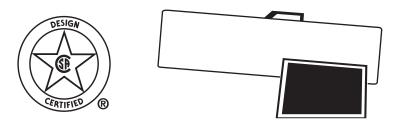


PROPANE CONSTRUCTION FORCED AIR HEATER OWNER'S MANUAL



170,000 BTU/HR VARIABLE WITH BUILT-IN THERMOSTAT

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.

A 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 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. This product has been approved for use in the Commonwealth of Massachusetts.

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

- 2. 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.
- 3. 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.
- 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.
- 5. Use only the hose and factory preset regulator provided with the heater.
- 6. Use only propane gas set up for vapor withdrawal.
- Provide adequate ventilation. Before using heater, provide at least a three-squarefoot opening of fresh, outside air for each 100,000 Btu/Hr (105,500 k/j) of rating.
- 8. For indoor use only. Do not use heater outdoors.
- 9. Do not use heater in occupied dwellings or in living or sleeping quarters.
- 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.

SAFETY Continued

- 11. 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.
- Minimum heater clearances from combustible materials: Outlet: 8 Ft. (2.4 m), Sides: 2 Ft. (.6 m), Top: 6 Ft. (1.8 m), Rear: 2 Ft. (.6 m)
- 13. Keep heater at least six feet from propane tank(s). Do not point heater at propane tank(s) within 20 feet (6.1 m).
- 14. Keep propane tank(s) below 100° F (38° C).
- 15. Check heater for damage before each use. Do not use a damaged heater.
- Check hose before each use of heater. If highly worn or cut, replace with hose specified by manufacturer before using heater.
- 17. Locate heater on stable and level surface if heater is hot or operating.
- 18. Never block air inlet (rear) or air outlet (front) of heater.

- 19. Keep heater away from strong drafts, wind, water spray, rain or dripping water.
- 20. Keep children and animals away from heater.
- 21. This heater is equipped with a thermostat. Heater may start at anytime.
- Never move, handle or service a hot or operating heater. Severe burns may result. You must wait 15 minutes after turning heater off.
- 23. To prevent injury, wear gloves when handling heater.
- 24. Never attach duct work to heater.
- 25. Do not alter heater. Keep heater in its original state.
- 26. Do not use heater if altered.
- 27. Turn off propane supply to heater and unplug heater when not in use.
- 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.

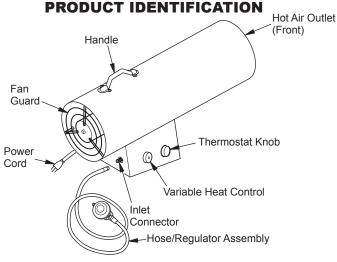


Figure 1 - 170,000 Btu/Hr Model

UNPACKING

- 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.
- 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 solenoid 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 direct spark ignitor (DSI) sends voltage to the spark plug/ignitor. The spark plug/ignitor ignites the fuel and air mixture.

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

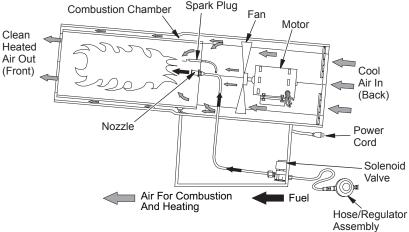


Figure 2 - Cross Section Operational View (Heater may vary from illustration)

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 I brary 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 chart below shows the number of 100 b. (45 kg) tanks needed to run this heater. Do not operate this product with any tank smaller than 100 pounds.

Temperature at tank location	Number of tanks
above 20° F (-7° C)	2
20° F (-7° C) to -10° F (-23°	C) 3
below -10° F (-23° C)	(Use larger
	tank)

Less gas is vaporized at lower temperatures. You may need two or more 100 b. (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). WARNING: Review and understand the warnings in the <u>Safety</u> 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.

- Provide propane supply system (see <u>Propane Supply</u>, page 4).
- 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.

 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.

WARNING: 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.

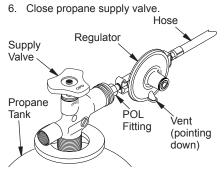


Figure 3 - Regulator With Vent Pointing Down

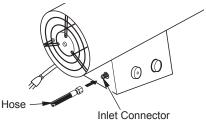


Figure 4 - Hose and Inlet Connector (Heater may vary from illustration)

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.

VENTILATION

Provide a fresh air opening of at least 3 ft² (0.28 m^2) for each 100,000 Btu/Hr (105,500 k/j) rating. Provide extra fresh air if more heaters are being used.

WARNING: Review and understand the warnings in the <u>Safety</u> 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.
- 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 threeprong, grounded extension cord. Extension cord must be at least 6 feet long. Extension cord must be UL listed.

Extension Cord Size Requirement

Up to 50 feet (15 m) long, use 18 AWG rated cord.

51 to 100 feet (15.5 to 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.
- 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.

 Turn thermostat control knob fully counterclockwise to the "cooler" position. Turn thermostat control knob slowly clockwise until electric motor and fan begin to run. Heater will start in approximately 3 seconds. Adjust thermostat control knob to warmer or cooler setting as needed. To control the heat output, adjust the gas valve to the desired temperature.

Note: If heater does not start after 3 seconds, the ignition control will automatically attempt to start heater one time. If heater fails to start on this attempt, the safety control will "lock out" and no further automatic restarts will be attempted. This could occur if air remains in fuel line. If heater fails to start on this attempt, turn thermostat knob to the "cooler" position until the motor stops turning. Wait ten seconds for safety control to reset, then turn control knob to the "warmer" position and try to start heater again.

 Thermostat Operation Only: During normal thermostat operation, heater will cycle off when air temperature rises to thermostat setting. When air temperature drops sufficiently below thermostat setting, the electric motor and fan will begin to run. After 15 to 60 seconds, heater burner should automatically ignite and provide heat to maintain temperature setting.

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. Turn thermostat knob fully counterclockwise to the "cooler" position.
- 4. Unplug heater.

STORAGE

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

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

- 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.

- 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.
- 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.
- 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.

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	 Check voltage to electrical outlet. If voltage is good, check heater power cord for breaks
	2. Fan hitting inside of heater shell	 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 instal- lation or operation instruc- tions properly	 Repeat installation and operation instructions. See <u>Installation</u>, page 5 and <u>Operation</u>, page 6
	 No spark at spark plug. To test for spark, follow step 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 trans- former. See <u>Spark Trans- former</u>, page 9

TROUBLESHOOTING

Continued

OBSERVED PROBLEM	POSSIBLE CAUSE	REMEDY
Heater shuts down while running	1. Propane supply may be inadequate	 A) Refill tank B) Provide additional and/or larger tanks. See <u>Propane</u> <u>Supply</u>, page 4
	2. High surrounding air tem- perature causing thermal limit device to shut down heater	 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
WARNING: Use	4. Damaged fan	4. Replace fan. See <u>Fan</u> , page 9
only in areas free of high dust content.	 Excessive dust or debris in surrounding area 	5. Clean heater. See <u>Mainte-</u> <u>nance</u> , page 7

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.
- 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).
- Remove two black wires from motor to terminal board.
- Carefully push motor wires through hole in bottom of shell.
- Remove screws holding motor mount to shell. Use nut-driver (see Figure 5).
- 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.
- Replace fan on motor shaft. Make sure set screw contacts flat surface on motor shaft.
- 13. Tighten set screw firmly (40-50 inchpounds [46.08-57.60 kg-cm]).
- 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.
- 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.
- Attach two black wires from motor to terminal board (see <u>Wiring Diagram</u>, page 10, for correct locations).
- 18. Replace access panel.

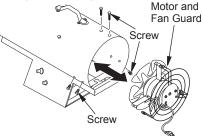


Figure 5 - Removing Motor and Fan Guard from Heater (Heater may vary from illustration)

SERVICE PROCEDURES Continued

FAN

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

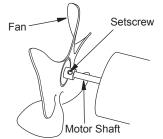


Figure 6 - Fan, Motor Shaft and Setscrew Location

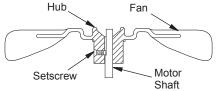


Figure 7 - Fan Cross Section

SPARK TRANSFORMER

- 1. Remove access panel.
- 2. Locate and disconnect white, black and orange wires from spark transformer.
- Remove screw holding spark transformer to base. Remove sheet metal nut on transformer and install on new transformer. Discard spark transformer.
- Install new spark transformer. Position new spark transformer in same manner as old transformer.
- Connect white, black and orange wires to new spark transformer. Connect wires to correct terminals as noted in <u>Wiring</u> <u>Diagram</u>, page 10.
- 6. Replace access panel.

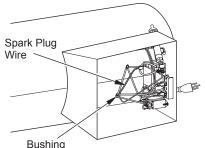


Figure 8 - Removing Spark Plug Wire from Spark Transformer (Heater may vary from illustration)

SPARK PLUG

- 1. Remove motor, motor mount and fan guard (see *Motor*, page 8, steps 1 through 6).
- 2. Remove orange spark plug wire from spark plug.
- 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.

 Place motor, motor mount and fan guard into rear of heater shell (see <u>Motor</u>, steps 14 through 18, page 8).

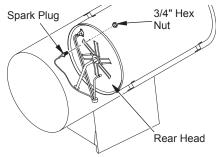


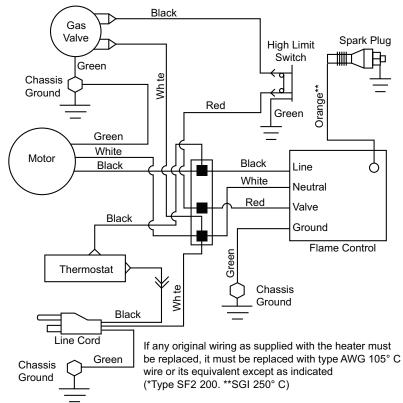
Figure 9 - Removing Spark Plug Nut and Spark Plug (Heater may vary from illustration)

SPECIFICATIONS

- 125,000 170,000 Btu/Hr (36.6 49.8 kW)
- Propane/LP Fuel
- 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, interrupted type
- · Primary Flame Control: Solid State
- High Temperature Control: 240° F (116° C)
- Minimum Ambient Temp. Rating: -20° F (-29° C)
- Fuel Consumption: 5.8 7.9 lbs/hr (2.6 3.6 kg/hr)
- Heated Air Output: 450 CFM (12.74 cu m/m)

WIRING DIAGRAM

CONNECTION DIAGRAM



10

ACCESSORIES

Purchase accessories and parts from your nearest dealer or service center. If your dealer or service center can not supply an accessory or part, contact your nearest Parts Central or call DESA Heating Products at 1-866-672-6040 for referral information. You can also write to the address listed on the back page of this manual.

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.

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.

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

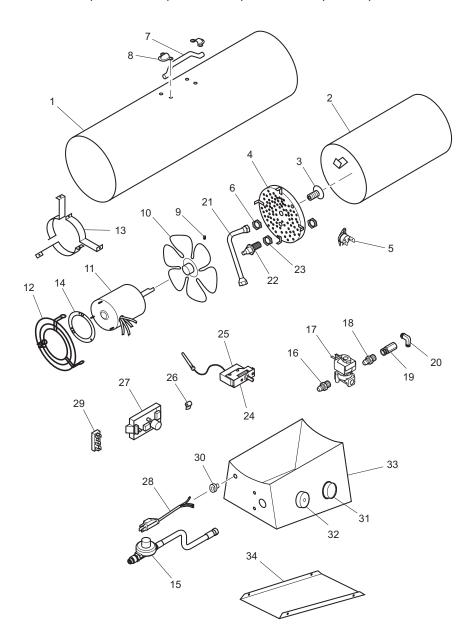
Contact authorized dealers of this product. If they can't supply original replacement part(s), either contact your nearest Parts Central or call DESA Heating Products for referral information at 1-866-672-6040.

When calling DESA Heating Products, have ready:

- model number of your heater
- · the replacement part number

PARTS

MODELS BLP170VTA, REM170VTA, RLP170VTA, SBLP170VTA, 170-FA, SPC-170FA



PARTS

MODELS

BLP170VTA, REM170VTA, RLP170VTA, SBLP170VTA, 170-FA, SPC-170FA

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

KEY					
NO.	PART NO.	DESCRIPTION	QTY.		
1	121409-03	Outer Shell Yellow (BLP170VTA)	1		
	121409-01	Outer Shell, Red (RLP170VTA)	1		
	121409-02	Outer Shell, Red (170-FA)	1		
	121409-04	Outer Shell, Green (SBLP170VTA)	1		
	121409-05	Outer Shell, Orange (SPC-170A)	1		
2	**	Middle Cylinder	1		
3	121245-04	Orifice Assembly	1		
4	121225-02	Flame Holder Assembly	1		
5	113848-01	High Limit Switch	1		
6	113888-02	Orifice Nut	1		
7	121216-01	Handle	1		
8	121217-01	Handle Mounting Clips	2		
9	113948-01	Set Screw, Nyloc	1		
10	121211-01	Fan	1		
11	121208-01	Motor Assembly	1		
12	121246-02	Inlet Grille	1		
13	121247-03	Motor Mounting Bracket	3		
14	121247-02		1		
15	121205-01	Hose/Regulator Assembly	1		
16	113952-01	Male Fitting Conn. 3/8 MPT x 3/8 SAE FLR	1		
17	113951-01	Solenoid Valve, Goyen	1		
18	113964-01	Fitting Close Nipple	1		
19	113966-01	Burn Rate Adjustment Valve	1		
20	113965-01	E bow Fitting, 3/8 MPT x 1/2 SAE FLR	1		
21	121212-03	Fuel Tube Assembly	1		
22	121213-03	Spark Plug, Flame Sensor	1		
23	113886-01	Spark Plug Nut	1		
24	121242-01	Thermostat Mounting Bracket	1		
25	113944-01	Thermostat Assembly	1		
26	113949-01	Loop Clamp, 5/16	1		
27	121233-01	Flame Control	1		
28	113864-01	Power Cord Assembly	1		
29	113960-01	Terminal Board	1		
30	113865-01	Bushing Strain Relief	1		
31	121215-02	Thermostat Knob	1		
32	121215-03	Burn Rate Adjustment Knob	1		
33	121410-03	Control Box	1		
34	121411-03	Access Panel	1		
	•	PARTS AVAILABLE - NOT SHOWN			
	•	Flame Control Assembly Wire	1		
	121238-01	Pressure Ignition Wire	1		
	1	Switch Wire, Red	1		
	1	Switch Wire, Black	1		
**Nc	**Not a field replaceable part.				

**Not a field replaceable part.

WARRANTY

KEEP THIS WARRANTY

Model (located on product or identification tag)

Serial No. (located on product or identification tag)

Date Purchased

Keep receipt for warranty verification.

DESA HEATING, LLC LIMITED WARRANTIES

New Products

Standard Warranty: DESA Heating, LLC warrants this new product and any parts thereof to be free from defects in material and workmanship for a period of one (1) year from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instruc ions.

For products purchased for commercial, industrial or rental usage, his warranty is limited to 90 days from the date of first purchase.

Factory Reconditioned Products

Limited Warranty: DESA Heating, LLC warrants factory reconditioned products and any parts thereof to be free from defects in material and workmanship for 30 days from the date of first purchase from an authorized dealer provided the product has been installed, maintained and operated in accordance with DESA Heating, LLC's warnings and instruc ions.

Terms Common to All Warranties

The following terms apply to all of the above warranties:

Always specify model number and serial number when contac ing the manufacturer. To make a claim under this warranty the bill of sale or other proof of purchase must be presented.

This warranty is extended only to the original retail purchaser when purchased from an authorized dealer, and only when installed by a qualified installer in accordance with all local codes and instructions furnished with this product.

This warranty covers the cost of part(s) required to restore this product to proper operating condition and an allowance for labor when provided by a DESA Heating, LLC Authorized Service Center or a provider approved by DESA Heating, LLC. Warranty parts must be obtained through authorized dealers of this product and/or DESA Heating, LLC who will provide original factory replacement parts. Failure to use original factory replacement parts voids this warranty.

Travel, handling, transportation, diagnostic, material, labor and incidental costs associated with warranty repairs, unless expressly covered by this warranty, are not reimbursable under this warranty and are the responsibility of the owner.

Excluded from this warranty are products or parts that fail or become damaged due to misuse, accidents, improper installation, lack of proper maintenance, tampering, or altera ion(s).

This is DESA Heating, LLC's exclusive warranty, and to the full extent allowed by law; this express warranty excludes any and all other warranties, express or implied, written or verbal and limits he duration of any and all implied warranties, including warranties of merchantability and fitness for a particular purpose to one (1) year on new products and 30 days on factory recondi ioned products from the date of first purchase. DESA Heating, LLC makes no other warranties regarding this product.

DESA Heating, LLC's liability is limited to the purchase price of the product, and DESA Heating, LLC shall not be liable for any other damages whatsoever under any circumstances including indirect, incidental, or consequential damages.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have o her rights which vary from state to state.

For information about this warranty contact:



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