call)	6170NR Toggle Switch 1090NR Resistor Assy Can Use Thermostat
150FAS (1988-1991)	1166NR	NA	6100NR	6074NR	6168NR Limit 6172NR Flame Rod	1082NR Spark Plug	6255NR	1168NR	6152NR (10ft) 3825 (25ft)	NA	1145NR 24Volt Transformer 6170NR Toggle Switch 6269NR Ball Control Valve
150FAS/SPC150FA (1992-1996)	150FA1561NR	NA	6100NR	6074NR	1550NR Limit	1083NR Spark Plug	6255NR	1168NR	6152NR (10ft) 3825 (25ft)	NA	6170NR Toggle Switch Can Use Thermostat

Scheu Quick Parts Reference (Propane)

Model#	Motor D.S.I.	Thermocouple/ Auto Control	Ignition Control/ Valve: Safety/ Cage	Fan/Squirrel	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Spark Generator	Other
150FAST/SPC150T (1997-1998)	NA	M51605-02 / 7499NR (Call)	6100NR	6074NR	1550NR Limit	1083NR Spark Plug	6255NR	1168NR	6152NR (10ft) 3825 (25ft)	NA	1734NR Thermostat 1942NR Thermostat Knob 3087NR Inlet Grill
150FAST/SPC150T (1999-2002)	NA	7801NR / 7808NR	6100NR	6074NR	1550NR Limit	1083NR Spark Plug	6255NR	1168NR	6152NR (10ft) 3825 (25ft)	NA	1959NR Wiring Harness 1734NR Thermostat 1924NR Thermostat Knob
170FAST/SPC170T 2003	NA	7808NR	6101NR	6074NR	6168NR Limit	8774NR	6257NR	2250NR	6152NR (10ft) 3825 (25ft)	NA	2254NR Thermostat 8777NR Burn Rate Adjustment Valve 8773NR Burn Rate Adjustment Knob
3500FA	NA	10741NR Conversion	1125NR	6073NR	1118NR Limit 6169NR Flame Sensor 0945NR Tip Switch	1083NR Spark Plug 6253NR Exterior 40psi	6255NR	3191NR	6151NR (10ft) 2525 (25ft)	3275NR HI-LO 801	1122NR Thermostat 6119NR J.S. Filler 1127NR 1000 Ohm Resistor
3500FAS	NA	1303NR (Call)	1125NR	6073NR	1176NR Limit 0945NR Tip Switch	1083NR Spark Plug	6258NR	3191NR	6151NR (10ft) 2525 (25ft)	NA	1122NR Thermostat 6118NR Filter, Pipe Insert 1/4" 1507NR Thermostat Knob
3500FAC	NA	Call	1125NR	6073NR	1316NR Limit	7118NR Electrode	6258NR	3652NR	6151NR (10ft) 2525 (25ft)	NA	1663NR Ceramic Burner Grid Assy 1122NR Thermostat 6118NR Filter, Pipe Insert 1/4"
3500FACV	NA	Call	1125NR	6073NR	6168NR Limit	7118NR Electrode	7406NR	3652NR	6151NR (10ft) 2525 (25ft)	NA	1663NR Ceramic Burner Grid Assy 7431NR Ball Adjustment Valve 1734NR Thermostat
7000FACV (1996-1998)	NA	7499NR	7721NR (qty 2)	7619NR	7661NR Limit 7722NR Air Switch	7118NR	7723NR	3913NR	7659NR (10ft)	NA	1856NR Ceramic Burner Grid Assy 6689NR Wheel (qty 2) 1734NR Thermostat
7000FACV (1999-2002)	NA	7499NR (1999) 7801NR (2000-2002)	7970NR (qty 2)	7619NR	7661NR Limit 7722NR Air Switch	7118NR	7723NR	3913NR	7659NR (10ft)	NA	7660NR P.O.L. Fitting 7663NR Ball Adjustment Valve 1734NR Thermostat

Scheu Quick Parts Reference (Propane Convection)

Model	Thermocouple	T.E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
SPC25VC	6233NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7916NR Electrode	7919NR	4034NR Pilot 4035NR Burner	7918NR (10ft)	7161NR Piezo Nut
SPC80C 80C (2003)	8643NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7652NR Electrode	6255NR	8644NR Pilot 8641NR Burner	6152NR (10ft) 3825 (25ft)	8654NR Ball Valve 8651NR Ball Valve Nut 8655NR Ball Valve Insert
80VC (Pre 1999)	6233NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7160NR Electrode	6255NR	7157NR Pilot 3557NR Burner	6152NR (10ft) 3825 (25ft)	6655NR Ball Valve 7161NR Piezo Nut
80VCA	6233NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7652NR Electrode	6255NR	7157NR Pilot 3557NR Burner	6152NR (10ft) 3825 (25ft)	6269NR Ball Valve 7161NR Piezo Nut
80VCB	8643NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7652NR Electrode	6255NR	8644NR Pilot 8641NR Burner	6152NR (10ft) 3825 (25ft)	8654NR Ball Valve 8651NR Ball Valve Nut 8655NR Ball Valve Insert
101	6235NR 6515NR Knob	6103NR (Brushed Aluminum)	NA	6255NR	6108NR Pilot 6112NR Burner	6152NR (10ft) 3825 (25ft)	6433NR P.O.L. Fitting
SPC200C 200C (2003)	8643NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7652NR Electrode	6256NR	8647NR Pilot 8646NR Burner	1591NR (10ft)	8654NR Ball Valve 8651NR Ball Valve Nut 6252NR P.O.L. Fitting
SPC200VC	6234NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7652NR Electrode	6256NR	7708NR Pilot 3988NR Burner	6151NR (10ft) 2525 (25ft) 6252NR P.O.L. Fitting	6269NR Ball Valve 7161NR Piezo Nut

Scheu Gas Quick Parts Ref.

Scheu Quick Parts Reference (Propane Convection)

Model	Thermocouple	T.E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
SPC225VC	6233NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7652NR Electrode	6256NR	7708NR Pilot 3988NR Burner	1591NR (10ft)	6252NR Ball Valve 7161NR Piezo Nut 6252NR P.O.L. Fitting
SPC225VCA	6233NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7652NR Electrode	6256NR	7708NR Pilot 3988NR Burner	1591NR (10ft)	6269NR Ball Valve 7161NR Piezo Nut 6252NR P.O.L. Fitting
SPC225VCB	8643NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7652NR Electrode	6256NR	8647NR Pilot 8646NR Burner	1591NR (10ft)	8654NR Ball Valve 8651NR Ball Valve Knob 8655NR Ball Valve Insert
250 (1985-1988)	6233NR 6045NR Clip	6104NR 7111NR Power Coil	NA	6256NR	3140NR Pilot 3145NR Burner	6151NR (10ft) 2525 (25ft)	6269NR Ball Valve 6252NR P.O.L. Fitting
250 (1994-On)	6233NR 6045NR Clip	6104NR 7111NR Power Coil	NA	6256NR	6716NR Pilot 3145NR Burner	1591NR (10ft)	6655NR Ball Valve 6252NR P.O.L. Fitting
250A 1986	6233NR 6045NR Clip	6104NR 7111NR Power Coil	NA	6256NR	6716NR Pilot 3145NR Burner	6151NR (10ft) 2525 (25ft)	6269NR Ball Valve 6252NR P.O.L. Fitting
250A (1994-2000)	6233NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7160NR Electrode	6256NR	6716NR Pilot 3145NR Burner	1591NR (10ft)	6655NR Ball Valve 7161NR Piezo Nut 6252NR P.O.L. Fitting
250H (1977-1994)	6234NR 6045NR Clip	6104NR 7111NR Power Coil	NA	6256NR	3140NR Pilot 3159NR Burner	6151NR (10ft) 2525 (25ft)	6655NR Ball Valve 6252NR P.O.L. Fitting
250P 1991	6233NR 6045NR Clip	6104NR Valve 7111NR Power Coil	6473NR Piezo 7160NR Electrode	6256NR	6716NR Pilot 3145NR Burner	6151NR (10ft) 2525 (25ft)	6655NR Ball Valve 7161NR Piezo Nut 6252NR P.O.L. Fitting
SPC250VC	6243NR 6045NR Clip	6104NR Valve 7111NR Power Coil	6473NR Piezo 7652NR Electrode	6256NR	6716NR Pilot 3145NR Burner	6151NR (10ft) 2525 (25ft)	6269NR Ball Valve 7161NR Piezo Nut 6252NR P.O.L. Fitting

Scheu Quick Parts Reference (Propane Radiant)

Model#	Thermocouple	T.E. Safety Valve	Switch: Safety	Ignitor/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
SPC9R	E73404 O.D.S. Pilot Assy	E73416	E73403 Tip Switch	E73234 Piezo See Thermocouple	E11410	See Thermocouple E73414 Burner	E73701 (5ft-optional) E73702 (12ft-optional)	E73439 Burner Tile E73446 Complete Burner Assy E73418 Burner Control Knob
11PHTT	8390NR	8401NR	8361NR Tilt Switch	8386NR Electrode	8360NR	8392NR		8397NR Knob 8403NR Ignition Wire F273702 12" Ext Hose
SPC12IR	6233NR 6045NR Nut	7285NR 7111NR Power Coil	NA	NA	6257NR	3008NR	1016NR	0566NR Ceramic Grid 3017NR Grid Keeper (Qty 2) 1010NR Complete Burner Assy
SPC15R	8661NR 8662NR Nut (Qty 2)	7111NR Power Coil	NA	NA	8663NR	8660NR Burner Head Assy	NA	8664NR Grill
SPC21PHTTS	8551NR 8541NR Nut	8553NR	8555NR Tilt Switch	8550NR Electrode	8552NR	8539NR	NA	8554NR Knob 8557NR Door Knob 8558NR Door Latch
SPC24IR SPC24IRP	6233NR 6045NR Nut	7285NR 7111NR Power Coil	NA	6473NR Piezo (24P Only) 7395NR Electrode (24P Only)	6257NR	3008NR (Qty 2)	1016NR	0566NR Ceramic Grid (Qty 2) 3017NR Grid Keeper (Qty 3) 1010NR Complete Burner Assy (Qty 2)
SPC30R	8661NR (Qty 2) 8662NR Nut (Qty 2)	7111NR Power Coil (Qty 2)	NA	8672NR Piezo 8666NR Electrode (Qty 2)	8663NR	8660NR Burner Head Assy (Qty 2)	8665NR (Qty 2)	8664NR Grill (Qty 2) 8673NR Piezo Nut
SPC35R	09352	00333	09357 Tip Switch	CR375 Piezo CR705 Ignitor	11695	05455	Call	CR710 Wheel (Qty 2) CR725 Handle CR720 Axle

Scheu Quick Parts Reference (Propane Radiant)

Model#	Thermocouple	T.E. Safety Valve	Switch: Safety	Ignitor/Electrode	Regulator	Orifice: Pilot/Burner	Hose	Other
SPC36AP	6233NR 6045NR Nut	7285NR 7111NR Power Coil	NA	6473NR Piezo 7395NR Electrode 8129NR Flat Tip Electrode	6257NR	3008NR (Qty 3)	7309NR	0566NR Ceramic Grid (Qty 3) 3017NR Grid Keeper (Qty 2) 1010NR Complete Burner Assy (Qty 3)
SPC36IR	6233NR 6045NR Nut	7285NR 7111NR Power Coil	NA	NA	6257NR	3008NR (Qty 3)	1016NR	0566NR Ceramic Grid (Qty 3) 3017NR Grid Keeper (Qty 2) 1010NR Complete Burner Assy (Qty 3)
SPC42PH	8001NR	7999NR	NA	6473NR Piezo 2085NR Electrode	2075NR Assy	8063NR Pilot 4176NR Burner	2075NR Assy	8004NR Pilot Knob G1851 Acme Withdrawal Valve
SPC44PHW	8301NR	8304NR	NA	8251NR Piezo 8302NR Electrode	2075NR Assy	8306NR Pilot 8303NR Burner	8248NR	8004NR Knob G1851 Acme Withdrawal Valve
SPC45PHS	8301NR	8304NR	NA	8251NR Piezo 8302NR Electrode	2075NR Assy	8306NR Pilot 8303NR Burner	8248NR	8004NR Knob G1851 Acme Withdrawal Valve
SPC48IR	6233NR 6045NR Nut	7285NR 7111NR Power Coil	NA	6473NR Piezo 7395NR Electrode 8129NR Flat Tip Electrode	6257NR	3008NR (Qty 4)	1016NR	0566NR Ceramic Grid (Qty 4) 3017NR Grid Keeper (Qty 3) 1010NR Complete Burner Assy (Qty 4)
SPC54PHW SPC54PHB	8576NR (O.D.S.)	8603NR	8605NR Tip Switch	6473NR Piezo Electrode Part Of 8576NR (O.D.S.)	2242NR Assy	8576NR Pilot (O.D.S.) 8611NR Burner	2242NR Assy	8692NR Wheel Assy 8579NR Knob 8617NR Reflector (Dome)
SPC55PHS SPC55PHT	8576NR (O.D.S.)	8603NR	8605NR Tip Switch	8577NR Pulse Igniter Electrode Part Of 8576NR (O.D.S.)	2243NR Assy	8576NR Pilot (O.D.S.) 8611NR Burner	2243NR Assy	8579NR Knob 8693NR Wheel Assy 8617NR Reflector (Dome)
SPC100RA (Pre 1991)	6235NR	6103NR (Brushed Aluminum) 6515NR Knob	NA	NA	6255NR	6108NR Pilot 6112NR Burner	6152NR (10ft) 3825 (25ft)	6433NR P.O.L. Fitting
SPC100RA (Post 1991)	6234NR 6045NR Clip	6104NR 7111NR Power Coil	NA	6473NR Piezo 3451NR Electrode	6255NR	7157NR Pilot 6112NR Burner	6152NR (10ft) 3825 (25ft)	6269NR Ball Control Valve 6433NR P.O.L. Fitting
SPC125R	09352	00332	NA	CR835 Piezo CR805 Igniter	11695	05363 Pilot	Call	CR810 Wheel (Qty 2) CR820 Axle
SPC250RA	6234NR 6045NR Clip	6104NR 7111NR Power Coil	NA	NA	6256NR	7481NR Pilot 7480NR Burner	1591NR (10ft)	1007NR Hose & Reg Assy 6433NR P.O.L. Fitting

Scheu Quick Parts Reference (Natural Gas Forced Air)

Model#	Motor	Thermocouple	Ignition control/ D.S.I.	Valve: Safety/ Auto Control	Fan/ Squirrel Cage	Safety Switches	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose (Optional)	Spark Generator	Other
80FASNG (1996-1999)	1551NR	NA	7499NR	6100NR	6086NR	1550NR Limit	1083NR Spark Plug	6259NR	1227NR	5010 10ft*	NA	Can Use Thermostat 6170NR Toggle Switch 6444NR Terminal Board
80FASNG (2000-2002)	1551NR	NA	7808NR	6100NR	6086NR	1550NR Limit	1083NR Spark Plug	6259NR	1227NR	5010 10ft*	NA	Can Use Thermostat 1959NR Wiring Harness 6170NR Toggle Switch
150FANG	1166NR	NA	10742NR Conversion	6100NR	6074NR	6168NR Limit 6169NR Flame Sensor	1083NR Spark Plug	6259NR	3122NR	5010 10ft*	3275NR HI-LO 801	Can Use Thermostat 1243NR Amber Light 1251NR Resistor
150FASNG (1978-1990)	1166NR	NA	10741NR	6100NR	6074NR	6168NR Limit 6172NR Flame Rod	1083NR Spark Plug	6259NR	1216NR	5010 10ft*	3275NR HI-LO 801	Can Use Thermostat 6170NR Toggle Switch
150FASNG (1991-1998)	1561NR	NA	M51605-02 (Call)	6100NR	6074NR	1550NR Limit	1083NR Spark Plug	6259NR	1216NR	5010 10ft*	NA	Can Use Thermostat 6170NR Toggle Switch
150FASNG (1999-2002)	1561NR	NA	7808NR	6100NR	6074NR	1550NR Limit	1083NR Spark Plug	6259NR	1216NR	5010 10ft*	NA	Can Use Thermostat 6170NR Toggle Switch 1959NR Wiring Harness
3500FA	1174NR	NA	10741NR (Call)	1125NR	6073NR	1118NR Limit 6169NR Flame Switch 0945NR Tip Switch	1083NR Spark Plug	6254NR	3104NR	CALL	3275NR HI-LO 801	1122NR Thermostat 6119NR J & S Filter 6271NR 30lb Guage
3500FACNG	1174NR	NA	CALL	1125NR	6073NR	6168NR Limit	7118NR Electrode	6258NR	3841NR	CALL	NA	1122NR Thermostat 1663NR Ceramic Burner 6118NR 1/2" Pipe Filter Insert

* You may need to use part #'s 54 and 10444 to adapt hoses for use

Scheu Quick Parts Reference (Natural Gas Radiant & Convection)

Model#	Thermocouple	T.E. Safety Valve	Igniter/Electrode	Regulator	Orifice: Pilot/Burner	Hose (Optional)	Other
Scheu Natural Gas Convection							
80VCG	6233NR 6045NR Clip	6104NR 7111NR Power Coil	6473NR Piezo 7160NR Electrode	6259NR	7253NR Pilot 3621NR Burner	5010 (10ft)*	6655NR Adjuster Valve Low Pressure
101NG	6235NR	6103NR Brushed Aluminum 6515NR Knob	NA	6259NR	6109NR Pilot 6112NR Burner	5010 (10ft)*	Manual Ignition Low Pressure
Scheu Natural Gas Radiant							
100RNG (Pre 1992)	6235NR	6103NR Brushed Aluminum 6515NR Knob	NA	6259NR	6109NR Pilot 6113NR Burner	5010 (10ft)*	Manual Ignition Low Pressure
100RANG (1992-1998)	6234NR 6045NR Nut	6103NR Brushed Aluminum 6515NR Knob	NA	6259NR	7253NR Pilot 6113NR Burner	5010 (10ft)*	Manual Ignition Low Pressure
100RANG (1999-2002)	6234NR 6045NR Nut	7616NR Brushed Aluminum 6515NR Knob	6473NR Piezo 3451NR Electrode	6259NR	7253NR Pilot 6113NR Burner	5010 (10ft)*	7161NR Piezo Nut Low Pressure
125RN	09352	00332	CR835 Piezo CR805 Igniter	11666	05374 Pilot	Call	CR810 Wheel (Qty 2) CR820 Axle CR815 Axle Brackets
250RANG	6234NR 6045NR Nut	6104NR 7111NR Power Coil	NA	7531NR	7479NR Pilot 3743NR Burner	5010 (10ft)*	6655NR Burner Valve 7496NR Burner Valve Handle

* You may need to use part #'s 54 and 10444 to adapt hoses for proper application

Pro Temp Gas Fired Heaters

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater. If your model number does not appear in the breakdowns, please call one of our technicians for assistance.

Brand Names Include:

Pro Temp
Heat Hog

If you need technical assistance, feel free to call **PHP at 1-800-362-6951** or e-mail **us at techservice@phpdistribution.com**. Whenever possible, please have your model number and the nature of your problem before you place a call for technical service.

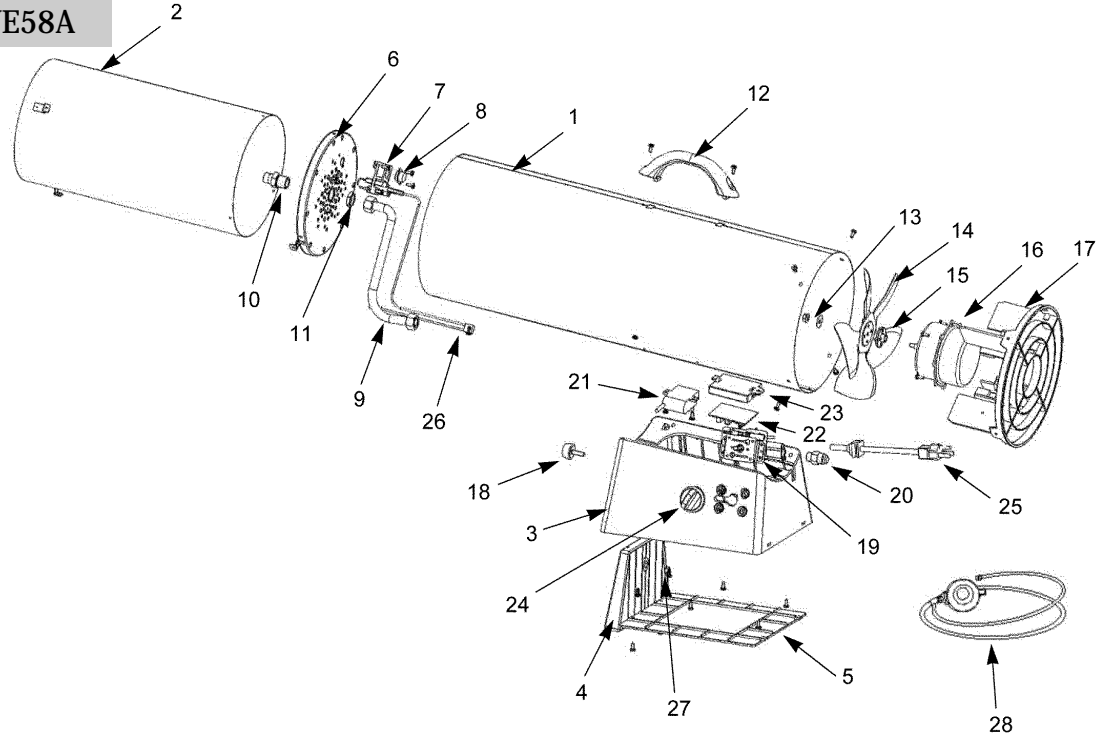
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BTU's and Description	Fuel Type	Heater Type	Page No.
40,000	Propane	Forced Air	240
50,000	Propane	Forced Air	240
100,000	Propane	Forced Air	240
150,000	Propane	Forced Air	240
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Pro Temp Propane Heaters

Model Numbers

Pro Temp	Dayton
PT40GFA	3VE55A
PT50VGFA	3VE54A
PT100VGFA	3VE57A
PT150VGFA	3VE58A

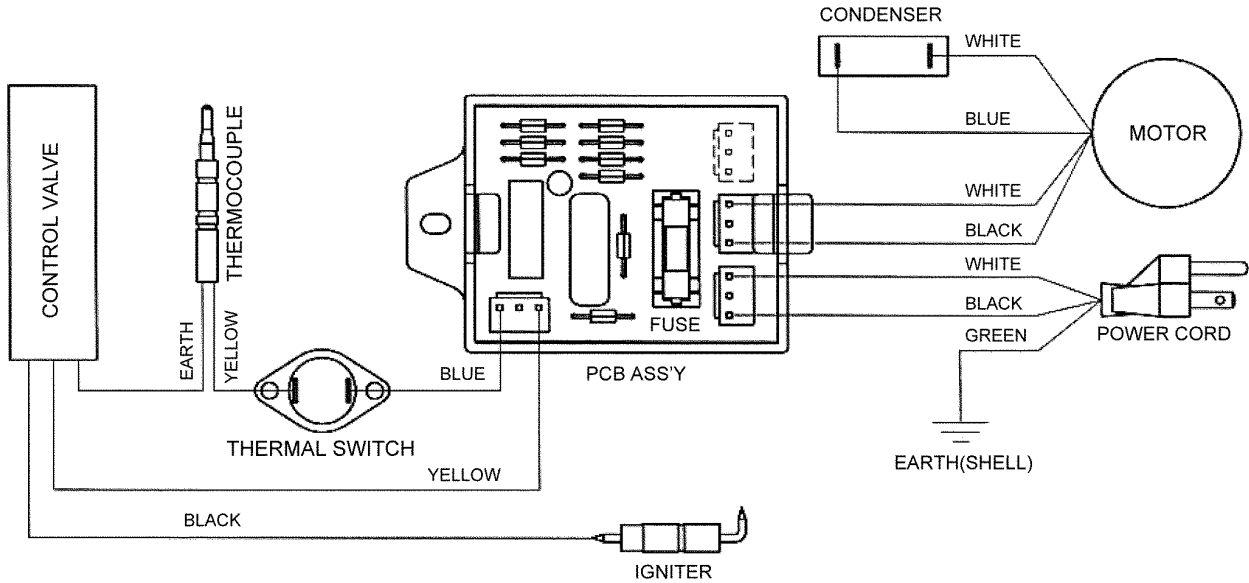


Key

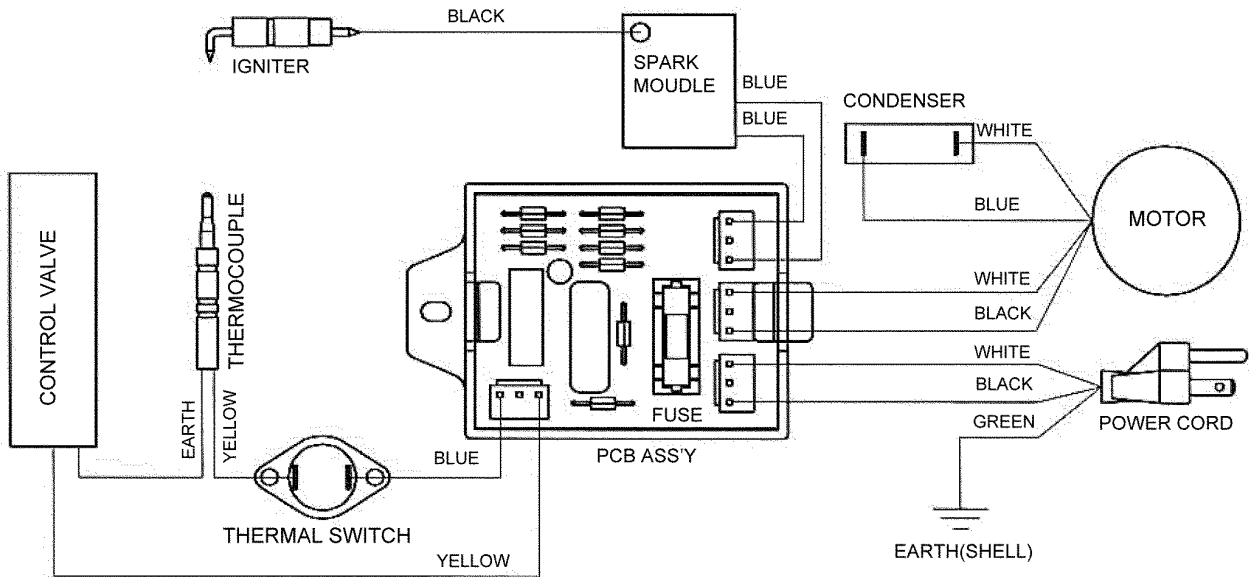
No.	Description	PT-40-GFA	PT-50V-GFA	PT-100V-GFA	PT-150V-GFA
1	Out Shell	22-524-0006	22-524-0007	22-524-0008	22-524-0008
2	Inner shell Ass'y	22-524-0004	22-524-0004	22-524-0005	22-524-0005
3	Base	22-501-0001	22-501-0001	22-501-0002	22-501-0002
4	Height Controller	22-512-0001	22-512-0001	22-512-0002	22-512-0002
5	Base Cover	22-508-0001	22-508-0001	22-508-0002	22-508-0002
6	Inner Shell Cap	22-505-0001	22-505-0001	22-505-0002	22-505-0002
7	Thermocouple/Electrode Ass'y	22-504-0002	22-504-0002	22-504-0003	22-504-0003
8	Thermal Switch	22-603-0001	22-603-0002	22-603-0001	22-603-0001
9	Tubing Ass'y	22-605-0001	22-605-0001	22-605-0002	22-605-0003
10	Nozzle	22-081-0001	22-081-0002	22-081-0003	22-081-0004
11	Nozzle Nut	22-518-0001	22-518-0001	22-518-0001	22-518-0002
12	Handle	22-511-0001	22-511-0001	22-511-0001	22-511-0001
13	Flange Hexa Nut	22-518-0003	22-518-0003	22-518-0003	22-518-0003
14	Fan	22-514-0001	22-514-0001	22-514-0002	22-514-0002
15	Cushion Pad	22-509-0001	22-509-0001	22-509-0001	22-509-0001
16	Motor Ass'y	22-061-0001	22-061-0001	22-061-0002	22-061-0002
17	Guard	22-101-0003	22-101-0003	22-101-0004	22-101-0004
18	Round Bolt	22-503-0002	22-503-0002	22-503-0002	22-503-0002
19	Valve Ass'y	22-011-0001	22-011-0002	22-011-0003	22-011-0004
20	Inlet Connector	22-507-0001	22-507-0001	22-507-0001	22-507-0001
21	Spark Moudle		22-604-0001	22-604-0001	22-604-0001
22	PCB	22-521-0001	22-521-0002	22-521-0002	22-521-0002
23	PCB Case	22-506-0001	22-506-0001	22-506-0001	22-506-0001
24	Valve Knob	22-516-0001	22-516-0001	22-516-0001	22-516-0001
25	Power Cord Ass'y	22-131-0001	22-131-0001	22-131-0001	22-131-0001
26	Thermal Switch Cable	22-601-0001	22-601-0001	22-601-0001	22-601-0001
27	Hexa Nut	22-518-0004	22-518-0004	22-518-0004	22-518-0004
28	Regulator Ass'y	22-041-0001	22-041-0001	22-041-0002	22-041-0002

Pro Temp LP 40-150,000 BTU

Pro Temp Propane Heaters



Wiring Diagram for Piezo/Manual Spark Models.



Wiring Diagram for Continuous Spark Models.

Space Ray Heaters

Always remember to match the model number of your heater with the model number of the individual breakdowns in this section. The breakdowns in this manual refer to the model specifically listed on each individual page. Use a breakdown only if you have the exact model match for your particular heater. If your model number does not appear in the breakdowns, please call one of our technicians for assistance.

Brand Names Include:
Space Ray

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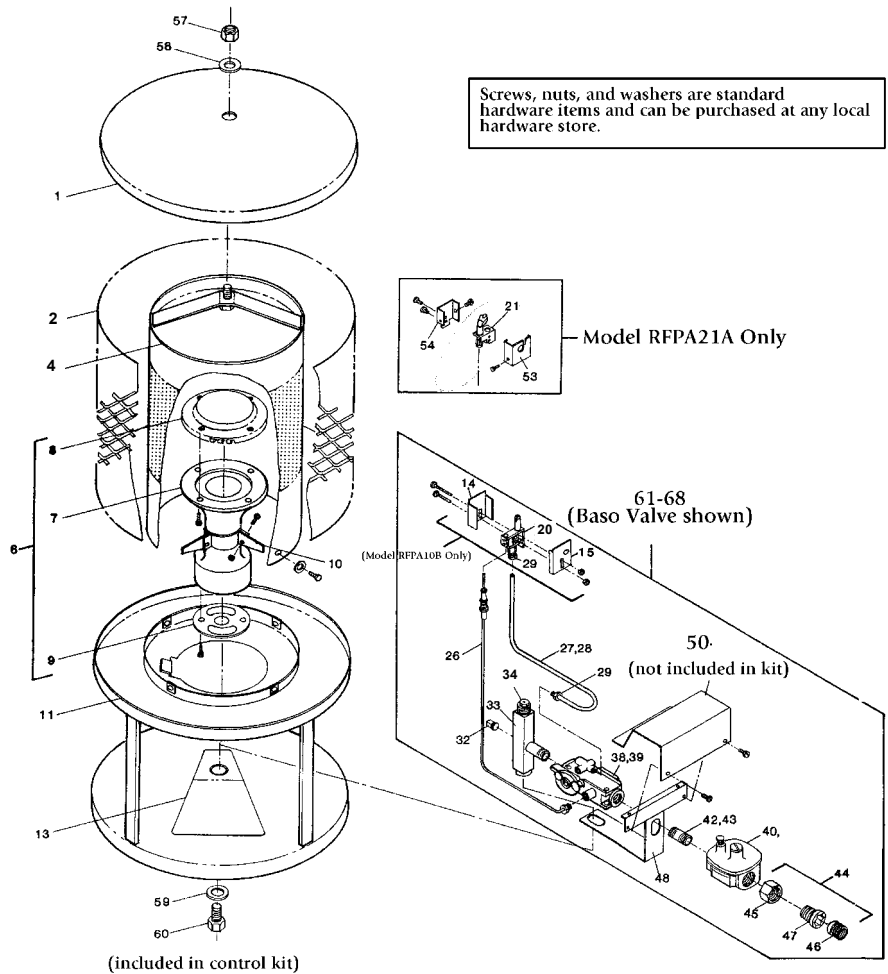
HEATER INDEX

Model and Description	Fuel Type	Heater Type	Page No.
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Space Ray Propane or Natural Gas Radiant Heater

Model Numbers

RFPA10B
RFPA21A



Key Part

No.	Number	Description
1	0411400	Upper Head
2	0459302	Expanded Metal Guard (short) (RFPA10B)
4	0436202	Heat Exchanger Assembly (short) (RFPA10B)
6	0438000	Main Burner Assembly (complete)
7	4185800	Burner Base
8	4185900	Burner Cap
9	0409401	Shutter Plate - Fixed
10	4058400	Burner Alignment Bracket

Assembly

11	0478301	Base Assembly
13	4180600	Warning Plate
14	4179502	Pilot Shield - Outer (RFPA10B)
15	4179501	Pilot Shield - Inner (RFPA10B)
16	0339902	Pilot Burner & Orifice Fitting - Nat #J129DDA3223 (RFPA10B-N6,N6C)
21	3033501	Pilot Burner & Orifice Fitting - Nat. #J181EKA7221 (RFPA21A-N6)
26	0340103	Thermocouple (RFPA10B, RFPA21A)
27	0465900	Pilot Tubing - Baso Valve
28	4179900	Pilot Tubing - White-Rodgers valve
29	0352700	Break Away Fitting - Comes w/valve & pilot orifice
32	0333902	Plug - 1/8" (Pressure Tap)
33	4183400	Burner Fitting Assembly
34	0325812	Main Burner Orifice (Nat.) #12 (RFPA10B-N6,N6C)
38	0369500	Gas Valve - Baso #H43BA-5D
40	0330710	Regulator - RV48 (Nat.)
42	0333304	Nipple 1/2 x 1-12
43	0333310	Nipple 1/2 x 3
44	0306800	Union (Complete)
45	0306803	Nut (Union)
46	0306801	Union Half - Female
47	0306802	Union Half - Male

Key Part

No.	Number	Description
48	4313600	Manifold Support & Nameplate Bracket
49	4135701	Instruction Manual (not shown)
50	4198800	Nameplate (State Gas Type) (RFPA10B-6)
53	4291801	Pilot Shield - Inner (RFPA21A)
57	0212715	Nut - Hex 1/2-13
58	0212916	Washer - Flat 1/2
59	4184700	Washer - Burner Fitting
60	0224701	Machine screw 1/2-13 x 1
61	4187701	Control Arm Kit - Nat (RFPA10B-N6)

RFPA10B - L6	(4247702)
RFPA10B - L6C	(4247706)
RFPA10B - N6	(4247701)
RFPA10B - N6C	(4114302)
RFPA21A - L6	(4115001)
RFPA21A - N6	(4114901)

CODE REFERENCE

N - Natural Gas

L - LP Gas

6 - 100% Gas Shutoff Control - Manually Operated (Baso Valve)

6C - 100% Gas Shutoff Control - Manually Operated (White-Rodgers valve)

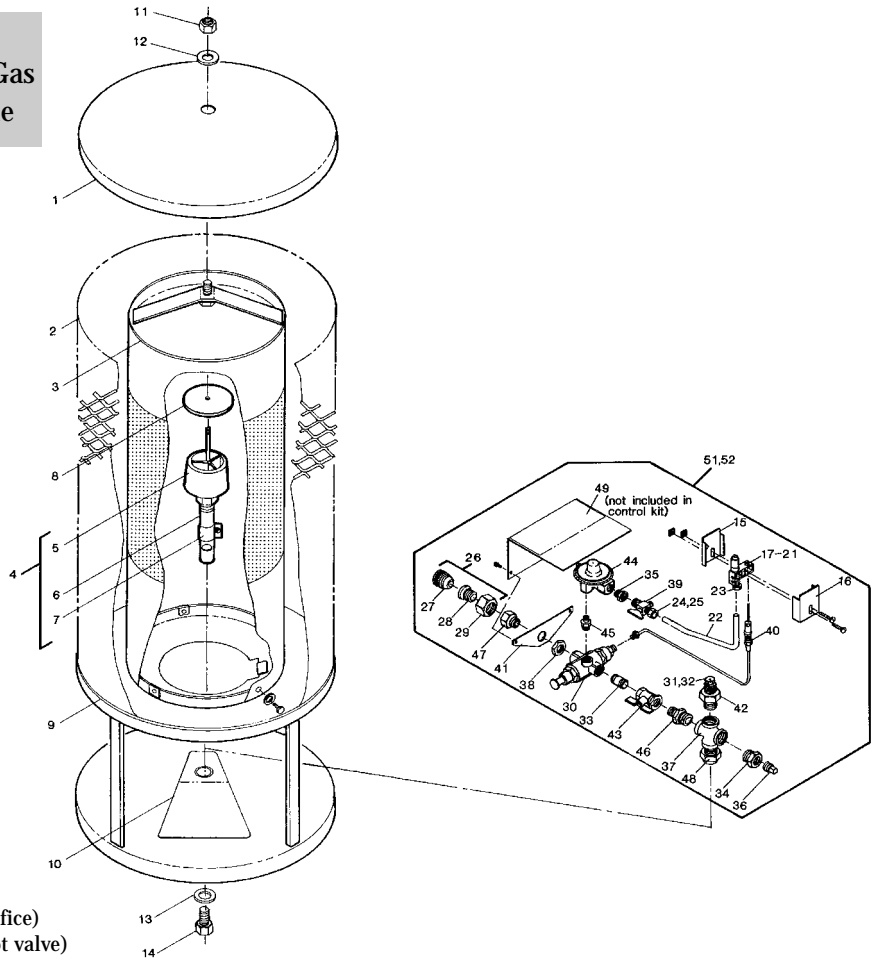
Space-Ray Propane or Natural Gas Radiant Heater

Model Number

4115101 - (RFPA25 - N6A) 250,000 Nat. Gas
 4115200 - (RFPA25 - L6) 250,000 Propane

Key Part

No.	No.	Description
1	0411400	Upper Head
2	0459303	Expanded Metal Guard
3	0448500	Heat Exchanger Assembly
4	4125800	Burner Assembly (Complete-Incl. 5,6,7)
5	4201100	Burner Top & Bracket Assembly
6	0702200	Burner Tube
7	0430400	Air Shutter
8	4033800	Burner Target
9	0478301	Base Assembly
10	4180601	Warning Plate
11	0212715	Nut, Hex 1/2-13
12	0212916	Washer, Flat 1/2
13	4184700	Washer, Burner Fitting
14	0224701	Machine Screw, 1/2-13 x 1
15	4179501	Pilot Shield - Inner
16	4179502	Pilot Shield - Outer
17	0339902	Pilot Shield & Orifice Fitting Nat #J129DDA3223
18	0339903	Pilot Shield & Orifice Fitting LP #J129DDA4212
19	0334501	Pilot Orifice - Nat (.023") #Y90AA-3223
20	0334502	Pilot Orifice - LP (.012") #Y90AA-4212
21	0343700	Pilot Burner less Orifice #J129DDA
22	4168401	Pilot Tubing
23	0352700	Break Away Fitting (comes w/pilot orifice)
24	0360101	Nut, Compression 1/4" (comes w/Pilot valve)
25	0360001	Sleeve, Compression 1/4" (comes w/Pilot valve)
26	0306800	Union, 1/2 NPT (Complete)
27	0306801	Union Half, 1/2 FPT
28	0306802	Union Half, 1/2 FPT
29	0306803	Union Nut, 1/2" FPT
30	0316600	Pilot Safety Gas Valve #H19LA-1
31	0325833	Main Burner Orifice (Nat.) #33
32	0325842	Main Burner Orifice (LP) #42
33	0333004	Nipple, 3/8 NPT x 1-1/2" Long
34	0333810	Reducing Bushing, 1/2 x 1/4 NPT
35	0333820	Reducing Bushing, 1/4 x 1/8 NPT
36	0333904	Plug, 1/4 NPT (pressure tap)
37	0334008	Cross, 1/2 NPT
38	0334706	Locknut, 3/8 Conduit
39	0338402	Pilot Valve, 1/8 MPT x 1/4" OD Tube
40	0340103	Thermocouple 18" Long #K16BA-18
41	0408800	Bracket, Radiation Shield
42	0409800	Burner/Orifice Fitting
43	3028501	Manual Ball Valve 3/8"
44	3052401	Pilot Regulator #140T
45	3052700	Nipple, Hex Reducing 1/4 MPT x 1/8 MPT
46	3052701	Nipple, Hex Reducing 1/2 MPT x 3/8 MPT
47	3052800	Adapter, Reducing 1/2 FPT x 3/8 MPT
48	4184900	Manifold Holder Stud
49	0450802	Nameplate/Shield Assembly (State Gas Type)
50	4135801	Instruction Manual (Not Shown)
51	4187727	Control Arm Kit - Natural Gas
52	4187728	Control Arm Kit - LP Gas



CODE REFERENCE

N - Natural Gas
 L - LP Gas
 6A - 100% Gas Shutoff Control -
 Manually Operated

Screws, nuts & washers are standard hardware items and can be purchased at any local hardware store.

Space Ray 250,000 BTU

Heat Wagon/SureFlame Heaters

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Brand Names Include:

Heat Wagon
Sure Flame

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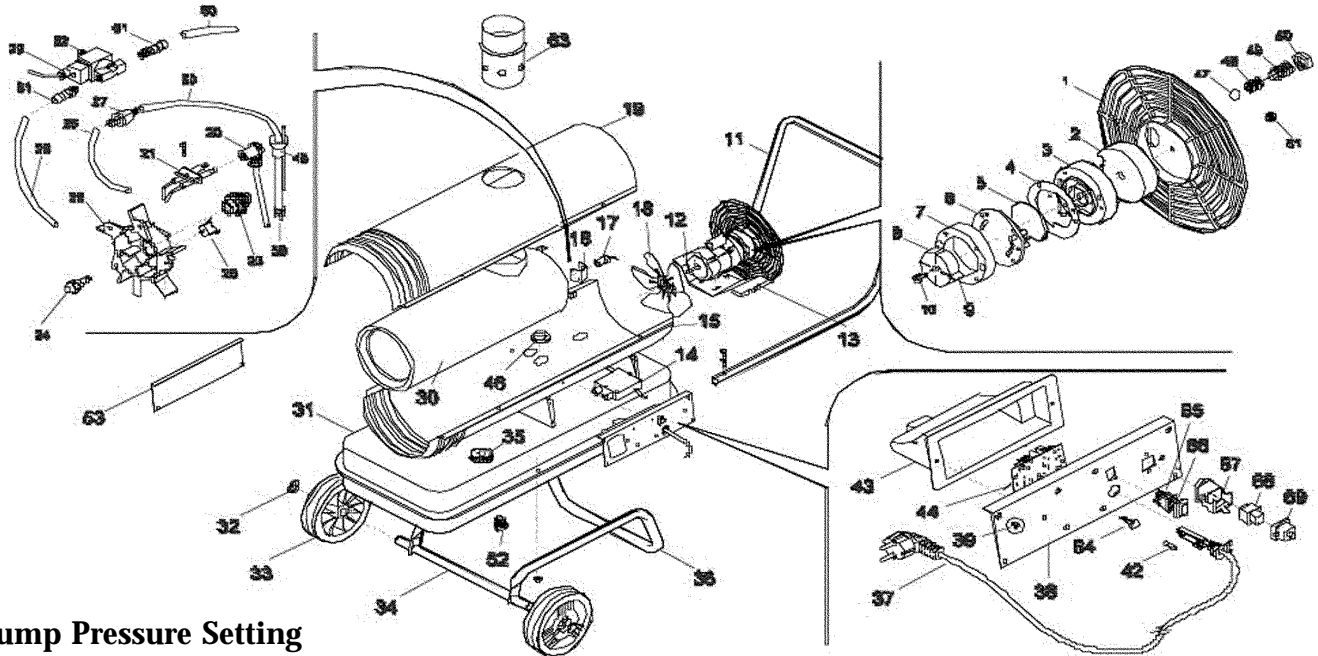
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Heat Wagon HVF110	Kerosene	Forced Air	247
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Heat Wagon HVF210	Kerosene	Forced Air	249
Heat Wagon HVF300 (Present)	Kerosene	Forced Air	250
Heat Wagon HVF310	Kerosene	Forced Air	249
Sure Flame S405P	LP or NG	Forced Air	251
Sure Flame S1505P	LP or NG	Forced Air	252

90,000 BTU Heat Wagon Indirect Oil Fired Heater

Model Numbers

LVF90



Pump Pressure Setting
4.8 PSI

Key No.	Part No.	Description	Key No.	Part No.	Description
1	1006000311	REAR GUARD	32	1022000911	WHEEL RING
2	1086001711	AIR INLET FILTER	33	1004000200	WHEEL
3	1094007311	PLATE	34	ASSALE#GRY4020	AXLE
4	1002001311	GASKET	35	1094004311	FILLING CAP
5	1086000111	AIR OUTLET FILTER	36	TELAIoT#GRY04020	FRAME
6	1094007211	COVER	37	CAVAL#USA0180USAP2	POWER CORD
7	1094008211	STATOR RING	38	CRUSCGRYP#025F20	LEFT SIDE PANEL
8	1099001811	ROTOR	39	1016001600	SCREW
9	1099001411	BLADE	42	1035001511	FUSE
10	1001008311	JOINT	43	1001016711	COVER
11	MANT#GRY4020	HANDLE	44	1047004111	CONTROL BOARD
12	1040009411	MOTOR	45	1002005711	GASKET
13	1094006111	MOTOR SUPPORT	46	1002002100	RUBBER GASKET
14	1033004411	IGNITION TRANSFORMER	47	1023002411	BALL
15	1094143711	LOWER CASING	48	1023004511	SPRING
16	1094104211	FLAME SENSOR SUPPORT	49	1023002511	SCREW
17	1050000711	FLAME SENSOR	50	1017002111	NUT
18	1087004611	FAN	51	1067006911	CAP
19	1094143811	UPPER CASING	52	1067007000DRAIN	CAP
20	1039033211	HT CABLE	53	CRUSCGRYP#028C20	SIDE RIGHT PANEL
21	1030001111	IGNITION ELECTRODE	59	1001014711	SUCTION FITTING
22	1094138011	COMBUSTION HEAD	60	1078000411	RUBBER HOSE
23	1001017011	NOZZLE HOLDER	61	1067005800	HOSE HOLDER
24	1088014311	NOZZLE	62	1042003811	SOLENOID VALVE
25	1078000211	HOSE	63	1094138733	EXHAUST HOOD
26	1078001611	HOSE	64	1001015680	SPACER
27	1086001911	OIL FILTER	65	1032001900	SWITCH
28	1036001611	SAFETY THERMOSTAT	66	1002002755	SWITCH COVER
29	1043002655	CABLE + CONNECTOR	67	1043000600	SOCKET CASING
30	CAMERA#GRY025	COMBUSTION CHAMBER	68	1043000400	SOCKET
31	SERBGRYP#040STD20	TANK	69	1052001800	CAP

110,000 BTU Heat Wagon Indirect Oil Fired Heater

Model Numbers

HVF110

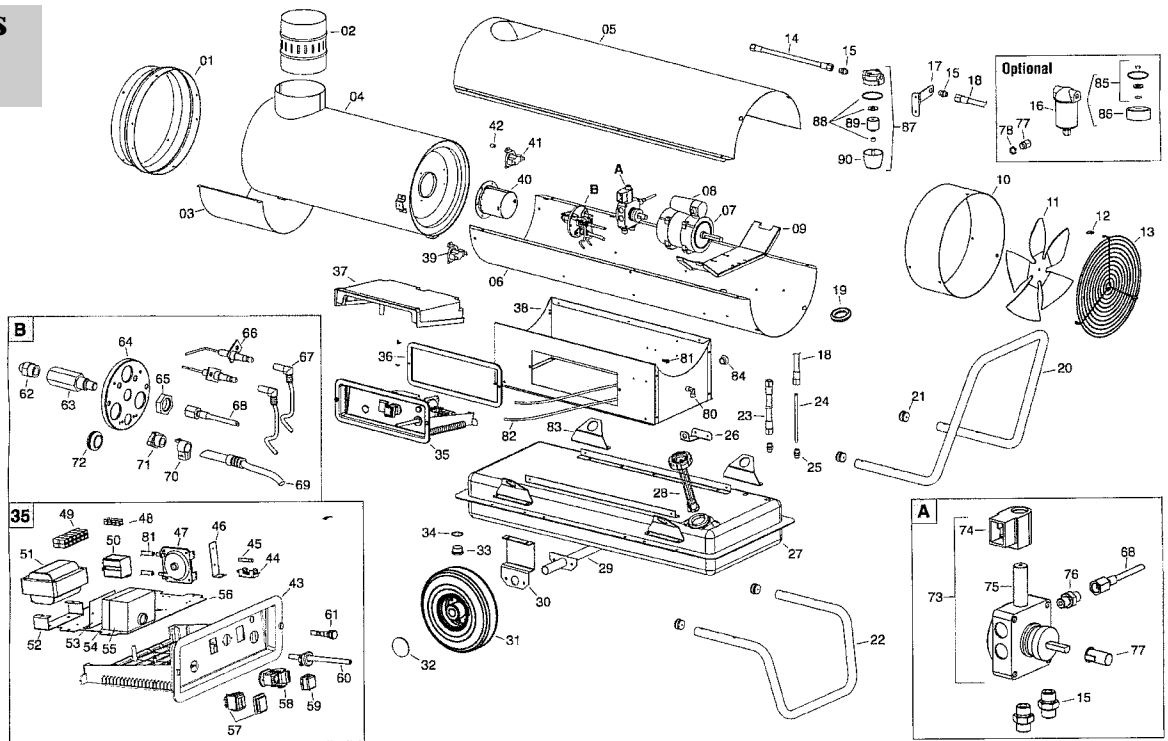
Accessories:

Duct 25 ft.: WD1225

Duct ring: AR110

Diffuser: 26350

Thermostat: THIDF



Heat Wagon 110,000 BTU

Key Part No.

Part No.	Description
1	G06075-9010
2	G06077
3	G06079
4	G06081
5	G06083-9010
6	G06085-9010
7	E10677-110
8	E11208
9	G06067
10	G06070-9010
11	T10207
12	M20402
13	P30165
14	I40330
15	I20104
16	T20239
17	G06104-9005
18	I40329
19	C30307
20	P20174-9005
21	C30319
22	P20175-9005
23	I40331
24	I30695
25	I30737
26	G06068-9005
27	G08110-9005
28	C30363
29	G06105-9005
30	G06106-9005
31	C10548
32	M20202
33	I25019
34	C30350
35	G00212
36	C30425
37	P50127
38	G06108-9010
39	E50101
40	G06087
41	E50102
42	G06072
43	P50126
44	E20508
45	E10308

Key Part No.

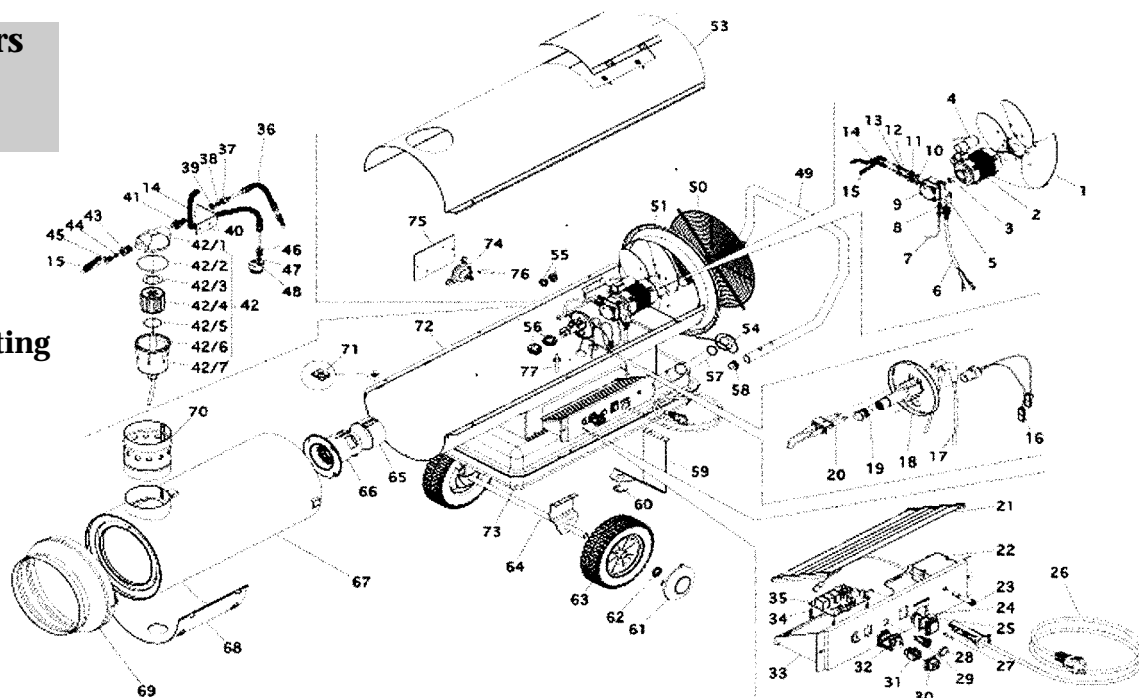
Part No.	Description
46	G06102
47	E50437
48	E20319
49	E20305
50	E11125
51	E10917-2
52	G06109
53	G06103
54	E40107
55	E40113
56	G06073
57	E10102-P
58	E20640
59	E20665
60	E30443
61	E11030
62	T20339
63	I33001
64	P20526
65	I31034
66	E10248
67	G02078
68	I40192
69	E50306
70	E50307
71	E50308
72	C30352
73	T20429-1
74	T20118
75	T20117
76	I20115
77	E10513
78	E20953
79	E20854
80	I20325
81	I31130
82	I40332
83	G06111-9005
84	C30319
85	T20241
86	T20242
87	T20201
88	T20234
89	T20208
90	T20212

180,000 BTU Heat Wagon Indirect Oil Fired Heater

Model Numbers

HVF180
(Present)

Pump Pressure Setting
175 PSI

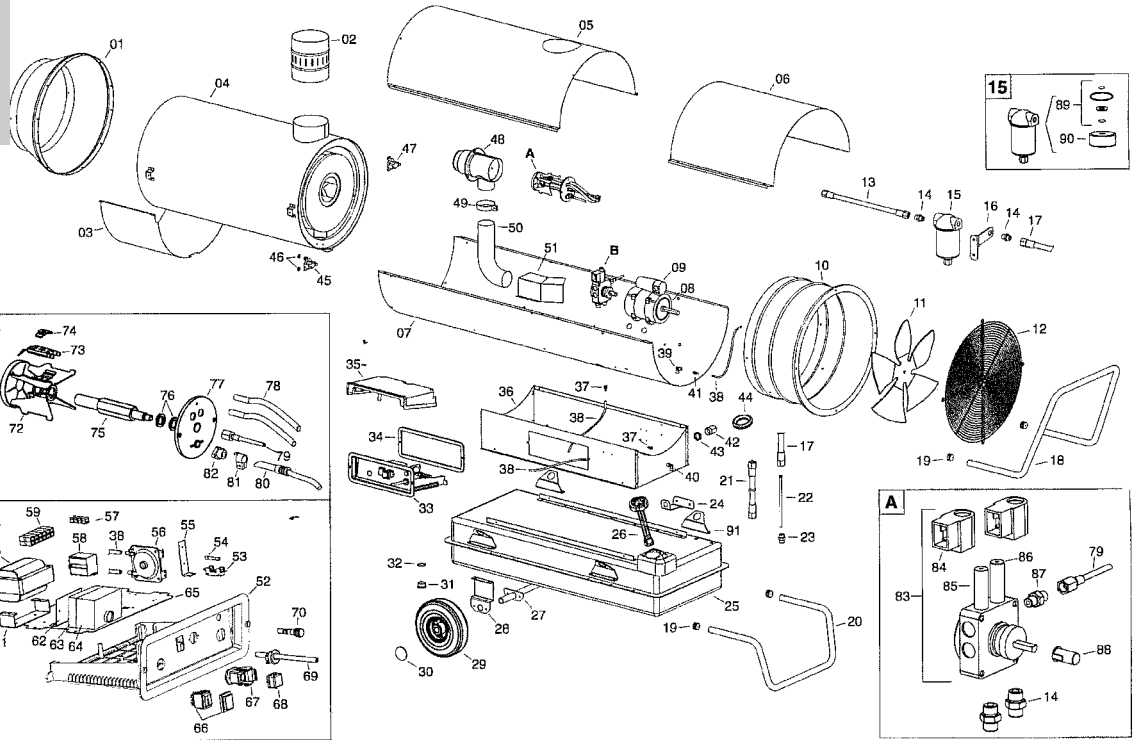


Key No.	Part No.	Description	Key No.	Part No.	Description
1	1087008133	FAN	42/1	1135000500	COVER
2	1040012900	MOTOR	42/2	1002004200	O-RING
3	1001001300	JOINT	42/3	1002005100	GASKET
5	1089007200	COIL	42/4	1086002800	CARTRIDGE
6	1043004500	CABLE + CONNECTOR	42/5	1002005200	O-RING
7	1076004300	MICROHOSE	42/6	1052004900	HEATING ELEMENT
8	1067004100	FITTING	42/7	1135000600	FILTER GLASS
9	1089007100	PUMP	43	1066001300	FITTING
10	1018002900	WASHER	44	1067009100	OGIVE
11	1066001300	FITTING	45	1066001600	FITTING
12	1067009100	OGIVE	46	1066001600	FITTING
13	1066001600	FITTING	47	1067009100	OGIVE
14	1078000600	BACKFLOW HOSE	48	1066001200	SUCTION FITTING
15	1078000100	INFLOW HOSE	49	1095011800	HANDLE
16	1050001000	FLAME SENSOR	50	1090007533	GUARD
17	1039043600	HT CABLE	51	CONVGEN#MIR05536	AIR INLET
18	1094135533	BURNER HEAD	52	PORTISP#TOMM436	INSPECTION COVER
19	1088012100	NOZZLE	53	COPGEN#MIR05536	UPPER SHELL
20	1030002100	ELECTRODE	54	1005000100	TANK CAP
21	1001017700	COVER	55	1002002000	GASKET
22	1033004600	TRANSFORMER	56	1002002100	GASKET
23	1032005500	LAMP	57	1086001000	FILLING FILTER
24	1032001700	ON/OFF SWITCH	58	1005000900	HANDLE CAP
25	1002002600	CAP	59	1094046500	TANK SUPPORT
26	CAVAL#US10400USAP2	POWER SUPPLY CABLE	60	1023001500	SPRING
27	1035001800	FUSE	61	1005002000	WHEEL CAP
28	1002002855	CAP	62	1022000300	SEEGER RING
29	1032005500	RESET PUSHBUTTON	63	1004001300	WHEEL
30	1052001800	SOCKET CAP	64	1094134100	AXLE
31	1043000400	SOCKET BODY	65	1094135733	AIR LOCK
32	1043000600	SOCKET CASING	66	1095011233	CHAMBER INLET
33	1001017200	CONTROL PANEL	67	CAMGEN#MIR055	COMBUSTION CHAMBER
34	1001015680	SPACER	68	PROCAMGEN#MIR5H	CHAMBER SHIELD
35	1047004600	BURNER CONTROL	69	CONOMIR#055A36	AIR OUTLET
36	1078000300	SUCTION HOSE	70	1094138733	FLUE COLLAR
37	1066001700	FITTING	71	1017002200	FIXING CLIP
38	1067009100	OGIVE	72	CRPGEN#MIR18036	LOWER SHELL
39	1017002800	NUT	73	SERBGEN#MU20	TANK
40	1094134900	FILTER BRACKET	74	1046001500	AIR PRESSURE SWITCH
41	1066001500	FITTING	75	1080002600	AIR HOSE
42	1086000800	OIL FILTER	76	1094171300	PLATE
			77	1046001036	HOSE FITTING

210 - 310,000 BTU Heat Wagon Indirect Oil Fired Heater

Model Numbers

HVF210
HVF310



Accessories:

HVF210

Duct 25 ft.: WD1425
Duct ring: AR210
Diffuser: 26350
Thermostat: THIDF
Two-way adapter: AR212

HVF310

Duct 25 ft.: WD1825
Duct ring: AR310
Diffuser: 23189
Thermostat: THIDF
Two-way adapter: AR312

Key

No.	HVF210	HVF310	Description
1	G08113-9010	G06114-9010	Outlet cone
2	G06077	G06077	Chimney
3	G06115	G06116	Comb. Chamber support
4	G06117	G06118	Combustion chamber
5	G08119-9010	G06120-9010	Upper body
6	G06121-9010	G06122-9010	Inspection cover
7	G06123-9010	G06124-9010	Lower body
8	E10678-110	E10679-110	Motor with capacitor
9	E11230	E11229	Capacitor 40 uf
10	G06125-9010	G06126-9010	Motor flange
11	T10260	T10261	Fan 18"
12	P30169	P30129	Inlet grille
13	I40330	I40330	Tube
14	I20104	I20104	Nipple
15	T20239	T20239	Fuel filter, heated
16	G06104-9005	G06104-9005	support, filter
17	I40329	I40329	Hose
18	P20174-9005	P20176-9005	Handle
19	C30319	C30319	Plug
20	P20175-9005	P20177-9005	Foot
21	I40331	I40331	Hose
22	I30369	I30369	Line
23	I30737	I30737	Nipple
24	G06068-9005	G06068-9005	Power lead hook
25	G06127-9005	G06128-9005	Fuel tank
26	C30363	C30364	Fuel gauge
27	G06105-9005	G06129-9005	Wheel axle
28	G06106-9005	G06106-9005	Wheel axle support
29	C10546	C10546	Wheel
30	M20202	M20202	Spring washer
31	I25019	I25019	Drain plug
32	C30350	C30350	Wheel cap
33	G00213	G00213	Components drawer
34	C30425	C30425	Seal
35	P50127	P50127	Control box cover
36	G06130-9010	G06131-9010	Base
37	I31130	I31130	Connector
38	I40332	I40332	Tube
39	I30325-1	I20325	Connector
40	I20235	I20235	Connector
41	I31130	I31130	Connector
42	E20953	E20953	Cable holder
43	E20954	E20954	Ring nut
44	C30307	C30307	Cable protector
45	E50102	E50102	Limit switch

Key

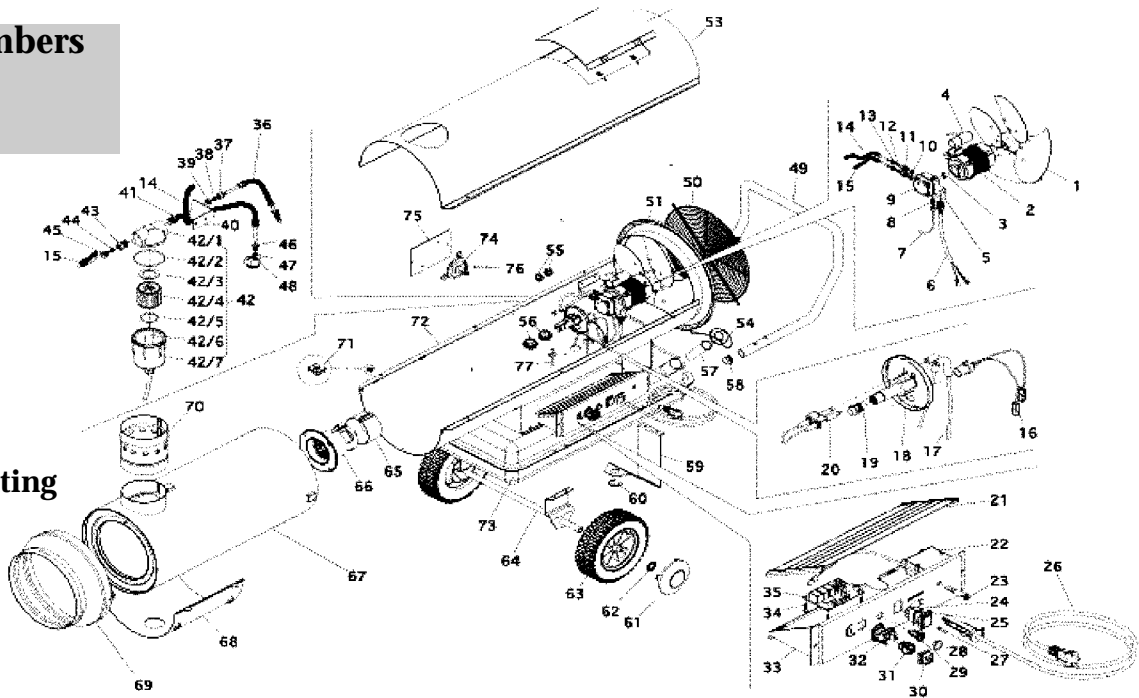
No.	HVF210	HVF310	Description
46	M20107	M20107	Washer
47	E50101	E50104	Fan switch
48	G06132	G06132	Blast tube
49	G06133	G06133	Clip for duct
50	I40801	I40802	Duct
51	G06134	G06134	Air flap
52	P50126	P50126	Control panel
53	E20508	E20508	Fuse holder
54	E10313	E10313	Fuse 20 amp
55	G06102	G06102	Switch support
56	E50437	E50437	Pressure switch
57	E20319	E20319	Terminal board
58	E11125	E11125	Relay
59	E20305	E20305	Terminal board
60	E10917-2	E10917-2	Transformer
61	G08109	G08109	Transformer flange
62	G06103	G06103	Support
63	E40107	E40107	Base for control board
64	E40113	E40113	Control board
65	G06073	G06073	Plate
66	E10102-P	E10102-P	On-off switch
67	E20640	E20640	Thermostat plug
68	E20665	E20665	Thermostat socket cap
69	E30443	E30443	Power cord
70	E11030	E11030	Power indicator light
71	T20354	T20351	Nozzle 1.00 GPH 45deg
72	P10137	T10138	Burner head and electr.
73	E10254	E10254	Electrodes
74	P10134	P10134	Electrodes stirrup
75	I33002	I33002	Nozzle holder
76	I30685	I30685	Washer
77	P20529	P20529	Burner flange
78	G02076	G02076	H T cable connectors
79	I40192	I40192	Hose
80	E50306	E50306	Photocell
81	E50307	E50307	Fixing clamp
82	E50308	E50308	Photocell flange
83	T20439-1	T20440-1	Pump
84	T20118	T20118	Solenoid spool
85	T20129	T20129	Solenoid valve (no)
86	T20117	T20117	Solenoid valve (nc)
87	I20115	I20115	Nipple
88	E10513	E10514	Coupling
89	T20241	T20241	O-ring kit for filter
90	T20242	T20242	Filter element

Heat Wagon 210-310,000 BTU

300,000 BTU Heat Wagon Indirect Oil Fired Heater

Model Numbers

HVF300
(Present)



Pump Pressure Setting
175 PSI

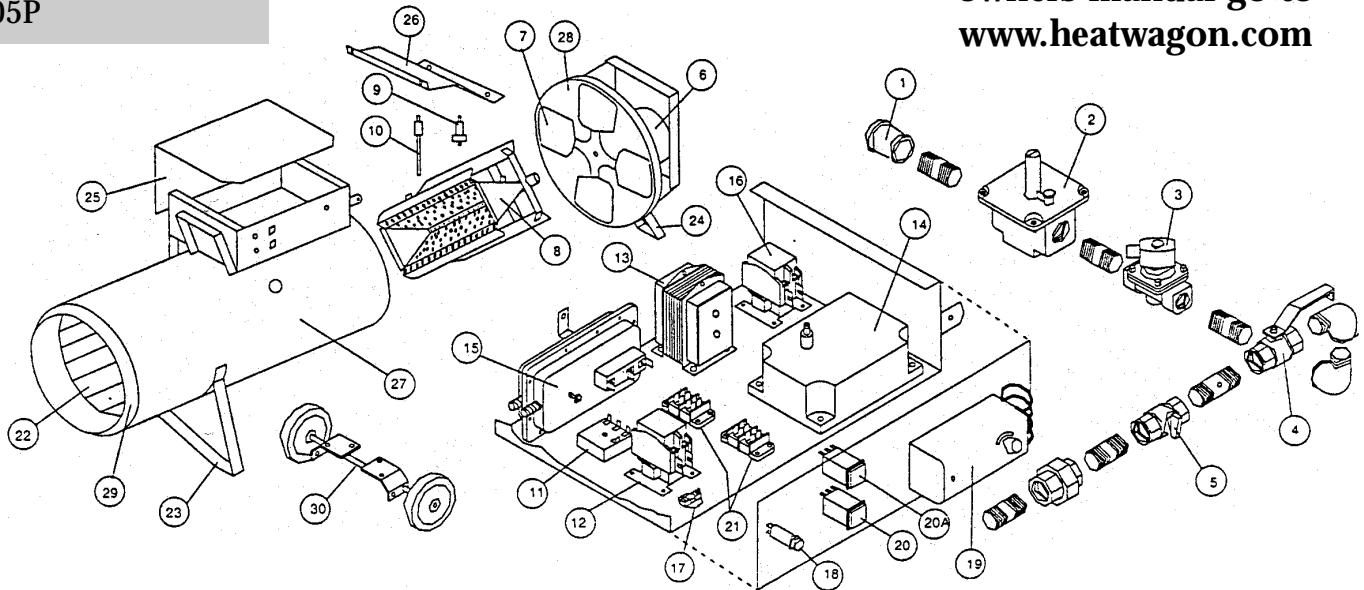
Key No.	Part No.	Description	Key No.	Part No.	Description
1	1087008233	FAN	42/2	1002004200	O-RING
2	1040013000	MOTOR	42/3	1002005100	GASKET
3	1001017400	JOINT	42/4	1086002800	CARTRIDGE
5	1089007200	COIL	42/5	1002005200	O-RING
6	1043004500	CABLE + CONNECTOR	42/6	1052004900	HEATING ELEMENT
7	1076004300	MICROHOSE	42/7	1135000600	FILTER GLASS
8	1067004100	FITTING	43	1066001300	FITTING
9	1089006100	PUMP	44	1067009100	OGIVE
10	1018002900	WASHER	45	1066001600	FITTING
11	1066001300	FITTING	46	1066001600	FITTING
12	1067009100	OGIVE	47	1067009100	OGIVE
13	1066001600	FITTING	48	1066001200	SUCTION FITTING
14	1078000500	BACKFLOW HOSE	49	1095011700	HANDLE
15	1078000100	INFLOW HOSE	50	1090007633	GUARD
16	1050001000	FLAME SENSOR	51	CONVGEN#MIR08536	AIR INLET
17	1039043600	HT CABLE	52	PORTISP#TOMG436	INSPECTION COVER
18	1094135633	BURNER HEAD	53	COPGEN#MIR08536	UPPER SHELL
19	1088014000	NOZZLE	54	1005000100	TANK CAP
20	1030002100	ELECTRODE	55	1002002000	GASKET
21	1001017700	COVER	56	1002002100	GASKET
22	1033004600	TRANSFORMER	57	1086001000	FILLING FILTER
23	1032005500	LAMP	58	1005000900	HANDLE CAP
24	1032001700	ON/OFF SWITCH	59	1094141600	TANK SUPPORT
25	1002002600	CAP	60	1023001500	SPRING
26	CAVAL#US10400USAP2	POWER SUPPLY CABLE	61	1005002000	WHEEL CAP
27	1035000800	FUSE	62	1022000300	SEEGER RING
28	1002002855	CAP	63	1004001300	WHEEL
29	1032005500	RESET PUSHBUTTON	64	1094141500	AXLE
30	1052001800	SOCKET CAP	65	1094135733	AIR LOCK
31	1043000400	SOCKET BODY	66	1095011333	CHAMBER INLET
32	1043000600	SOCKET CASING	67	CAMGEN#MIR085	COMBUSTION CHAMBER
33	1001017200	CONTROL PANEL	68	PROCAMGEN#MIR8H	CHAMBER SHIELD
34	1001015680	SPACER	69	CONOMIR#085A36	AIR OUTLET
35	1047004600	BURNER CONTROL	70	1094138733	FLUE COLLAR
36	1078001000	SUCTION HOSE	71	1017002200	FIXING CLIP
37	1066001700	FITTING	72	CRPGEN#MIR08536	LOWER SHELL
38	1067009100	OGIVE	73	SERBGEN#G420	TANK
39	1017002800	NUT	74	1046001500	AIR PRESSURE SWITCH
40	1094134900	FILTER BRACKET	75	1080002600	AIR HOSE
41	1066001500	FITTING	76	1094171300	PLATE
42	1086000800	OIL FILTER	77	1046001036	HOSE FITTING
42/1	1135000500	COVER			

Propane or Natural Gas Sureflame Forced Air Heater

Model Number
S405P

For wiring diagram or
owners manual go to
www.heatwagon.com

Sure Flame 400,000 BTU



Key Part
No. No.

No.	No.	Description
1	40SV01P	Strainer (S400-80)
2	2524P	Low Pressure Regulator
3	4514P	Solenoid Shut Off Valve 24V
4	40SV04P	Gas Selector Valve (S400-73)
5	2538P	Manual Shut Off Valve 3/4" valve
6	2430P	Motor 1/4 H.P.
7	2420P	Fan Blade
8	40SB26P	Burner
9	2142P	Spark Plug
10	40SB28P	Flame Rod
11	7465P	24VAC 5-Second Delay-ON-Break Timer
12	4519P	Control Relay 24V
13	4510P	Transformer 24V
14	5943P	Direct Spark Ignition Control
15	5124P	Air Switch
16	4519P	Motor Relay 24V
17	2446P	Hi Limit Thermoswitch
18	4518P	Indicator Light 24V
19	2453P	Thermostat
20	3337RP	OFF Switch (Red)

Key Part
No. No.

No.	No.	Description
20A	3337GP	On Switch (Green)
21	5768P	Terminal Block
22	S400-2P	Heat Shield
23	S400-57P	Front Leg Assembly
24	S400-47P	Rear Leg Assembly (less motor mount & screen)
25	4517P	Control Box Lid
26	SC400-38P	Valve Train Cover
27	S400-53P	Heater Body Includes 22, 23 & 29
28	SFP3859P	Motor Mount (with screen & rear legs)
29	S400-3P	Nose Cone
30	SWK1P	Wheel Kit (Optional)
31	40SV06P	Regulator (Optional)

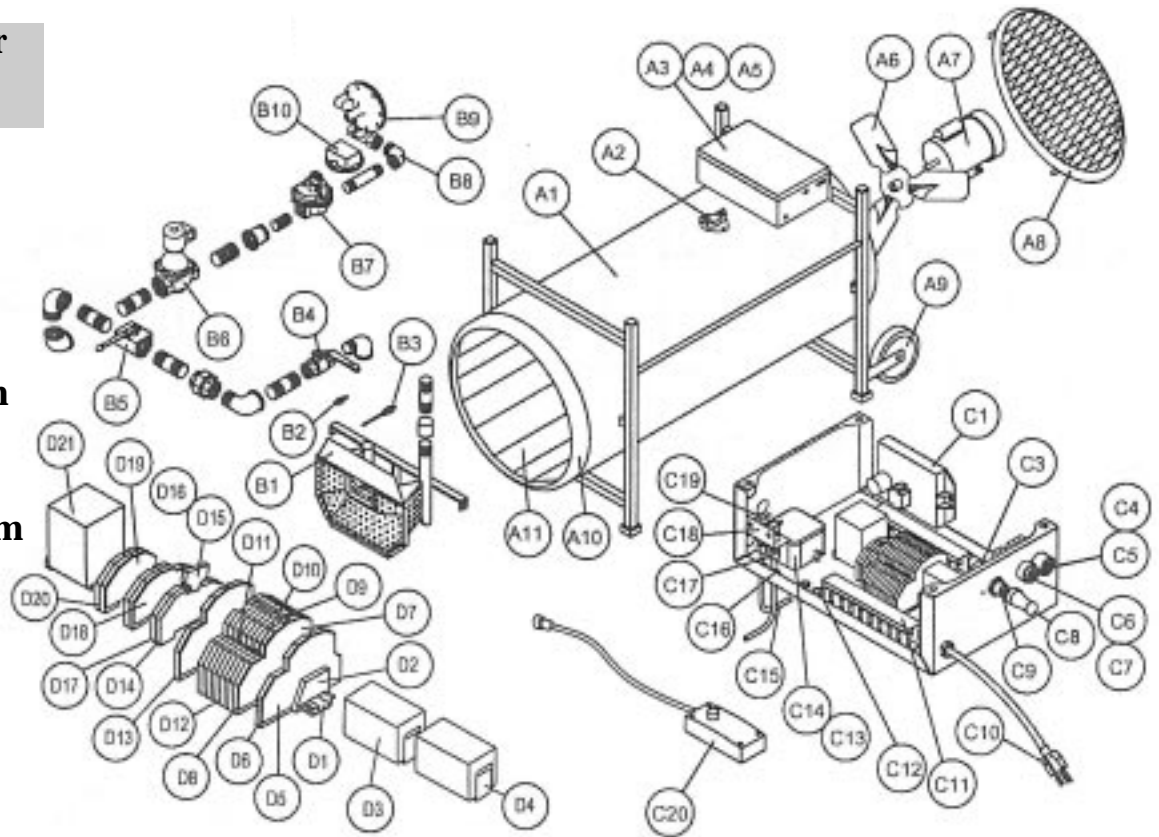
Parts Available - Not Shown

7510P	3/4" x 10' Gas Hose with swivel (Optional)
HC1020P	6' Powercord (14 GA)
HC1005P	Ignition wire assy. w/fittings

Sureflame Propane or Natural Gas Forced Air Heater

Model Number
S1505B

**For wiring diagram
or owners manual
go to
www.heatwagon.com**



Key No.	Part No.	Description
A1	S1505-56	Heater Body (Includes A10 & A11)
A2	2446	Limit Switch, 180°F
A3	S1500-104	Control Box Lid
A4	S1500-501	Control Box
A5	7723	Control Box Seal
A6	2423	24" Fan Blade
A7	9262	Motor, 1HP
A8	SL11B-53	Screen
A9	6119	Wheel
A10	SL11B-13	Nose Cone
A11	SL11B-90	Heat Shield
B1	BV85-50	Burner
B2	2143	Spark Plug
B3	SL11B-86	Flame Rod
B4	2539	Manual Shut-Off Valve, 1-1/2"
B5	S1505-81	Gas Selector Valve, 1-1/2"
B6	2537	1.5" Solenoid Valve
B7	4490	2-Stage Regulator, 1-1/4"
B8	S1500-86	Strainer Assembly, 1-1/4"
B9	2528	Regulator (optional)
B10	4509	Gas Pressure Switch
C1	9625	Flame Controller
C3	S1500-108	Wiring Duct, 3"
C4	9612	Start Button Assembly
C5	S1500-718	Start Contact Block Assembly
C6	9611	Stop Button Assembly
C7	S1500-717	Stop Contact Block Assembly
C8	S1500-713	Thermostat Jumper Assembly
C9	8682	Thermostat Receptacle
C10	3868	Power Cord, 24"
C11	S1500-107	Wiring Duct, 7"
C12	5509	Snap Bushing, 1/2"
C13	S1500-710	Adjusted Air Switch
C14	9294	Vinyl Tube, 3/16"
C15	S1500-109	Air Tube
C16	5515	Rubber Grommet
C17	2554	Compression Fitting, 1/4" MNPT
C18	S1500-502	Air Tube Bracket
C19	9348	Connector, 1/8" MNPT x .170" 90° Elbow
C20	S1500-716	Remote Thermostat Assembly w/cable
D1	S1500-105	Mounting Rail
D2	9443	Ground Terminal Block green/yellow
D3	9264	Power Relay, 120V
D4	9826	Relay Clip
D5	9280	End Plate, Green
D6	9275	Terminal Block, Green
D7	9279	End Plate, Gray
D8	9277	Terminal Block, Red
D9	9283	Cross Connector, 2 Pole
D10	9284	Cross Connector, 3 Pole
D11	9285	Cross Connector, 5 Pole
D12	9276	Terminal Block, Gray
D13	9274	Terminal Block, Gray
D14	9278	Terminal Block, Gray
D15	9271	Fuse Holder
D16	9270	Fuse, 2A
D17	9273	Terminal Block, Gray
D18	9281	End Plate, Gray
D19	9282	End Plate, Gray
D20	9272	Terminal Block, Gray
D21	8659	Utility Box

Miscellaneous Service Equip. & Supplies

This section focuses on the tools and supplies that are needed in order to service oil and gas fired heaters. Hopefully, this portion of the book will give you a better understanding of the common supplies you will need to stock in your repair shop for expedient repair services.

Of course, you can call one of our technicians at **PHP at 800-362-6951 ext. 2** for advice on servicing your heaters and getting set up to repair your customers heaters.

Repair shops can never have too many manuals and gauges on hand. They will help you in servicing your heaters on a more accurate basis. The CD Rom's can assist you in training employees, especially your new mechanics

Gauges
Hoses
Tools
Manuals
CD Roms

Misc. Service Equipment

MISCELLANEOUS INDEX

Equipment and Supplies	Page No.
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CD Rom's	256
Electrode Setting Gauge	256
Gauge, High Pressure 0-160 PSI	256
Gauge, Low Pressure 0-15 PSI	256
Gauge, Low Pressure Liquid Filled	256
Ignition Wire Lead	254
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Photocell/Safety Control Test Kit	256
Service Manual, Gas	256
Service Manual, Low Pressure	256
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Ignitor / Electrode Wire Terminals

Solderless - Reusable

These are the most common types of terminals used on portable oil and gas heaters.

Ignitor/Electrode Terminals



#55211

90° Electrode Terminal
Part No. 55211
Package of 5

90° Non-Insulated Terminal
Part No. 55321
Package of 5



#55321



#55231

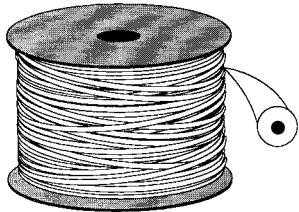
Straight Insulated Terminal
Part No. 55231
Package of 5

Straight Non-Insulated Terminal
Part No. 55221
Package of 5



Straight Non-Insulated Base Stud
Part No. 55021
Package of 5

Electrode leads for 6000V to 15000V transformers can be made to order, call for details.



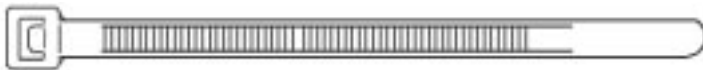
Belden Type GTO-15 Ignition Wire

15,000 Volt Rated; UL Listed

#41648
10' Ignition Wire

#41650
25' Ignition Wire

Standard Nylon Cable Ties



Cat. No.	Qty Per Bag	Minimum Tensile Strength	Overall Length	Color
33NCT4	25	18 lbs.	4"	Clear
CV200S	100	50 lbs.	7"	Clear
CV292	100	50 lbs.	11"	Clear
CV432	100	50 lbs.	14"	Clear
33NCT18	50	50 lbs.	18"	Clear

Nozzles

Desa High Pressure

Part#	GPH x Degree	Model#
M3292	.75 x 80°A	Old B100's
M4792	.90 x 80°B	B125
M9108	1.00 x 90°A	B150, B155, F155
M27828	1.40 x 70°A	BV250
1000854	1.50 x 60°	H231
1001347-5	1.50 x 80°	B240
M18876	1.75 x 70°A	B220
M4857	1.75 x 80°A	B250
M51070-01	2.00 x 70°A	BV400/C
M50112	2.50 x 70°A	B350's
M18303	2.75 x 70°	BV400CA
1000489-4	3.00 x 60°	B400
M14969	3.50 x 70°A	B500's
M30765	4.00 x 80°A	B600's

Stone High Pressure

46291	.65 x 80°B	SG100, SG120
46238	.85 x 80°B	SG150, SG160
46216	1.50 x 80°B	SG500 (1974-1977)
46215	2.00 x 80°B	SG300 (pre 1979)
46215	2.00 x 80°B	SG500 (pre 1976)
46294	3.25 x 80°B	SG500 (1977-on)

Kelly High Pressure

32206	.65 x 80°B	90KSHS
32233	.85 x 80°B	120KSHS
30266	1.20 x 80°B	175KSHS
32014	2.25 x 70°B	300KSHS
32101	3.00 x 80°B	450KSHS

Toro High Pressure

Part #	GPH x Degree	Model#
154613	.50 x 90°A	
154466	.60 x 60°W	CH85, Lil Champ (+)
154615	.75 x 60°B	CH100 Air Scoop
154608	.75 x 90°B	CH100 Inline
154610	.85 x 60°B	CH120 (pre-1977) Champ Ven-Tec
154389	.85 x 80°B	CH120 Air Scoop VAL 6
154612	1.00 x 90°A	CH150 Inline
154611	1.10 x 60°B	CH155 (pre-1978)
154609	1.10 x 70°B	CPH160 Inline
154387	1.10 x 80°B	CH155's
154614	1.10 x 90°B	CH155's with high speed burners
1.35 x 60	1.35 x 60°	CH200/C CH210 Air Scoop
154607	1.35x 70°B	
1000854	1.50 x 60°	CH210 Air Scoops
154388	1.65 x 60°B	CH230 (pre-1977)
154840	1.65 x 70°B	CH230
154744	1.65 x 80°B	CH230
147377	2.00 x 60°B	CH320's
147531	4.50 x 80°B	CH650's

Aeroil High Pressure

30266	1.20 x 80°B	HE-S-163
30279	4.50 x 80°B	651TS

Universal High Pressure

M50112	2.50 x 70°A	K350
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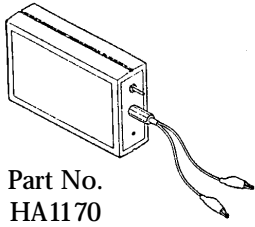
GPH - Gallons Per Hour

* The SG500 used dual nozzles at that time

Replacing the nozzle should be part of every high pressure oil tune up!

Other nozzles in stock, call for availability.

Heater Service Equipment

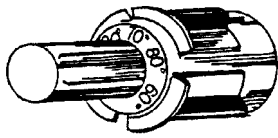


Master Safety Control/Photocell Tester Part No. HA1170

Portable battery operated
(9V battery not included, available as our part no. HD-9V).

Check all low pressure safety controls and low pressure photo cells for proper operation.

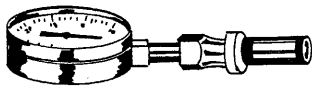
A new tool that is a must for all Portable Heater servicemen, especially for the new HSI heaters.
(HSI ignition controls, photocells and glowbars)



Electrode Setting Gauge Part No. 40445

Just slide over nozzle and set electrode.

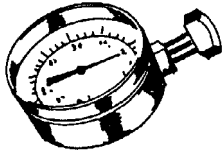
Works great on Wayne Burners and Champion, Century, Porta Heat, and Guardian Heaters.



Low Pressure Gauge 0-15PSI

Part No. HA1180

For Oil Fired Heaters. Test gauge is used when adjusting the pump pressure on low pressure oil fired heaters. A must for use on HSI heaters!



High Pressure Gauge 0-160 PSI

Part No. G14494

For Oil Fired Heaters. This test gauge is used to set pump pressure on oil heaters equipped with a high pressure pump (100+ PSI).

Liquid Filled Low Pressure Gauge

Part No. 559L-153438

For Oil Fired Heaters. Mounting is on back of gauge instead of bottom of gauge. Most accurate and longest lasting gauge available today! (0-15 PSI)



Low Pressure Oil Fired Service Manual

We have developed our own 160 page service manual that covers all three manufacturers of low pressure oil fired heaters; Desa, Toro, Scheu.

Part No. SM70106


Essential Tool Kit For Repair Shop

Part No. RS100

Kit Includes

- HA1170-Safety control tester
- HA1180-Low pressure gauge
- 40445-Electrode setting gauge
- 22T-Technical service catalog

Heater Service CD Roms



Tech
Service
Manual
On CD

Part #CDTECH




Interactive
Heater
Troubleshooting
CD

Part #CDTS



Low
Pressure
Manual
On CD

Part #CD70101



Gas
Fired
Manual
On CD

Part #CDGF

Wick Heater Accessories

Kerosene Wick Sales Ideas for Independent Dealers

AT PHP we sell wicks from Cans Unlimited. Cans offers the most attractively packaged wicks, and they are the most thoroughly tested.

Their English laboratory maintains over 200 different heater models to insure that the wicks fit perfectly and burn at maximum BTU outputs using American fuel.

Some of this year's production lot was tested in 20 different heaters in June 1995. The average percentage above the heaters rated BTU output was 9%. This is very important for customer satisfaction because a heater with a new wick should give the proper BTU output on the low setting. As a wick builds up tar, it must be turned up a little higher to maintain normal combustion. When the heater is turned as high as possible to burn normally, it is time to dry burn. Dry burning cleans the tar from the top of the wick. This lowest setting is used again for normal burning as the cycle starts over.

This is great advice for your customer, but he needs to buy your superior quality wick to take advantage of it. There are many cheap generic wicks which cannot provide the proper combustion on the lower settings.

Some customers want to know if graphite coated fiberglass will accumulate less tar than white fiberglass. One factory that made that claim conducted a test using 80% kerosene and 20% diesel. After 15 1/2 hours the black top had 1,051 milligrams of tar and the white top had 1,651 milligrams. Besides proving nothing about using 100% kerosene, the test may really show that fuel transference to the top of the wick was better with the white top. The white top averaged 9,074 BTU; the black top was 8,840 BTU. Not bad for a dirtier wick.

ACCESSORIES INDEX

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Ignitors	258
Kerosene Additive	258
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Siphon Pumps	258

Batteries

Ray-O-Vac Alkaline Batteries

-sold by pkg only

Part#	Description	Ctn. Qty.
AL-C	Size C, 6 pack	12 pkgs.
AL-D	Size D, 6 pack	12 pkgs.
AL-AA	Size AA, 8 pack	12 pkgs.
AL-AA	Size AAA, 8 pack	12 pkgs.
AL-9V	Size 9 volt, 6 pack	12 pkgs.

Ray-O-Vac Heavy-Duty Batteries

-sold by pkg. only

Part#	Description	Ctn. Qty.
HD-D	Size D, 6 per pack	12 pkgs.
HD-AA	Size AA, 8 per pack	12 pkgs.

PHP
accepts





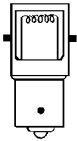

pay by check
Secure. Accurate. Reliable.

No Extra Fee

Wick Ignitors

Part#	Models Ignitor Fits
P10A	Most popular plug fits Aladdin, Corona, Kero Sun, etc.
P20A	For heater you must pull a knob to light. Fits Sanyo 30, 41, 42, 300, 420, 510 Yuasa J10, 40, 50 etc.
P30A	Fits Crestline, Noble Warm Knight, Sanyo 28H, 240, 280, Hamai 24, Turco, Yuasa J5, J20, J45, J46

Please consult your manual to make sure you get the correct ignitor.



Scented Kerosene Additive

A high quality kerosene treatment. Will help eliminate water and reduce odor! There are 24, 8 oz bottles in a case.

Six each of the following:

- A09P - Pine
- A09H- Honeysuckle
- A09HB - Holly Berry
- A09R - Rose



Individual bottles are available for sale.

One bottle treats 80 gallons.
For use in wick heaters only.

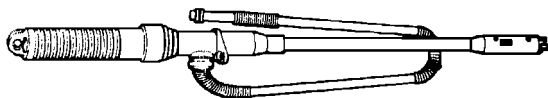
Wick Heater Accessories

Mica Windows

#58 - Universal - Can be cut to fit all wick heaters

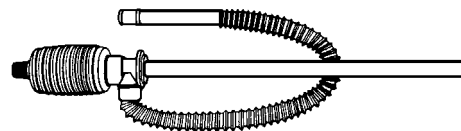
Siphon Pumps

Battery Operated Pump



Part #A60 Battery Operated
Requires 2 "D" cell batteries, not included
AL-D - 6 pack "D" cell batteries

Manual Siphon Pumps



Part #SI60 Individual Bag
Part #A40 12 Pack

Wick Part #	Make/Model	Igniter
	STA-GLO	
31	RH-10	P10A
	SHETLAND	
1A	KHR-96	
	SUN AIR GLO	
3	US-23-5	P10A
31	US-8-5	P10A
28	US-9-5; US-11-15	P10A
30	US-12-5	P10A
21	US-18-7	P10A
	SUNBEAM	
2	3601, 3602, 3603	P10A
4	3621	P10A
3A	3623, 3625-2, 3627; 5800	P30A
	SUNCREST	
25	4000, 4010	P30A
26	4500, 4510	P30A
27	4600, 4601	P30A
26A	4700	P30A
3	4870	P30A
20A	4800, 4801	P30A
	SUN HOUSEWARES	
6A	K-72	
7	K-100	
7A	K-102	
18	K-200	
	SUNNY (see Cosy)	
	SUNNY-VOX	
9	SU-9805	P10A
	SUNSHINE (see Emerson)	
	SUNSTAR	
1	EZ 2220	P10A
5	BK 195	P10A
	SUNWISE	
2	SPR-10, SPR-95	P30A
22	SPC-12	P30A
3A	SPC-180	P20A
	TAKO	
3	5DK	P10A
5	KSA105F	P10A
	TATUNG	
4	8,000 Btu	
	TEKNIKA	
10	TKH-800E,800EU	P10A
11	TKH-1000E,1000EU; TKH-1010E	P10A
10	TKH-810E,TKH-1050GE	P10A
22	TKH-1200GE; TKC-1200E**	P10A
8	TKC-2000	P10A
** a few of these models require a different wick: 20 or 35		
	TOSHIBA	
9	KSE-2150	P10A
14	KSE-2200, KSE-2850	
N/A	KSR363	
	TOYOKUNI	
7	TSK-23U, TSK30E, 64U	P10A
34	TSK-26EA, TSK26EGQ	P10A
1A	TSK-26EU	P10A
7B	TSK-80EU	P10A
35	TSK-80EA, TSK-80EGQ	P10A
23	TSK-90EU (no metal band)	P10A
31	84EU	P10A
20	TSK-90EA, TSK-90EGQ	P10A
20	TSK-90EU (metal band)	P10A
7B	101EU	P10A
20B	200EU (30483), 96EU	P10A
7	608	P10A
	TOYOSET (by KeroSun)	
1C	Radiant 100; Radiant Fan 110	P10A
2A	Radiant 101, Radiant Fan 111	P10A
5C	Omi 200	P10A
8B	Omni 230	P10A
	TOYOSTOVE-TOYOTOMI-TOYOSET	
2A	DC-60, DC-80	P10A
5C	DC-90, A, B; DC-100	P10A
2A	DR-86, DR-86F	P10A
5C	KRA-105 Double Kleen	P10A
1B	KSA-85C, 851C (pins)	P10A
1D	KSA-85D pre-I; KSA-851D	P10A
5B	KSA-105D (pins) 1978 model	P10A
5	KSA-105E, F, G, H, I	P10A
8B	KSA-120	P10A
5A	Model G Cooker	P10A
5C	Omni 200 (by KeroSun)	P10A
8B	Omni 230, B (by KeroSun)	P10A
1C	Radiant 100 (by KeroSun)	P10A
2A	Radiant 101 (by KeroSun)	P10A
1C	Radiant Fan 110 (by KeroSun)	P10A
2A	Radiant Fan 111 (by KeroSun)	P10A
2A	R-400	P10A
4	RB-2 Rainbow (cotton)	P10A

Wick Part #	Make/Model	Igniter
4A	RB-2 Rainbow (fiberglass)	P10A
4B	(pins) Rainbow B, C	P10A
1D	RC-11 pre-C	P10A
34A	RCA 25, RC-25A (024907)	P10A
5A	RCA-28B	P10A
2A	RC-11 Type D	P10A
1C	RCA-36, 36F Warm Breeze	P10A
1C	RC-37 B, C; RC-37F	P10A
2A	RC-41, 41F; RCA-87	P10A
1	RSA-8, RSA-10 G, H, I, J	P10A
1	RSA 21, 23, 24, 50, 85, 850	P10A
2A	SC-150, A, B; SC-400	P10A
5C	SC-200, A, B	P10A
8B	SO-230	P10A
4	TSC-15	P10A
5C	WC-105, WC-105R	P10A
8B	WC120, WC-120R, WC-105, E, F	P10A
	TOUCH 'N GLOW	
38A	CR7	
16*	CR8, CR9, CRF9	
12	K13	
8	K20, CR15	
	TURCO	
9	2000 Villager, 2001	P10A
9	2005 Colony, 2006 Estate	P10A
9	2007 Plantation II	P30A
9	2008 Estate 2010	P30A
9	2016 Carlton	P30A
13	2300 Homestead	P30A
14	3100 Tradition, 3105 Heritage 3205	P30A
9	4020 Citadel; 4025 Citadel II	P30A
9	4030 Tempvent	P30A
14	4506 Vintage	P30A
	UNION	
9	Therma 10 (30482)	P30A
9	Therma 12F (30484)	P30A
14	Therma 21 (30483)	P30A
	UNITED AMERICA HARDWARE	
7B	Air Warmer (8,000 Btu)	
7B	Air Warmer - 379 (10,500 Btu)	
	U.S. STOVE CO. COOK STOVE	
44	Cook Stoves (Various)	
39	US-89A, US-89P; Boss 8	
	VALOR	
47	140 Radiant Deluxe; 141 Sunrise	
47	145 Super Fyrside (8 pieces)	
45	Heatmiser 100, 200, 420	
45	Valmin, No. 14, L Type (& No. 33)	
45	Valiant, L60, L207, L210, 100, 210	
45	51 Viceroy, Valor Vector 1&2, 420 Cheap Heatio	
45	Viking Vulcan, Valomatic	
109	(Valorheat wick) Autoheat 1 & 2	
109	239 Gardin Lover, Heatmiser 150 Auto, Super Viking	
110	(200F wick) 64G, 64W Cooking Stove, (300F wick) 65, 65S Boiling Stove	
122	("22" wick) 56, 106R, 623R, 104	
126	(600R wick) 625, 685, 785	
133W	12, 32K Elite Albion, 210	
139	Kindler 6139, 410 Safeway, 626-627, 16-17-19 cookers	
39	525-585, 525R, 10R (500F)	
135W	(Valmax wick) 160 Majestic Mk I & Mk II, 160 Auto Majestic (199359) L180 Log-Glo, Auto.	
	VAN WYCK (same as Robeson)	
	VORTEC FTTA Ltd.	
5A	19,000	P10A
4	10,000	P10A
	WARM MATE	
11	600EW; 670E	P10A
10	650GEW; 670GEDW	P10A
22	850	P10A
	WARM-UP SQUAD (see Leslie Locke)	
	WESTERN AUTO (see Citation)	
	WHITE GATE	
1A	Model 100, 9600 Btu, K192 KET	P30A
3A	20,000 Btu	P30A
	YUASA	
24	J-5; Danrich I	
2	J-10	P20A
2	J-20	P30A
22	J-30; (pre-1981, no metal band) J-35 (No Metal Band)	P10A
10	J-30; Danrich II (with metal band)	P10A
3A	J-37; J-40, J-45, J-46, J-50	P30A
10	J-35 (with metal band)	P10A
19	20 Sunglow	P10A
7A	30 Sunglow	P10A
7B	100 Sunglow	P10A
33	Super Sunglow	
43	Auxiliary String Wick	

How to clean the wick:

- 1) Take the heater outdoors on a windless day
- 2) Remove the cartridge tank from the heater. (If so equipped)
- 3) Ignite the heater letting it burn at full capacity.
- 4) Keep the heater burning until the fuel runs out and the flame dies out naturally. (Wait approximately 30 minutes for the unit to cool and then remove the wick)
- 5) If the wick is hardened due to the presence of degenerated or contaminated fuel, cleaning it once is not enough to eliminate its carbon content entirely. So clean the wick two or three times by brushing with a medium hardness toothbrush.
- 6) After you have cleaned the wick, put the cartridge tank back in the heater. Wait 30 minutes or longer to allow the wick to absorb fuel fully, and then ignite the heater.
- 7) If cleaning does not make an improvement in the wick and remains hard at its upper part, then replace it.

RAY-O-VAC Heavy Duty Batteries

Part #	Desc.
HD-AA	Size AA
HD-C	Size C
HD-D	Size D

The battery most commonly used in wick heaters is size D.

Wick Heater Chimney Glass by Size

<u>Height</u>	<u>Outside Diameter</u>	<u>Description</u>	<u>Part#</u>
2 1/4"	4-5/8"	DR86 Lower, Toyostove	N56
2 5/8"	4-1/2"	Crestline 3000,3010; Keymar K7200	M10
2 7/16"	4 13/16"	Turco 2005,2006, 2008, 2010	N49
2 1/2"	5"	Sanyo OHRG28H,Yuasa J10	NLA
2 1/2"	5 11/16"	Corona SPDx;Sun Air US9-5	M35
2 9/16"	4 3/16"	Sanyo OHR23; Calor	N86
2 3/4"	4 1/8"	Handymaster HM8;Sears 40214; CR-7	N87
2 13/16"	5"	Kerosun/Toyostove Radiant 8; S8200;670GE	N66
2 13/16"	4 13/16"	DC-80 Lower (toyostove)	N93
2 7/8"	4 3/4"	Crestline 230GE, Toyo DC80 lower	M84
2 15/16"	3 7/8"	Sanyo 240; Yuasa J5; AR-68,30460	M77
2 15/16"	5 1/16"	HM500K;650-GED;670-GED	N69
3 1/16"	4 3/4"	Toyokuni 26EA, 26EGQ	M65
3 1/8"	4 11/16"	Alad J380,Ever PE2, Fujika KS2A	M20
3 1/8"	5 7/16"	Alad J580,Mark II, Old PTE4,12	M14
3 1/8"	5 5/8"	Toyostove DC90,100;KRA105 lower	N96
3 1/8"	5 13/16"	Sanyo 10600,41,42,300,1410;J37	M22
3 1/8"	5 7/8"	Toyostove DR86 upper	M81
3 1/8"	6 3/8"	Citation 2013	N64
3 5/16"	4 13/16"	Rad9600;Toyokuni 26EU,HM 700	M70
3 5/16"	4 7/16"	Toyokuni 84EU;Glo70;Artifex S100	M64
3 5/16"	4 9/16"	Sanyo 25,240(113-00); C Glow, Sears	M60
3 3/8"	4 1/2"	Alad B131; TR7 Chimney	N/A
3 3/8"	5 3/16"	Crest 250GE; 80EU,HM800,J35,1200GE	N80
3 3/8"	6 5/16"	S581U; RK500,Perf PSR15;90EGQ	M82
3 7/16"	7 13/16"	Toyostove DC90,100,KRA105 Upper	N74
3 3/8"	4 1/2"	Aladdin B131, TR-7 Chimney	N59
3 7/16"	4 13/16"	Alad S381;Perf PSR10;RK100S	N76
3 9/16"	5 1/4"	Alad S481,TR10,11; Arctic Sun; RK250	M50
3 9/16"	5 7/8"	Kerosun Director A,B	N85
3 13/16"	4"	Turco 2007,Union Therma 10	M67
3 13/16"	5 1/16"	KeroSun R10,36;Rad100,110	M79
3 15/16"	5 5/16"	Everglow PE12	M16
3 7/8"	6 3/8"	Everglow PTE16 (new style)	M31
3 7/8"	7 3/8"	Toyostove DC80 upper	N91
3 15/16"	4 15/16"	Toyoset Rad101, Rad40	M54
4 5/16"	4 13/16"	Robeson radiants with 9-9A wicks	M63
4 5/16"	5 7/8"	Sanyo OHC420; Yuasa J40, SunB3625	M25
4 5/16"	6 3/16"	Sanyo 2010, Yuasa J45,46;SunB 3627	M40
4 5/16"	6 5/16"	Toyokuni 96EU,200EU; CGlow R15000	M38
4 3/8"	5 7/8"	KeroSun Director (Pre-A)	M28
4 7/16"	6 5/16"	Alad Equator II,TR20;RKing450	M83
4 7/16"	9 1/8"	Robeson 2615 Outer Glass	NLA
4 9/16"	5 15/16"	Turco 2300 Homestead	G327
4 5/8"	4 13/16"	Turco 2015,16,18,4020,25;Union 12F	M90
4 11/16"	6 5/16"	Robeson 2606,2612,2617	M18
4 7/8"	3 1/2"	Aladdin TR2000	M68
5 1/16"	5"	Toyostove RCA87; Kogy500	C300
5 7/8"	4 1/16"	Corona SX2E,K World KW10	N88
5 7/16"	4 1/8"	Aladdin TR3000	N61
5 15/16"	4 11/16"	Corona SX2; Sun Air Glow US8-5	M33
6 1/2"	5 15/16"	Corona SX3;Sun Air Glow US 11-5	M89
7 1/16"	5 13/16"	KeroSun Moonlighter,Toyostove RB2	M57
7 5/16"	8 9/16"	Koehring KHL120,A;Sears 40304,8	N100
8 1/4"	4 11/16"	Lasor Clean LR350	N53
8 7/8"	6 5/8"	Lasor Clean LR450	N94

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Freight	Prepaid & Add	Prepaid & Add	Allowed*	Allowed*
Pricing	Dealer	Gold Key**	Gold Key**	Gold Key**

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SERVICE SCHOOL

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For more information, contact Melissa Culbertson @ Ext. 7275

Fax Toll Free: 800-255-7985

Who: *PHP customers who want to learn how to repair portable heaters*

What: *2-Day education of hands-on training*

When: *Two separate schools are typically held in the fall*

Where: *Harold Coates Education Facility, on the campus of PHP, 342 N. 400 E. Valparaiso, IN*

Cost: *Call for current rates*

*Fee Includes:
One night hotel accommodations for one room, double occupancy.
Two days of comprehensive instruction
Instructional materials
Catered lunch both days
Dinner on the first evening
Troubleshooting CD-ROM
Hands on training*



Yes, we would like to sign up for the two-day service school.

Company Name _____

Your Name _____

Phone _____ Fax # _____

Attendee Names _____

*Will you need to stay more than one night?
 PHP is extending our corporate rate for additional nights. You will be billed by PHP, not the hotel.

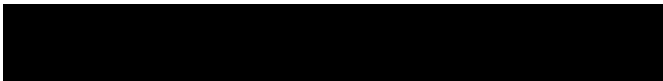
Arrival Date _____ Departing Date _____

FOR INTERNAL USE ONLY

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Pkg Mailed _____ Pmt Rcv'd _____

Notes:



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