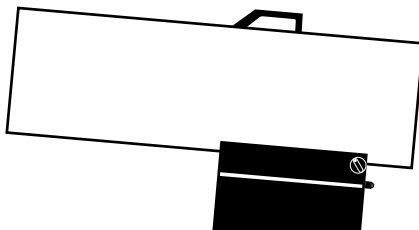


# **DESA<sup>TM</sup>**

## **HEATING PRODUCTS**

### **PROPANE CONSTRUCTION FORCED AIR HEATER OWNER'S MANUAL**



**VARIABLE 30-55,000, 50-85,000 AND 75-125,000 BTU/HR**

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

#### **⚠ GENERAL HAZARD WARNING:**

Failure to comply with the precautions and instructions provided with this heater, can result in death, serious bodily injury and property loss or damage from hazards of fire, explosion, burn, asphyxiation, carbon monoxide poisoning and/or electrical shock.

Only persons who can understand and follow the instructions should use or service this heater.

If you need assistance or heater information such as an instructions manual, labels, etc. Contact the manufacturer.

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**Save this manual for future reference.**  
**For more information, visit [www.desatech.com](http://www.desatech.com)**

## SAFETY



**WARNING:** This product contains and/or generates chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.



**WARNING:** Fire, burn, inhalation and explosion hazard. Keep solid combustibles, such as building materials, paper or cardboard, a safe distance away from the heater as recommended by the instructions. Never use the heater in spaces which do or may contain volatile or airborne combustibles or products such as gasoline, solvents, paint thinner, dust particles or unknown chemicals.



**WARNING:** Not for home or recreational vehicle use.

The heater is designed for use as a construction heater in accordance with ANSI Z83.7/CGA2.14. Other standards govern the use of fuel gases and heating products for specific uses. Your local authority can advise you about these. The primary purpose of construction heaters is to provide temporary heating of buildings under construction, alteration or repair. Properly used, the heater provides safe economical heating. Products of combustion are vented into the area being heated.

We cannot foresee every use which may be made of our heaters. **Check with your local fire safety authority if you have questions about heater use.**

**Carbon Monoxide Poisoning:** Some people are more affected by carbon monoxide than others. Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness and/or nausea. If you have these signs, the heater may not be working properly. **Get fresh air at once!** Check for proper ventilation and have heater serviced.

**Propane Gas:** Propane gas is odorless. An odor-making agent is added to propane gas. The odor helps you detect a propane gas

leak. However, the odor added to propane gas can fade. Propane gas may be present even though no odor exists.

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

1. Install and use heater with care. Follow all local ordinances and codes. In the absence of local ordinances and codes, refer to the *Standard for Storage and Handling of Liquefied Petroleum Gas, ANSI/NFPA 58* and the *Propane Gas Installation Code, CAN/CGA B149.2*. This instructs on the safe storage and handling of propane gases.

**State of Massachusetts:** The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

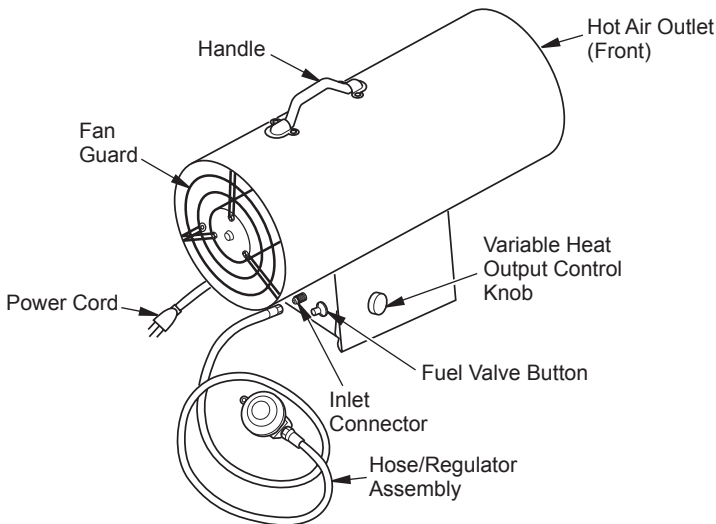
2. Use only the electrical voltage and frequency specified on model plate. The electrical connections and grounding of the heater shall follow the *National Electric Code, ANSI/NFPA 70* or the *Canadian Electrical Code, Part 1*.
3. Electrical Grounding Instructions - This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle or extension cord.
4. Use only the hose and factory preset regulator provided with the heater.
5. Use only propane gas set up for vapor withdrawal.
6. Provide adequate ventilation. Before using heater, provide at least a three square foot opening of fresh, outside air for each 100,000 Btu/Hr (105,500 kJ) of rating.
7. For indoor use only. Do not use heater outdoors.
8. Do not use heater in occupied dwellings or in living or sleeping quarters.
9. Do not use heater in a basement or below ground level. Propane gas is heavier than air. If a leak occurs, propane gas will sink to the lowest possible level.
10. Keep appliance area clear and free from combustible materials, gasoline, paint thinner and other flammable vapors and liquids. Dust is combustible. Do not use heater in areas with high dust content.

## SAFETY

### Continued

11. Minimum heater clearances from combustible materials:  
Outlet: 8 Ft. (2.4 m), Sides: 2 Ft. (0.6 m),  
Top: 6 Ft. (1.8 m), Rear: 2 Ft. (0.6 m)
12. Keep heater at least 6 feet from propane tank(s). Do not point heater at propane tank(s) within 20 feet (6.1 m).
13. Keep propane tank(s) below 100° F (37.8° C).
14. Check heater for damage before each use. Do not use a damaged heater.
15. Check hose before each use of heater. If highly worn or cut, replace with hose specified by manufacturer before using heater.
16. Locate heater on stable and level surface if heater is hot or operating.
17. Never block air inlet (rear) or air outlet (front) of heater.
18. Keep heater away from strong drafts, wind, water spray, rain or dripping water.
19. Do not leave heater unattended.
20. Keep children and animals away from heater.
21. Never move, handle or service a hot or operating heater. Severe burns may result. You must wait 15 minutes after turning heater off.
22. To prevent injury, wear gloves when handling heater.
23. Never attach duct work to heater.
24. Do not alter heater. Keep heater in its original state.
25. Do not use heater if altered.
26. Turn off propane supply to heater and unplug heater when not in use.
27. Use only original replacement parts. This heater must use design-specific parts. Do not substitute or use generic parts. Improper replacement parts could cause serious or fatal injuries.

## PRODUCT IDENTIFICATION



**Figure 1 - Variable 75-125,000 Btu/Hr (Heater may vary from illustration)**

## UNPACKING

1. Remove all packing items applied to heater for shipment. Keep plastic cover caps (attached to inlet connector and hose/regulator assembly) for storage.
2. Remove all items from carton.
3. Check all items for shipping damage. If heater is damaged, promptly inform dealer where you bought heater.

## THEORY OF OPERATION

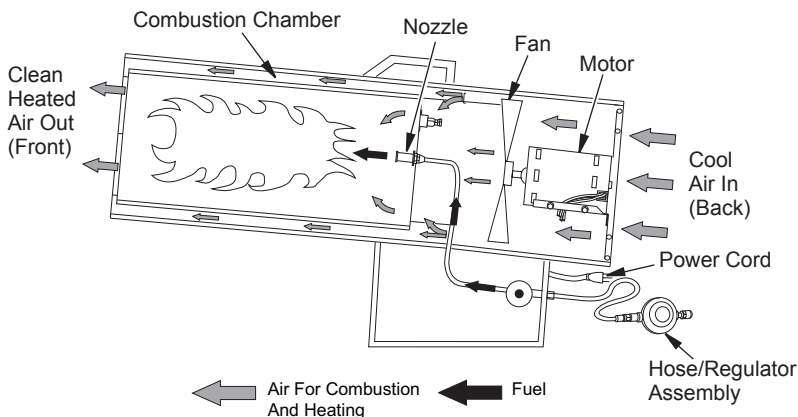
**The Fuel System:** The hose/regulator assembly attaches to the propane gas supply. The propane gas moves through the automatic control valve and out the nozzle.

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

**The Ignition System:** The spark transformer and spark plug lights the main burner.

**The Safety Control System:** This system causes the heater to shut down if the flame goes out.

*Note: Some parts are located differently on some models.*



**Figure 2 - Cross Section Operational View (Heater may vary from illustration)**

## PROPANE SUPPLY

Propane gas and propane tank(s) are to be furnished by the user.

Use this heater only with a propane vapor withdrawal supply system. See Chapter 5 of the *Standard for Storage and Handling of Liquefied Petroleum Gas, ANSI/NFPA 58*. Your local library or fire department will have this booklet.

The amount of propane gas ready for use from propane tanks varies. Two factors decide this amount:

1. The amount of propane gas in tank(s)
2. The temperature of tank(s)

The following chart shows the number of 100 b (45 kg) tanks needed to run this heater.

Temperature at tank location	Number of tanks Models		
	55	85	125
above 20° F (-7° C)	1	1	2
20° F (-7° C) to 0 (-18° C)	1	2	3
below 0° F (-18° C)	2	2	(Use larger tank)

**Smaller tanks can be used for limited run times but it is recommended to use larger tanks for optimum performance.**

Less gas is vaporized at lower temperatures. You may need two or more 100 pound (45 kg) tanks or one larger tank in colder weather. Your local propane gas dealer will help you select the proper supply system. The minimum surrounding-air temperature rating for each heater is -20° F (-29° C).

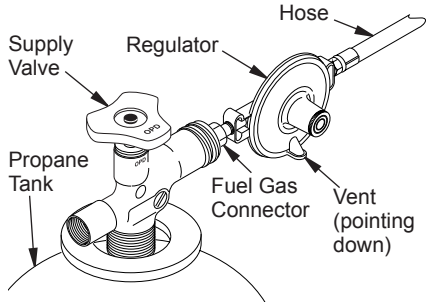
## INSTALLATION

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

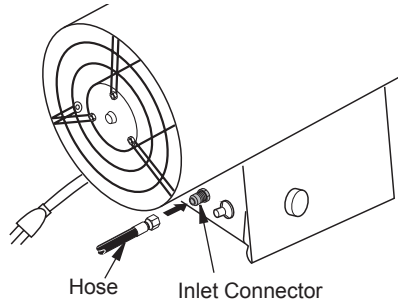
**⚠ WARNING:** Test all gas piping and connections for leaks after installing or servicing. Never use an open flame to check for a leak. Apply a mixture of liquid soap and water to all joints. Bubbles forming show a leak. Correct all leaks at once.

1. Provide propane supply system (see *Propane Supply*, page 4).
2. Connect fuel gas connector fitting on hose/regulator assembly to propane tank(s). Turn counterclockwise into threads on tank valve. Tighten firmly using wrench.  
**IMPORTANT:** Tighten regulator with vent pointing down. Pointing vent down protects regulator from weather damage.
3. Connect hose to inlet connector. Tighten firmly using a wrench.  
**IMPORTANT:** Extra hose or piping may be used if needed. Install extra hose or piping between hose/regulator assembly and propane tank. You must use the regulator supplied with heater.

4. Open propane supply valve on propane tank(s) slowly.  
*Note: If not opened slowly, excess-flow check valve on propane tank may stop gas flow. If this happens, close propane supply valve and open again slowly.*
5. Check all connections for leaks.
6. Close propane supply valve.



**Figure 3 - Regulator With Vent Pointing Down**




**Figure 4 - Hose and Inlet Connector (Heater may vary from illustration)**

## VENTILATION

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

Provide a fresh air opening of at least three square feet for each 100,000 Btu/Hr (105,500 kJ) rating. Provide extra fresh air if more heaters are being used.

## OPERATION

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

### TO START HEATER

1. Follow all installation, ventilation and safety information.
2. Locate heater on stable and level surface. Make sure strong drafts do not blow into front or rear of heater.

3. Plug power cord of heater into a 3-prong, grounded extension cord. Extension cord must be at least 6 feet (1.83 m) long, UL/CSA listed and of a proper size.

#### Extension Cord Size Requirement

Up to 100 feet (30.5 m) long, use 16 AWG rated cord.

101 to 200 feet (30.78 to 61 m) long, use 14 AWG rated cord.

4. Plug extension cord into a 120 volt/60 hertz, three-hole, grounded outlet. Motor will start. Fan will turn, forcing air out front of heater.
5. Open propane supply valve on propane tank(s) slowly.

*Note: If not opened slowly, excess-flow check valve on propane tank will stop gas flow. You may hear a click from the excess-flow check valve closing. If this happens, reset the excess-flow check valve by closing propane supply valve and open again slowly.*

6. Press and hold in fuel valve button. Heater should ignite within a few seconds.


*Note: If heater fails to ignite, hose may have air in it. If so, keep fuel valve button pressed and wait 20 seconds. Release automatic control valve button and wait 20 seconds for unburned fuel to exit heater. Repeat step 6.*

7. After heater ignites, wait 30 seconds. This activates the automatic control system. Release the control knob.
8. When burner remains lit, set heater at the desired heat level by turning the variable Btu control knob counterclockwise. If burner goes out, turn off gas. Turn variable Btu control knob fully clockwise to the lowest position. Check fuel supply. If adequate fuel is available, restart heater beginning at step 1.

### TO STOP HEATER

1. Tightly close propane supply valve on propane tank(s).
2. Wait a few seconds. Heater will burn gas left in supply hoses.
3. Unplug heater.

## STORAGE

 **CAUTION:** Disconnect heater from propane supply tank(s).

1. Store propane tank(s) in safe manner. See Chapter 5 of *Standard for Storage and Handling of Liquefied Petroleum Gases, ANSI/NFPA 58* and the *Propane Installation Code CAN/CGA B149.2*. Follow all local codes. Always store propane tanks outdoors.

2. Place plastic cover caps over brass fittings on inlet connector and hose/regulator assembly.
3. Store in dry, clean and safe place. Do not store hose/regulator assembly inside heater combustion chamber.
4. When taking heater out of storage, always check inside of heater. Insects and small animals may place foreign objects in heater. Keep inside of heater free from combustible and foreign objects.

## MAINTENANCE



### WARNINGS

- **Never service heater while it is plugged in, connected to propane supply, operating or hot. Severe burns and electrical shock can occur.**
  - **Keep heater clear and free from combustible materials, gasoline and other flammable vapors and liquids.**
  - **Do not block the flow of combustion or ventilation air.**
1. Keep heater clean. Clean heater annually or as needed to remove dust and debris. If heater is dirty or dusty, clean heater with a damp cloth. Use household cleaners on difficult spots.
  2. Inspect heater before each use. Check connections for leaks. Apply mixture of liquid soap and water to connections. Bubbles forming show a leak. Correct all leaks at once.
  3. Inspect hose/regulator assembly before each use. If hose is highly worn or cut, replace with hose specified by manufacturer.
  4. Have heater inspected yearly by a qualified service agency.
  5. Keep inside of heater free from combustible and foreign objects. Remove motor and other internal parts if needed to clean inside of heater (see Service Procedures, page 8).
  6. Clean fan blades each season or as needed (see Fan, page 9).

## TROUBLESHOOTING



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

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Fan does not turn when heater is plugged in	1. No electrical power to heater	1. Check voltage to electrical outlet. If voltage is good, check heater power cord for breaks
	2. Fan hitting inside of heater shell	2. Adjust motor/fan mount to keep fan from hitting inside of heater shell. Bend fan mount if necessary
	3. Fan blades bent	3. Replace fan. See <u>Fan</u> , page 9
	4. Defective motor	4. Replace motor. See <u>Motor</u> , page 8
Heater will not ignite	1. User did not follow installation or operation instructions properly	1. Repeat installation and operation instructions. See <u>Installation</u> , page 5 and <u>Operation</u> , page 6
	2. No spark at spark plug. To test for spark, follow steps 1 to 8 under <u>Spark Plug</u> , page 9. If you see spark at spark plug, have heater serviced by qualified service person. If no spark seen: A) Loose or disconnected spark plug wire B) Bad spark plug C) Bad spark transformer	2. A) Check spark plug wire. Tighten or reattach loose spark plug wire. See Figure 8, page 9 for spark plug wire location B) Replace spark plug. See <u>Spark Plug</u> , page 9 C) Replace spark transformer. See <u>Spark Transformer</u> , page 9

# TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Heater shuts down while running	1. Propane supply may be inadequate	1. A) Refill tank B) Provide additional and/or larger tanks. See <a href="#">Propane Supply</a> , page 4
	2. High surrounding air temperature causing thermal limit device to shut down heater	2. This can happen when running heater in temperatures above 85° F (29° C). Run heater in cooler temperatures
	3. Restricted air flow	3. Check heater inlet and outlet. Remove any obstructions
	4. Damaged fan	4. Replace fan. See <a href="#">Fan</a> , page 9
	5. Excessive dust or debris in surrounding area	5. Clean heater. See <a href="#">Maintenance</a> , page 7

**WARNING:** Use only in areas free of high dust content.

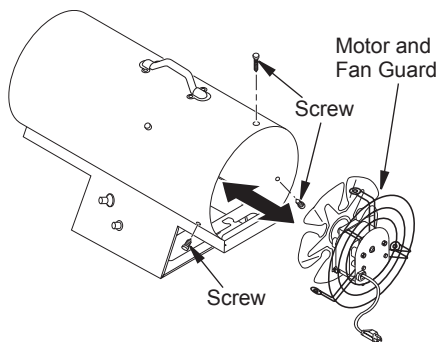
## SERVICE PROCEDURES

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

### MOTOR

1. With heater on its side, remove access panel.
2. Access ground screw through underside of heater base. Remove ground screw. Disconnect the green motor wire and the green power cord wire from underside of shell (see Figure 5).
3. Remove two black wires from motor to terminal board.
4. Carefully push motor wires through hole in bottom of shell.
5. Remove screws holding motor mount to shell. Use nut-driver (see Figure 5).
6. Carefully pull motor and fan out of shell. **IMPORTANT:** Be careful not to damage fan. Do not set motor and fan down with the weight resting on fan. This could damage fan pitch.
7. Use hex wrench to loosen setscrew which holds fan to motor shaft.
8. Remove fan. Be careful not to damage the fan blade pitch.
9. Use nut driver to remove two nuts that attach motor to motor mount.
10. Discard old motor.
11. Attach motor to motor mount with two nuts. Tighten nuts firmly.

12. Replace fan on motor shaft. Make sure set screw contacts flat surface on motor shaft.
13. Tighten set screw firmly (40-50 inch-pounds [46.08-57.60 kg-cm]).
14. Carefully route motor wires through hole in shell. Place motor, motor mount and fan guard into rear of heater shell, as shown in Figure 5.
15. Insert screws through heater shell and into motor mount. Tighten screws firmly.
16. Turn heater on its side to access opening in bottom of base. Connect green wires from motor, transformer and power cord to heater shell using ground nut.
17. Attach two black wires from motor to terminal board (see [Wiring Diagram](#), page 10, for correct locations).
18. Replace access panel.



**Figure 5 - Removing Motor and Fan Guard from Heater (Heater may vary from illustration)**

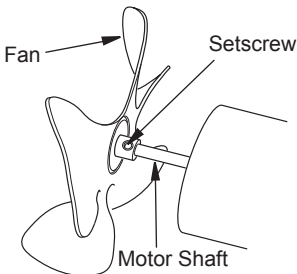


## SERVICE PROCEDURES

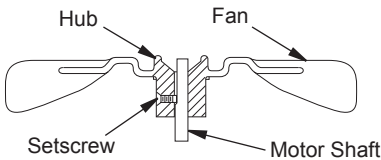
*Continued*

### FAN

1. Remove motor, motor mount and fan (see [Motor](#), steps 1 through 8, page 8).
2. Clean fan using soft cloth moistened with kerosene or solvent.
3. Dry fan thoroughly.
4. Replace fan on motor shaft. Make sure setscrew is touching back of flat surface on motor shaft (see Figure 6).
5. Place setscrew on flat of shaft. Tighten setscrew firmly (40-50 inch-pounds [46.08-57.60 kilogram-centimeters]).
6. Place motor, motor mount and fan guard into rear of heater shell (see [Motor](#), steps 14 through 18, page 8).



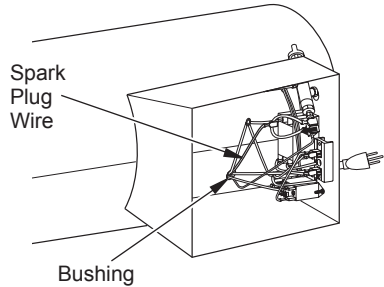
**Figure 6 - Fan, Motor Shaft and Setscrew Location**



**Figure 7 - Fan Cross Section**

### SPARK TRANSFORMER

1. Remove access panel.
2. Locate and disconnect white, black and orange wires from spark transformer.
3. Remove screw holding spark transformer to base. Remove sheet metal nut on transformer and install on new transformer. Discard spark transformer.
4. Install new spark transformer. Position new spark transformer in same manner as old transformer.
5. Connect white, black and orange wires to new spark transformer. Connect wires to correct terminals as noted in [Wiring Diagram](#), page 10.
6. Replace access panel.



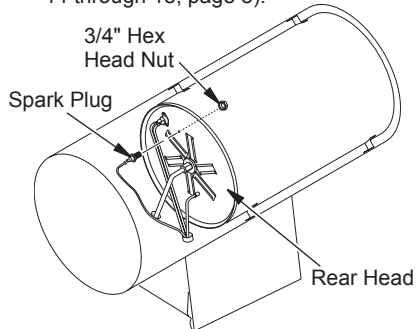
**Figure 8 - Removing Spark Plug Wire from Spark Transformer (Heater may vary from illustration)**

### SPARK PLUG

1. Remove motor, motor mount and fan guard (see [Motor](#), steps 1 through 6, page 8).
2. Remove orange spark plug wire from spark plug.
3. From front of heater loosen 3/4" hex nut holding spark plug in place (see Figure 9).
4. Remove spark plug from rear head.
5. Install new spark plug. Attach spark plug to rear head with ignitor hex nut removed in step 3.
6. Attach spark plug wire.
7. Test for spark.

**⚠ WARNING: Make sure heater is disconnected from propane supply. Heater could ignite causing severe burns.**

- Plug into extension cord and watch for spark at spark plug.
8. Place motor, motor mount and fan guard into rear of heater shell (see [Motor](#), steps 14 through 18, page 8).



**Figure 9 - Removing Spark Plug Nut and Spark Plug (Heater may vary from illustration)**

## SPECIFICATIONS

### All Models

- Propane/LP Gas
- Gas Supply Pressure to Regulator:  
Max - Bottle Pressure, Min - 5 psig (34.5 kPa)
- Gas Supply Pressure Regulator Out:  
28" WC (6.97 kPa)
- Electrical Input: 120V, 60 Hz, 1Ø, 3a
- Direct Spark Ignition
- Primary Flame Control:  
Thermocouple operated gas valve
- Minimum Ambient Temp. Rating:  
-20° F (-29° C)
- Heated Air Output: 350 CFM (9.91 m³/min)

### 55,000 Btu/Hr Models

- 30-55,000 Btu/Hr (8.8 - 16.1 kW)
- Fuel Consumption:  
1.4 - 2.6 pounds/hr (0.70 - 1.28 kg/hr)
- Average Air Temp. Rise: 200° F (111° C)

### 85,000 Btu/Hr Models

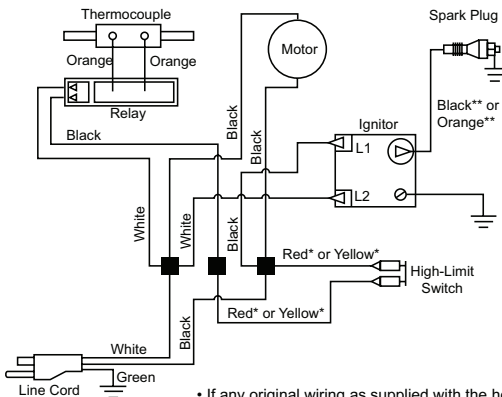
- 50-85,000 Btu/Hr (14.6 - 25.0 kW)
- Fuel Consumption:  
2.3 - 3.9 pounds/hr (1.04 - 1.77 kg/hr)
- Average Air Temp. Rise: 200° F (111° C)

### 125,000 Btu/Hr Models

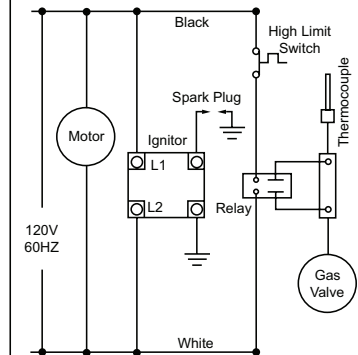
- 75-125,000 Btu/Hr (21.9 - 36.6 kW)
- Fuel Consumption:  
3.5 - 5.8 pounds/hr (1.59 - 2.63 kg/hr)
- Average Air Temp. Rise: 400° F (232° C)

## WIRING DIAGRAM

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 SF2-200. \*\*SGI-250° C)

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## REPLACEMENT PARTS

 **WARNING: Use only original replacement parts. This heater must use design-specific parts. Do not substitute or use generic parts. Improper replacement parts could cause serious or fatal injuries. This will also protect your warranty coverage for parts replaced under warranty.**

## TECHNICAL SERVICE

You may have further questions about this heater. If so, contact DESA Heating Products' Technical Service Department at 1-866-672-6040. When calling, please have your model and serial numbers of your heater ready.

You can also visit DESA Heating Products' Technical Service web site at [www.desatech.com](http://www.desatech.com).

### PARTS UNDER WARRANTY

Contact authorized dealers of this product. If they can't supply original replacement part(s), either contact your nearest Parts Central or call DESA Heating Products' Technical Service Department at 1-866-672-6040.

When calling DESA Heating Products, have ready:

- your name
- your address
- model and serial numbers of your heater
- how heater was malfunctioning
- purchase date

In most cases, we will ask you to return the part to the factory.

### PARTS NOT UNDER WARRANTY

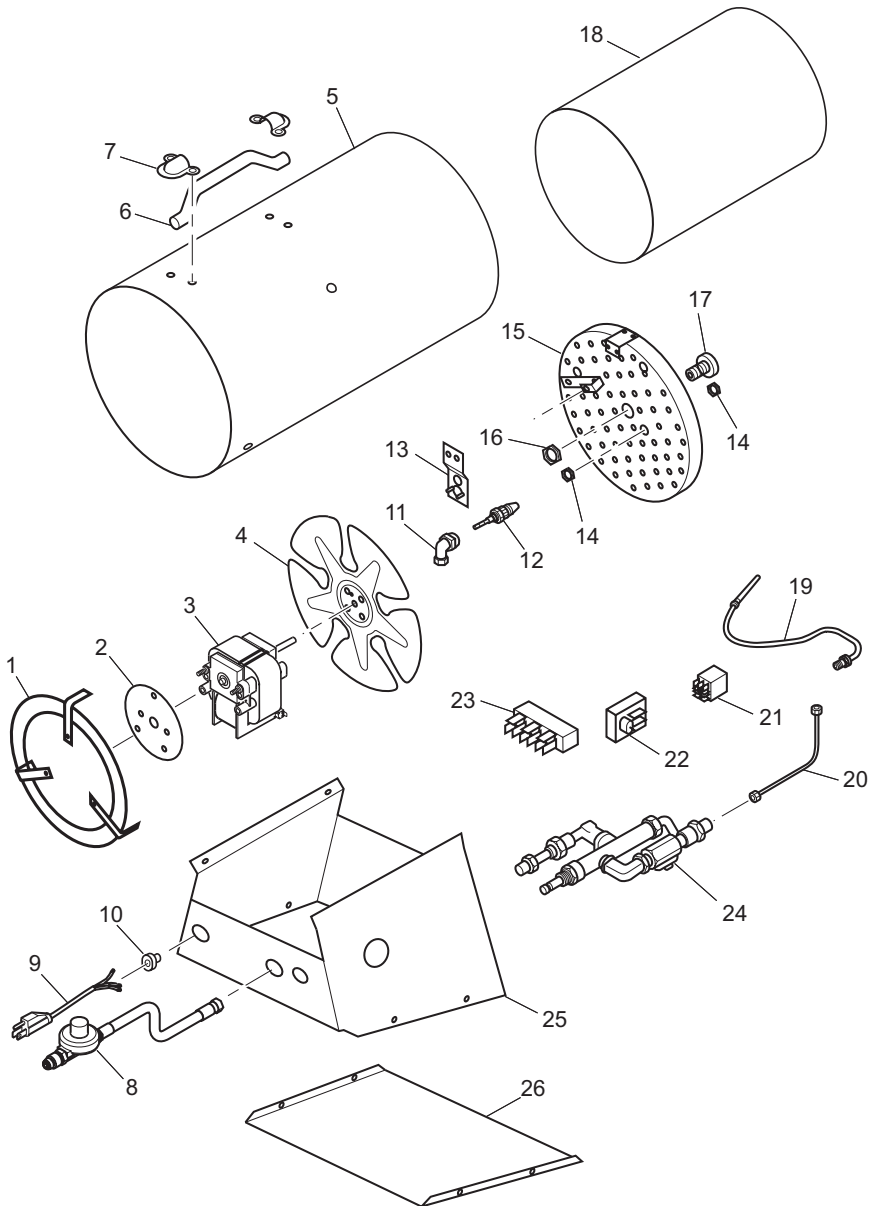
Contact authorized dealers of this product. If they can't supply original replacement part(s), either contact your nearest Parts Central or call DESA Heating Products for referral information at 1-866-672-6040.

When calling DESA Heating Products, have ready:

- model number of your heater
- the replacement part number

## PARTS

MODELS BLP55VA, REM55PVA, RLP55VA, SPC-55A AND TB115A



## PARTS

### MODELS BLP55VA, REM55PVA, RLP55VA, SPC-55A AND TB115A

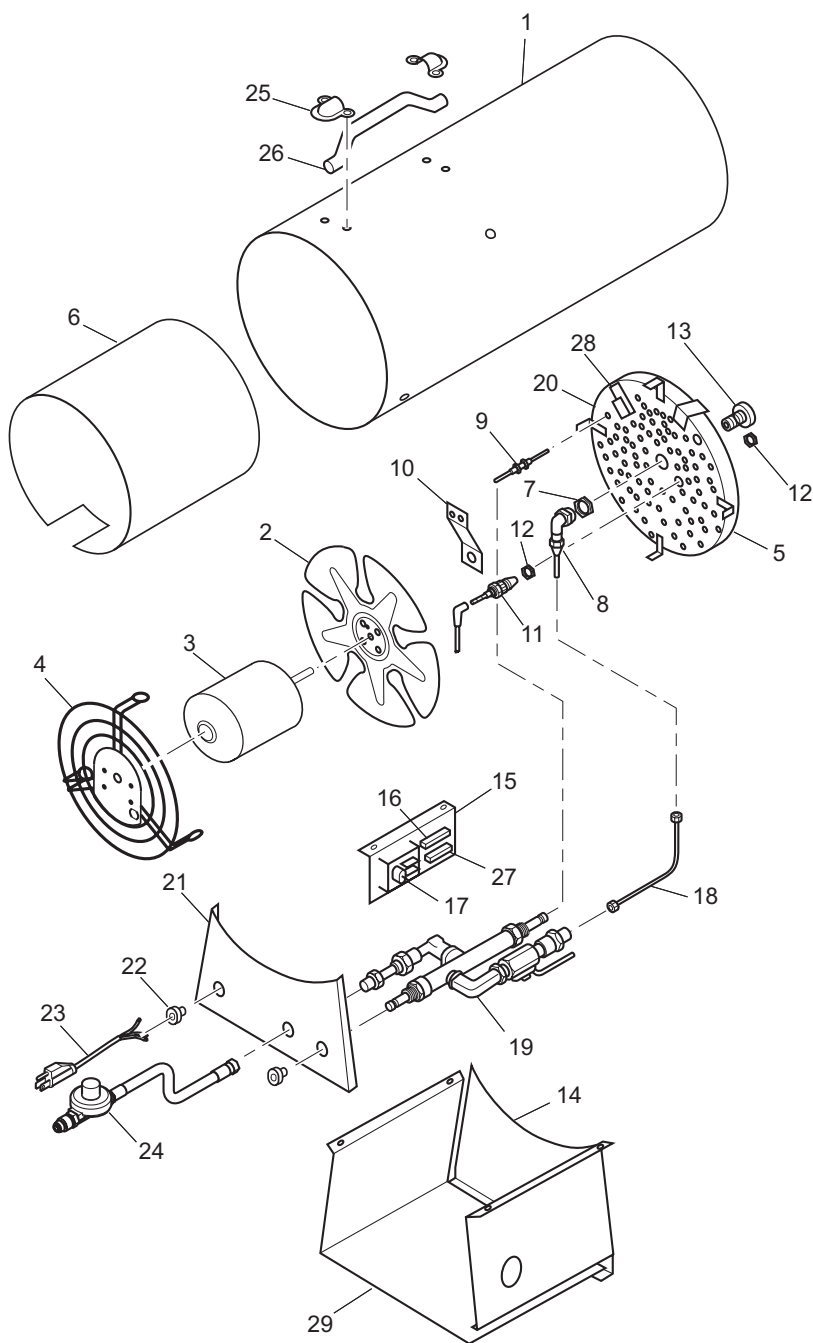
This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under Replacement Parts on page 11 of this manual.

KEY			
NO.	PART NO.	DESCRIPTION	QTY
1	121246-01	Grill Assembly	1
2	121247-01	Motor Mounting Bracket	1
3	121206-01	Motor Assembly	1
4	121209-01	Fan	1
5	121406-01	Outer Cylinder, Red (RLP55VA)	1
	121406-04	Outer Cylinder, Black (REM55PVA)	1
	121406-02	Outer Cylinder, Orange (TB115A)	1
	121406-03	Outer Cylinder, Yellow (BLP55VA)	1
6	121216-01	Handle	1
7	121217-01	Clip Handle Mounting	2
8	121205-01	Hose/Regulator Assembly	1
9	113864-01	Power Cord	1
10	113865-01	Strain Relief Bushing	1
11	113887-01	Male E bow Fitting	1
12	121213-01	Spark Plug	1
13	121244-01	High Limit Switch Control Assembly	1
14	113886-01	Nut, Spark Plug	2
15	121224-01	Flame Holder Assembly	1
16	113888-02	Nut orifice Mounting	1
17	121245-01	Orifice, LP Assembly	1
18	**	Middle Cylinder Assembly	1
19	113884-01	Thermocouple	1
20	121212-01	Fuel Tube Assembly	1
21	113875-01	Relay Assembly	1
22	121235-01	Ignitor	1
23	113872-01	Terminal Board	1
24	121230-01	Control Valve Assembly	1
	113870-01	Elbow Street Fitting	2
	113869-01	Coupling Fitting	2
	113868-01	Male Connector Fitting	1
	113876-01	Female Connector Fitting	1
	113873-01	Ball Valve	1
	113871-01	Valve	1
25	121410-01	Control Box Assembly	1
26	121411-01	Bottom Panel	1
<b>PARTS AVAILABLE - NOT SHOWN</b>			
	121238-01	Pressure Ignition Wire	1
	121237-03	High Limit Wire	1
	121236-01	Ground Wire	1
	121215-01	Knob	

\*\* Not a field replaceable part.

# ILLUSTRATED PARTS BREAKDOWN

MODELS 85-FACA, BLP85VA, REM85PVA, RLP85VA AND SPC-85



## PARTS LIST

### MODELS 85-FACA, BLP85VA, REM85PVA, RLP85VA AND SPC-85

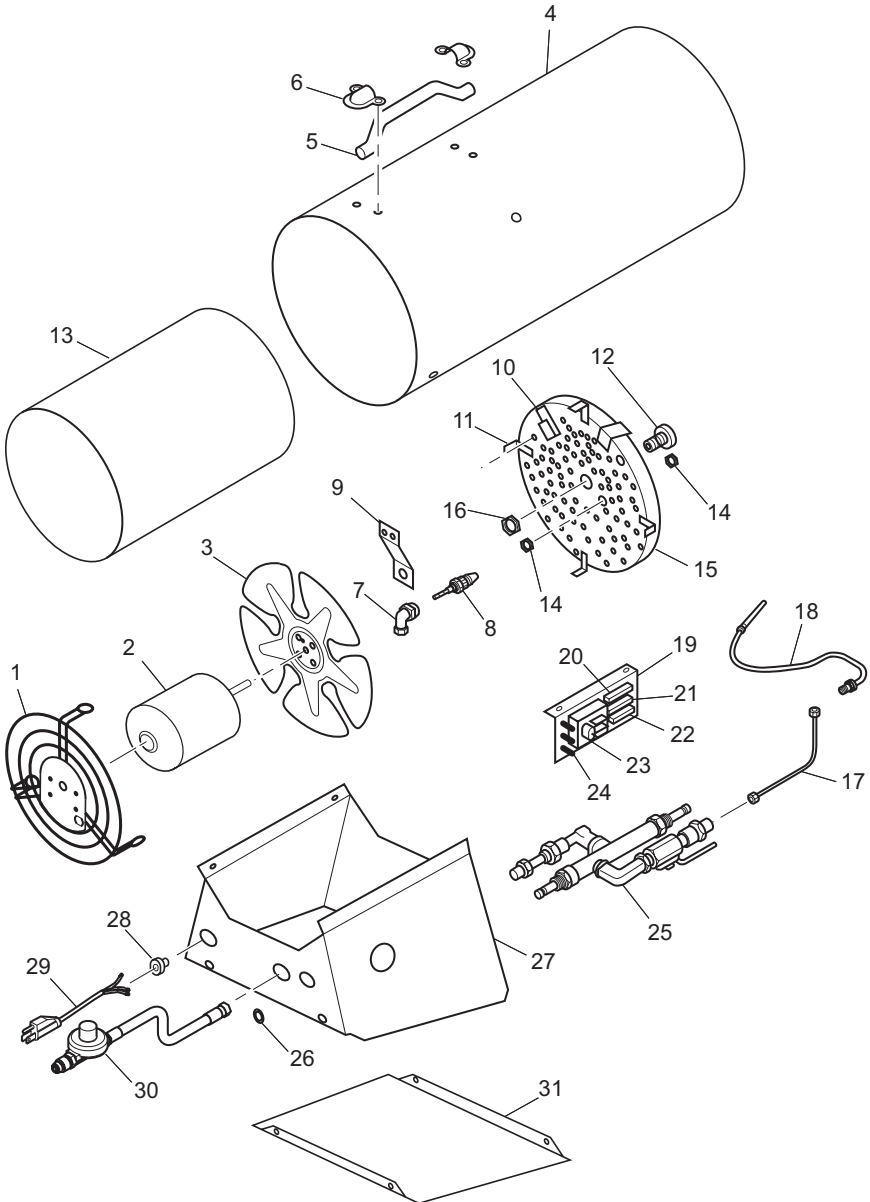
This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under Replacement Parts on page 11 of this manual.

KEY	NO.	PART NO.	DESCRIPTION	QTY.
	1	121407-01	Outer Cylinder Assembly, Red (RLP85VA)	1
		121407-02	Outer Cylinder Assembly, Red (85-FACA)	1
		121407-03	Outer Cylinder Assembly, Yellow (BLP85VA)	1
		121407-04	Outer Cylinder Assembly, Black (REM85PVA)	1
		121407-05	Outer Cylinder Assembly, Orange (SPC-85A)	1
	2	121209-01	Fan	1
	3	121207-01	Motor Assembly	1
	4	121246-02	Motor Grill	1
	5	121225-03	Flame Holder Assembly	1
	6	**	Middle Cylinder Assembly	1
	7	113888-02	Nut Orifice Mounting 3/4-16	1
	8	113931-01	Male Elbow Fitting	1
	9	113884-01	Thermocouple	1
	10	121244-01	High Limit Control Assembly	1
	11	121213-02	Spark Plug, 1/8 Gap	1
	12	113886-01	Nut-Spark Plug	2
	13	121245-03	Orifice Assembly	1
	14	121357-01	Control Box Assembly	1
	15	113924-01	Ignition Relay Bracket	1
	16	113872-01	Terminal Board	1
	17	121235-01	Spark Ignition, 115V Hi-Lo Mini Ignitor	1
	18	121212-02	Fuel Tube Assembly	1
	19	121230-02	Control Valve Assembly	1
		113869-01	Fitting, Coupling	1
		113868-01	Fitting, Male Connector	1
		113871-01	Valve	1
		113928-01	Ball Valve, Variable Rate	1
		113929-01	Female Connector Fitting	1
		113870-01	Fitting, Elbow	2
	20	121248-01	Spacer, TC Bracket	1
	21	121410-04	Control Panel Assembly	1
	22	113865-01	Strain Relief Bushing	1
	23	113864-01	Power Cord	1
	24	121205-01	Hose/Regulator Assembly	1
	25	121217-01	Clip Handle Mounting	2
	26	121216-01	Handle	1
	27	113875-01	Relay	1
	28	113923-01	Bracket, TC	1
	29	121411-04	Access Panel	1
<b>PARTS AVAILABLE - NOT SHOWN</b>				
		121238-01	Pressure Ignition Wire	1
		121237-03	High Limit Wire	1
		121236-01	Ground Wire	1
		121215-01	Knob	

\*\* Not a field replaceable part.

## PARTS

MODELS 125-FA, BLP125VA, REM125PVA, RLP125VA AND SPC-125A





## PARTS

### MODELS 125-FA, BLP125VA, REM125PVA, RLP125VA AND SPC-125A

This list contains replaceable parts used in your heater. When ordering parts, follow the instructions listed under Replacement Parts on page 11 of this manual.

KEY NO.	PART NO.	DESCRIPTION	QTY
1	113919-01	Grill Assembly	1
2	121207-01	Motor Assembly	1
3	121210-01	Fan	1
4	121408-01	Outer Shell Cylinder Assembly, Red (RLP125VA)	1
	121408-02	Outer Shell Cylinder Assembly, Red (125-FA)	1
	121408-03	Outer Shell Cylinder Assembly, Yellow (BLP125VA)	1
	121408-04	Outer Shell Cylinder Assembly, Black (REM125PVA)	1
	121408-05	Outer Shell Cylinder Assembly, Orange (SPC-125A)	1
5	121216-01	Handle	1
6	121217-01	Clip Handle Mounting	2
7	113931-01	Male Elbow Fitting	1
8	121213-02	Spark Plug, 1/8 (3.18 mm) Gap	1
9	121244-02	High Limit Switch Control Assembly	1
10	113923-01	Thermocouple Bracket	1
11	121248-01	Thermocouple Spacer	1
12	121245-02	Orifice, LP Assembly	1
13	**	Middle Cylinder Assembly	1
14	113886-01	Nut, Spark Plug	2
15	121225-01	Flame Holder Assembly	1
16	113888-02	Nut orifice Mounting	1
17	121212-02	Fuel Tube Assembly	1
18	113884-01	Thermocouple	1
19	113924-01	Bracket Ignition Relay	1
20	113872-01	Terminal Board	1
21	114150-01	Steel Spacer	1
22	113875-01	Relay Assembly	1
23	121235-02	Ignitor	1
24	114151-01	Spacer, PC Standoff Nylon	3
25	121230-02	Control Valve Assembly	1
	114153-01	Elbow Street Fitting	2
	114159-01	Ball Valve, Variable Rate	1
	113929-01	Female Connector Fitting	1
	113869-01	Coupling Fitting	1
	113868-01	Male Connector Fitting	1
	113871-01	Valve	1
26	114158-01	Flat Washer	1
27	121410-02	Control Box Assembly	1
28	113865-01	Strain Relief Bushing	1
29	113864-01	Power Cord	1
30	121205-01	Hose/Regulator Assembly	1
31	121411-02	Access Panel	1
<b>PARTS AVAILABLE - NOT SHOWN</b>			
	121238-01	Pressure Ignition Wire	1
	121237-03	High Limit Wire	1
	121236-01	Ground Wire	1
	121215-01	Knob	

\*\* Not a field replaceable part.

# WARRANTY

## KEEP THIS WARRANTY

Model \_\_\_\_\_

Serial No. \_\_\_\_\_

Date of Purchase \_\_\_\_\_

### LIMITED WARRANTIES FOR NEW AND FACTORY RECONDITIONED PRODUCTS

**New Products:** DESA Heating, LLC warrants this heater and any parts thereof, to be free of defects in materials and workmanship for one (1) year from the date of first purchase, when operated and maintained in accordance with the manufacturer's instructions. These warranties are extended only to the original retail purchaser, when proof of purchase is provided.

**Factory Reconditioned Heaters:** DESA Heating, LLC warrants this factory reconditioned heater and any parts thereof, to be free of defects in materials and workmanship for thirty (30) days from the date of first purchase, when operated and maintained in accordance with the manufacturer's instructions. These warranties are extended only to the original retail purchaser, when proof of purchase is provided.

These warranties cover only the cost of parts and labor required to restore the product to proper operating condition. Transportation and incidental costs associated with warranty repairs are not reimbursable under this warranty.

Warranty service is available only through authorized dealers and service centers.

This warranty does not cover defects resulting from misuse, abuse, negligence, accidents, lack of proper maintenance, normal wear, alteration, modification, tampering, contaminated fuels, repair using improper parts or repair by anyone other than an authorized dealer or service center. Routine maintenance is the responsibility of the owner.

THIS EXPRESS WARRANTY IS GIVEN IN LIEU OF ANY OTHER WARRANTY EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

DESA Heating, LLC assumes no responsibility for indirect, incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations or exclusions may not apply to you. This limited warranty gives you specific legal rights and you may also have other rights which vary from state to state.

The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

### WARRANTY SERVICE

Should your heater require service, return it to your nearest authorized service center. Proof of purchase must be presented with the heater. The heater will be inspected. A defect may be caused by faulty materials or workmanship. If so, DESA Heating, LLC will repair or replace the heater without charge.

### REPAIR SERVICE

Return your heater to your nearest authorized service center. Repairs not covered by the warranty will be billed at standard prices. Each Service Center is independently owned and operated. When writing, always include model number and serial number. For information, write:



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1-866-672-6040

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