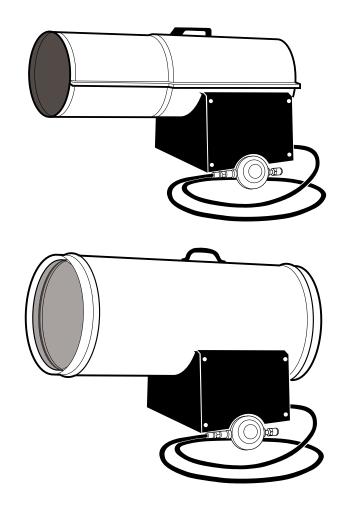
PROPANE CONSTRUCTION HEATERS

OWNER'S MANUAL



150 and 300 Models

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.



PROPANE CONSTRUCTION HEATERS

SAFETY INFORMATION

FOR YOUR SAFETY: Do not use this heater in a space where gasoline or other liquids having flammable vapors are stored or used.



WARNINGS

IMPORTANT: Read this owner's manual carefully and completely before trying to assemble, operate, or service this heater. Improper use of this heater can cause serious injury or death from burns, fire, explosion, electrical shock, or carbon monoxide poisoning.

Carbon Monoxide Poisoning: Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, and/or nausea. If you have these signs, the heater may not be working properly. Get fresh air at once! Have heater serviced. Some people are more affected by carbon monoxide than others. These include pregnant women, persons with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

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.

- · Not for domestic use (inside living areas). Use heater for space heating only.
- Primarily intended for temporary heating of buildings under construction, alteration, or repair.
- Install and use heater with care. Follow all local ordinances and codes.
- Use only in a well-vented area away from combustible materials.

• Provide proper ventilation. If not, excessive levels of carbon monoxide (CO) and carbon dioxide (CO₂) will form. Provide two fresh, outside air openings for ventilation. One opening should be near the floor, the other opening near the ceiling. Each ventilation opening minimum size is as follows:

150 model: 550 cm² 300 model: 875 cm²

- Never use heater where gasoline, paint thinner, or other highly flammable vapors are present. Use only in places free of flammable vapors or high dust content.
- · Do not use heater below ground level. Propane gas is heavier than air. If a leak occurs, propane gas will sink to the lowest possible level.
- · Keep heater away from strong drafts, water spray, rain, or dripping water.
- Check heater for damage before each use. Do not use a damaged heater.
- Use only propane gas, I3P.
- Keep propane tank(s) below 38° C.
- Unhook heater from propane and electrical supply before moving or when not in use.
- · Use only the electrical voltage and frequency specified on model plate.
- Use only the hose and regulator provided with the heater.
- Inspect hose before each use. If cut, worn, or damaged, replace before using heater. Use the replacement hose assembly specified in this manual.
- Keep heater at least two meters from propane tank(s). Do not point heater at propane tank(s).
- · Minimum heater clearances from combustibles:

Outlet: 3 meters Sides: 1 meter Rear: 1 meter Top: 2 meters

- · Locate heater on stable and level surface if heater is hot or running.
- · Keep children and animals away from heater.
- When used with thermostat, heater may start anytime.
- Never block air inlet (rear) or air outlet (front) of heater.

- Never move, handle, or service a hot, operating, or plugged-in heater.
- Do not alter heater. Keep heater in its original state.
- Do not use heater if altered.
- Never attach duct work to front or rear of heater.
- 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

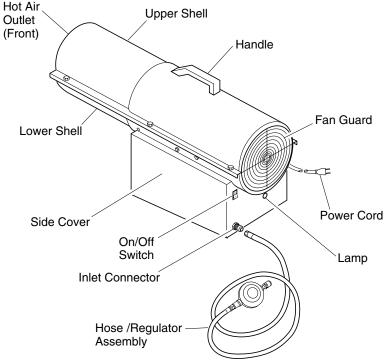


Figure 1 - 150 Model

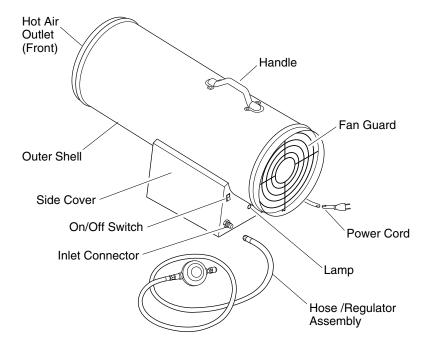


Figure 2 - 300 Model

UNPACKING

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

PROPANE CONSTRUCTION HEATERS

THEORY OF OPERATION

The Fuel System: The hose/regulator assembly attaches to the propane gas supply. The propane gas moves through the solenoid valves 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 burner control sends voltage to the ignitor. The ignitor ignites the fuel and air mixture.

The Burner Control System: This system causes the heater to shut down if the flame goes out. The motor will continue to run, but no heat is produced.

ATTACHING POWER CORD

Follow the instructions below to attach power cord to heater.

- 1. Remove heater side cover.
- 2. Locate the strain relief bushing for the power cord on the heater base (see Figure 4).
- Unscrew outer nut of strain relief bushing (see Figure 4). Only loosen this nut.
 Do not remove it.
- 4. Insert end of power cord through strain relief bushing. Pull enough power cord into the heater base to attach wire ends to terminal board.
- 5. Use a wrench to hold the rear hex of bushing. Tighten the outer nut of strain relief bushing until bushing firmly holds the power cord.
- 6. Attach power cord wires to terminal board. Figure 4 shows the exact placement of each wire. Attach green wire to the earth terminal. Attach brown wire to the L₁ terminal. Attach blue wire to the neutral terminal.
- 7. Replace heater side cover.

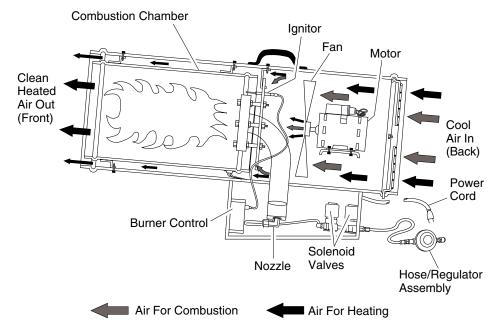


Figure 3 - Cross Section Operational View (300 Model Shown)

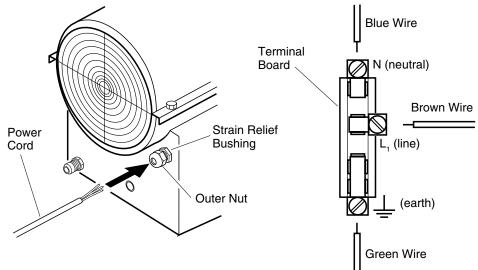


Figure 4 - Attaching Power Cord

4

PROPANE SUPPLY

User must provide propane gas and propane tank(s).

Use this heater only with a propane vapor withdrawal supply system. 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 45-kg tanks needed to run this heater.

Do not operate this product with any tank smaller than 45 kg.

Temperature (°C) At Tank	Number of Tanks	
12°	2	
0°	3	
-10°	(Use larger	
	propane supply)	

Less gas is vaporized at lower temperatures. You may need a larger supply in colder weather. Your local propane gas dealer will help you select the proper supply system.

INSTALLATION

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

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 5).
- Connect fuel gas connector on hose/ regulator assembly to propane tank(s). Tighten firmly using wrench. *IMPORTANT:* Tighten regulator with black adjustment knob pointing down. Pointing adjustment knob down protects regulator from weather damage.

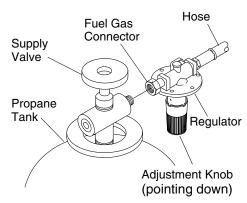


Figure 5 - Regulator With Adjustment Knob Pointing Down

- 3. Connect hose to inlet connector. Tighten firmly using a wrench.
- 4. Open propane supply valve on propane tank(s).
- 5. Adjust regulator between .34 and 1.34 bar (see Figure 7). *Note:* Higher regulator setting will allow heater to produce more heat.
- 6. 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.

7. Close propane supply valve.

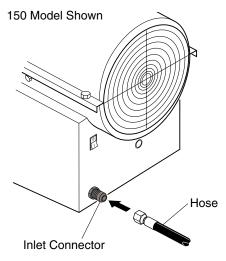


Figure 6 - Hose and Inlet Connector

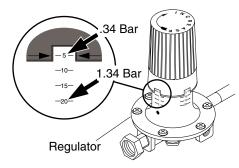


Figure 7 - Adjustable Regulator Set At .34

PROPANE CONSTRUCTION HEATERS

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 two fresh, outside air openings for ventilation. One opening should be near the floor, the other opening near the ceiling. Each ventilation opening minimum size is as follows:

150 Model: 550 cm² 300 Model: 875 cm²

OPERATION

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

To Start Heater

- 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 heater power cord into electrical source. *Note:* Red light indicates heater may not operate due to phase reversal. Reverse plug or check your installation to operate heater. Phase sensitivity is required by CE standards for this appliance.
- 4. Open propane supply valve on propane tank(s).
- 5. Make sure regulator is set between .34 and 1.34 bar. *Note*: Higher regulator setting will allow heater to produce more heat.
- 6. Turn on/off switch to the ON position. Heater will start within six seconds. *Note:* If heater does not start, turn on/off switch to the OFF position. Wait ten seconds for burner control to reset, then try again.

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 on/off switch to the OFF position.
- 4. Unplug heater power cord.

To Restart Heater

If burner control stops gas flow to heater, motor will continue to run.

To restart heater:

- 1. Turn on/off switch to the OFF position.
- 2. Wait ten seconds, then turn on/off switch to the ON position.

If heater does not restart:

- Check manual valves (if any) and supply valves (on propane tank). Make sure they are open.
- Check fuel level in propane tank(s). If fuel level is too low, contact local propane gas company.

If heater still does not restart, contact your local service center.

To Change Propane Tank(s)

Change propane tank(s) in a flame-free area. Use only propane gas, I3P.

- 1. Tightly close the propane supply valve(s) on the propane tank(s).
- 2. Disconnect the hose/regulator assembly from the propane tank(s).
- 3. Connect the hose/regulator assembly to the new propane tank(s). Tighten firmly.
- 4. 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.

STORAGE

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

- 1. Store propane tank(s) in safe manner.
- 2. Place packing items on the heater and hose/regulator assembly. Place heater and hose/regulator assembly into heater carton.
- 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

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

- 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.
- 3. Inspect hose/regulator assembly before each use. If hose is highly worn or cut, replace.
- 4. Have heater inspected yearly by service person.
- 5. Keep inside of heater free from combustible and foreign objects.
- 6. Clean fan every 500 hours of operation or as needed.

SERVICE PROCEDURE

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

Cleaning Fan 150 Model

- 1. Remove upper shell of heater. Remove screws along each side of heater using 5/16" nut-driver (see Figure 8). These screws attach upper and lower shells together.
- 2. Lift or slide upper shell off.
- 3. Remove fan guard.
- 4. Use 1/8" Allen wrench to loosen setscrew which holds fan to motor shaft (see Figure 9).
- 5. Slip fan off motor shaft.
- 6. Clean fan using soft cloth moistened with kerosene or solvent.
- 7. Dry fan thoroughly.
- 8. Replace fan on motor shaft. Make sure set screw is touching back of flat surface on motor shaft (see Figure 10).
- 9. Place setscrew on flat of shaft. Tighten setscrew firmly (4.5-5.6 n-m).
- 10. Replace fan guard and upper shell.

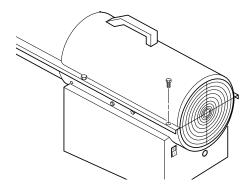


Figure 8 - Upper Shell Removal, 150 Model

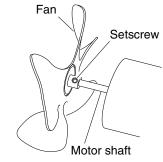


Figure 9 - Fan, Motor Shaft, and Setscrew Location

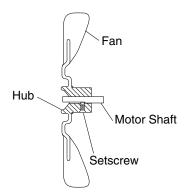


Figure 10 - Fan Cross Section

Continued

PROPANE CONSTRUCTION HEATERS

SERVICE PROCEDURE

Continued

Cleaning Fan 300 Model

Clean fan every 500 hours of operation or as needed.

- Remove screws on side cover using 5/16" nut-driver.
- 2. Remove side cover.
- 3. Detach the four motor wires from parts under heater shell (see Figure 11). Be sure to detach only wires coming from motor. The four motor wires are:
 - black wire—to burner control
 - · blue wire—to termianl board
 - green wire—to termianl board
 - brown wire—to on/off switch
- 4. Remove fan guard screw from top rear of heater shell. Remove fan guard.
- Reach into rear of heater shell. Carefully pull motor wires through hole in bottom of shell (see Figure 12). *Note:* Pull wires through hole one at a time.
- 6. Remove nuts and mounting bolts holding motor mount to shell. Use 3/8" nutdriver and 7/16" wrench (see Figure 12).

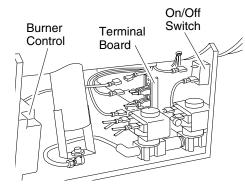


Figure 11 - Location of Motor Wires

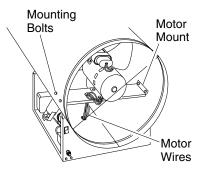


Figure 12 - Location of Fan and Motor

- 7. 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.
- 8. Turn motor and fan around. Place motor and fan into shell backwards. *Note:* Motor will go into shell first (see Figure 13).
- 9. Line up rear mounting holes in shell with first hole on each side of motor mount (see Figure 13). *Note:* When holes are lined up, fan should be outside of shell.
- 10. Holding mounting bolt, carefully reach through fan blades into rear of heater. Be careful not to damage fan pitch. Insert bolt through motor mount and shell. With free hand, attach nut finger tight. Repeat process for other mounting hole.
- 11. Use 1/8" Allen wrench to loosen setscrew which holds fan to motor shaft (see Figure 14).
- 12. Slip fan off motor shaft.
- 13. Clean fan using soft cloth moistened with kerosene or solvent.
- 14. Dry fan thoroughly.
- 15. Replace fan on motor shaft. Make sure set screw is touching back of flat surface on motor shaft (see Figure 15).
- 16. Place setscrew on flat of shaft. Tighten setscrew firmly (4.5-5.6 n-m).
- 17. Remove two nuts and bolts securing motor mount to shell.
- 18. Pull motor and fan from shell. Turn motor and fan around. Carefully place back in shell. *Note:* Fan will go into shell first.

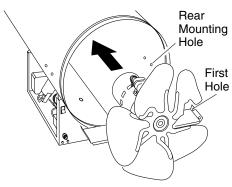


Figure 13 - Fan and Motor Turned Around

- 19. Line up mounting holes in shell with holes on motor mount. Replace four bolts through shell and motor mount. Insert bolts from outside of heater. Tighten nuts firmly.
- 20. Route motor wires through hole in bottom of shell (see Figure 12).
- 21. Connect motor wires as follows (see Figure 11):
 - black wire—to burner control
 - blue wire—to terminal board (see *Wiring Diagram*, page 9, for correct terminal location)
 - green wire—to terminal board (see *Wiring Diagram*, page 9, for correct terminal location)
 - brown wire—to on/off switch
- 22. Replace side cover.
- 23. Replace fan guard.

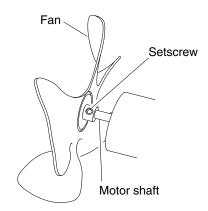


Figure 14 - Fan, Motor Shaft, and Setscrew Location

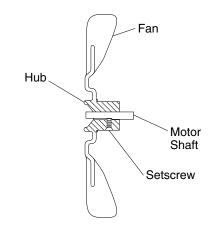


Figure 15 - Fan Cross Section

SERVICE PROCEDURE

Continued

Ignitor

Make sure gap between ignitor electrode and burner nozzle is 4.8 mm. Access ignitor electrode from inside combustion chamber. No other maintenance is needed for ignitor.

If a Gas Leak Occurs

WARNING: If you detect a gas leak, turn off propane supply at once. Ventilate the area. Wait until five minutes after propane odor is not present. Follow steps below to check for gas leak.

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.

- 1. After turning off propane supply and ventilating area, turn heater on/off switch to the OFF position. Unplug heater power cord.
- 2. Turn propane supply on.
- 3. Apply a mixture of liquid soap and water to hose and connections between propane tank(s) and heater inlet. Bubbles forming show a leak.
- 4. Turn propane supply off and ventilate the area. Repair leak.
- Wait until five minutes after propane odor is not present before restarting heater.
- 6. If you cannot repair leak, contact you local service center.

SPECIFICATIONS

Model	150		
Electrical Input	220/240 volt, 50 hertz,		

Maximum Input, net 200 watts IP20
Minimum Input, net 44 KW at 1.34 bar
Minimum Input, net 20 KW at .34 bar
Regulator Output (max./min.) 1.34 bar/.34 bar

Burner Rate 44 KW, 3400 g/hr max. 20 KW, 1550 g/hr min.

Supply Pressure (min.)

Ventilation

Room Size

Air Delivery Class

2 bar

1100 cm²

440 cubic meters

Type A

300

220/240 volt, 50 hertz, 200 watts IP20 70 KW at 1.34 bar 31 KW at .34 bar 1.34 bar/.34 bar 70 KW, 5400 g/hr max. 31 KW, 2400 g/hr min. 2 bar

2 bar 1750 cm² 700 cubic meters Type A

WIRING DIAGRAM

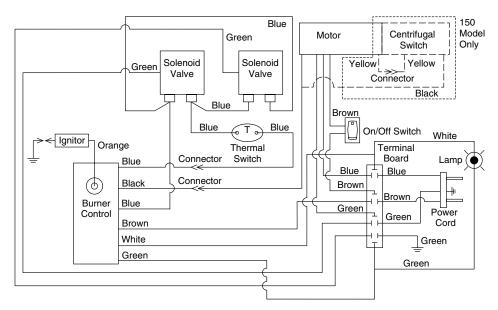
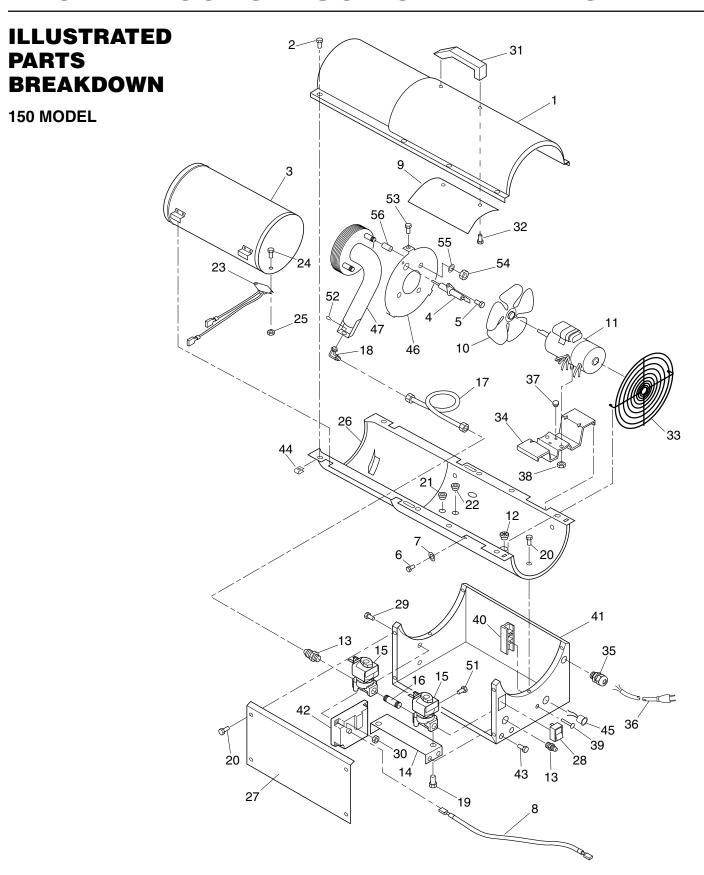


Figure 16 - Wiring Diagram

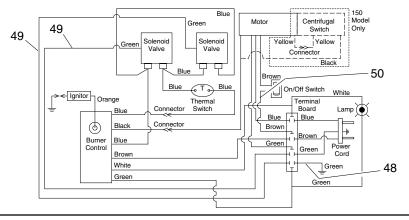
PROPANE CONSTRUCTION HEATERS



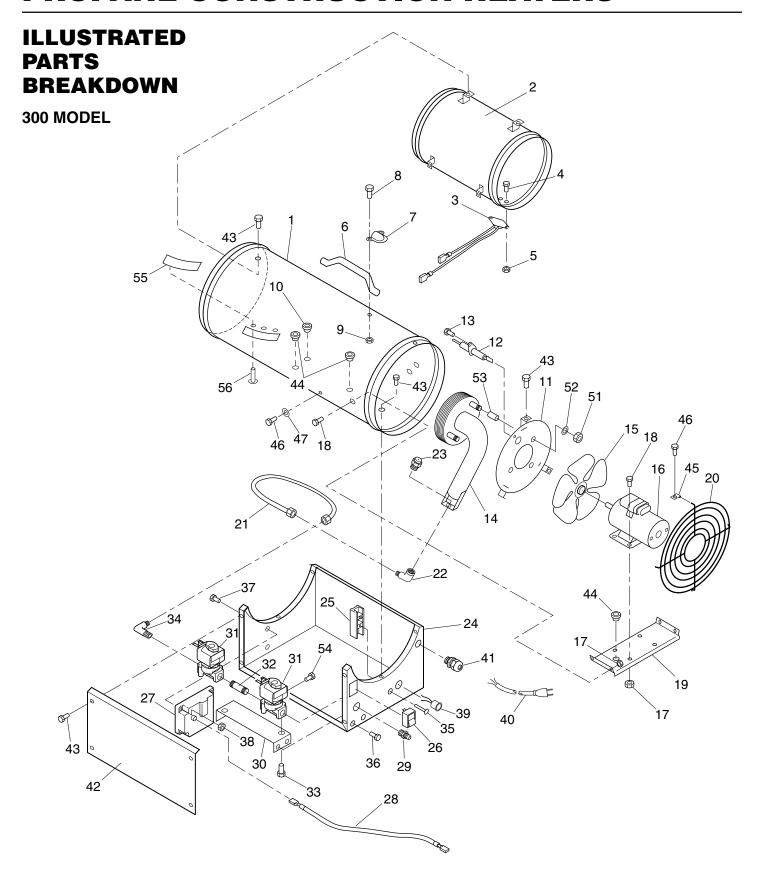
PARTS LIST 150 MODEL

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

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51072-02AA	Upper Shell (RM150E)	1	32	M11084-29	Screw, #10 x 3/4"	2
	M51072-02AB	Upper Shell (BLP150E)	1	33	097964-03AA	Fan Guard	1
	079028-01AC	Upper Shell (RLP150E)	1	34	M51074-01	Motor Mounting Bracket	1
2	M15823-27	Screw, #10-16 x 1/2"	8	35	M50400	Strain Relief Bushing	1
3	099443-01	Combustion Chamber	1	36	097545-01	Power Cord	1
4	097805-01	Ignitor	1	37	M50631	Rubber Bumper	2
5	M10908-1	Screw, #6-32 x 1/4"	1	38	NTC-4C	Lock Nut, 1/4-20	2
6	M11084-39	Screw, #8 x 1/2"	1	39	099157-01	Aluminum Rivet	1
7	WLI-2BL	Washer	1	40	099125-06	Terminal Board	1
8	097806-02	Ignitor Cable	1	41	097966-08AA	Base	1
9	M51108-01	Heat Shield	1	42	M51605-04	Burner Control	1
10	M51153-01	Fan	1	43	M10908-27	Screw, #10-32 x 1/2"	2
11	100298-01	Motor	1	44	M11271-8	U-Nut, #10	8
12	097776-01	Bushing	1	45	100371-01	Lamp	1
13	097809-01	Male Fitting	2	46	100299-01	Rear Plate	1
14	100301-01	Valve Bracket	1	47	097849-02	Burner Assembly	1
15	097803-01	Solenoid Valve	2	48	M16841-62	Wire Assembly, Green	1
16	097153-02	Pipe Nipple, 1/4 x 2"	1	49	M16841-55	Wire Assembly, Green	2
17	097905-02	Fuel Tube	1	50	097951-04	Wire Assembly, Brown	1
18	098425-01	Nozzle	1	51	M11084-37	Screw, #8 x 1/4"	2
19	M12461-25	Screw, #10-32 x 1/4"	2	52	098428-01	Clip	1
20	M11084-26	Screw, #10 x 3/8"	10	53	098406-01	Rivet	3
21	M50104-05	Bushing	1	54	NPC-4C	Nut, 1/4-20	3
22	M50104-01	Bushing	1	55	WLI-4C	Lock Washer	3
23	097952-07	Thermal Switch	1	56	098434-01	Spacer	3
24	097968-01	Screw, #4-40 x 1/4"	2	PARTS AVAILABLE – NOT SHOWN			
25	NPC-00C	Nut, #4-40	2				
26	M51073-06AA	Lower Shell (RM150E)	1		099596-05	Tradename Decal (RM150E)	2
	M51073-06AB	Lower Shell (BLP150E)	1		097940-03	Tradename Decal (BLP150E)	2
	M51073-06AC	Lower Shell (RLP150E)	1		097941-11	Tradename Decal (RLP150E)	2
27	097965-02AA	Side Cover	1		100181-01	General Information Decal	1
28	097462-01	On/Off Switch	1		100462-01	Operation Decal	1
29	M12461-7	Screw, #6-32 x 1"	2		100372-01	Lamp Decal	1
30	099432-01	Nut, #6-32	2		100168-01	Wiring Diagram Decal	1
31	M51104-01	Handle	1		097953-02	Regulator/Hose Assembly	1



PROPANE CONSTRUCTION HEATERS

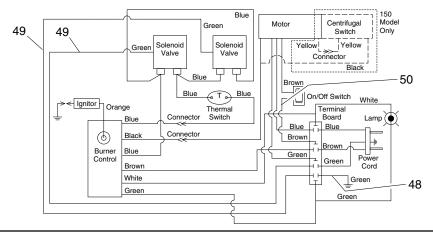


PARTS LIST

300 MODEL

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

KEY	PART			KEY	PART		
NO.	NUMBER	DESCRIPTION	QTY.	NO.	NUMBER	DESCRIPTION	QTY.
1	097963-01AA	Outer Shell (RM300E)	1	33	M12461-25	Screw, #10-32 x 1/4"	2
	097963-01AB	Outer Shell (BLP300E)	1	34	098825-01	Male Compression Elbow	1
	097963-01AC	Outer Shell (RLP300E)	1	35	099157-01	Aluminum Rivet	1
2	097847-01	Combustion Chamber	1	36	M10908-27	Screw, #10-32 x 1/2"	2
3	097952-06	Thermal Switch	1	37	M12461-7	Screw, #6-32 x 1"	2
4	097968-01	Screw, #4-40 x 1/4"	2	38	099432-01	Nut, #6-32	2
5	NPC-00C	Nut, #4-40	2	39	100371-01	Lamp	1
6	097917-01	Handle	1	40	097545-01	Power Cord	1
7	097918-01	Handle Cleat	2	41	M50400	Strain Relief Bushing	1
8	M12461-26	Screw, #10-32 x 3/8"	4	42	097965-01AA	Side Cover	1
9	NTF-3C	Torque Nut, #10-32	4	43	M11084-26	Screw, #10-16 x 3/8"	19
10	097930-01	Bushing	1	44	M50104-02	Bushing	3
11	097848-01	Rear Plate	1	45	100373-01	Clamp	1
12	097805-01	Ignitor	1	46	M11084-39	Screw, #8-18 x 1/2"	2
13	M10908-1	Screw, #6-32 x 1/4"	1	47	WLI-2BL	Washer	1
14	097849-01	Burner Assembly	1	48	M16841-62	Wire Assembly, Green	1
15	097811-01	Fan	1	49	M16841-55	Wire Assembly, Green	2
16	100144-01	Motor	1	50	097951-04	Wire Assembly, Brown	1
17	NTC-4C	Torque Nut, 1/4-20	8	51	NPC-4C	Nut, 1/4-20	3
18	M12461-62	Screw, 1/4-20 x 3/8"	8	52	WLI-4C	Lock Washer	3
19	097829-02	Motor Mount	1	53	097839-01	Spacer	3
20	097964-01AA	Fan Guard	1	54	M11084-37	Screw, #8 x 1/4"	2
21	100311-01	Fuel Tube	1	55	097916-01	Baffle	1
22	100146-01	Female Elbow	1	56	099202-02	Rivet	3
23	099679-02	Nozzle	1		DADTE AL	/AILABLE – NOT SHOWN	
24	097966-05AA	Base	1				
25	099125-06	Terminal Board	1		099596-06	Tradename Decal (RM300E)	2
26	097462-01	On/Off Switch	1		097895-03	Tradename Decal (BLP300E)	2
27	M51605-04	Burner Control	1		097941-12	Tradename Decal (RLP300E)	2
28	097806-02	Ignitor Cable	1		100180-01	General Information Decal	1
29	097809-01	Male Fitting	1		100462-01	Operation Decal	1
30	100301-02	Valve Bracket	1		100372-01	Lamp Decal	1
31	097803-01	Solenoid Valve	2		100168-01	Wiring Diagram Decal	1
32	097153-02	Pipe Nipple	1		097953-02	Regulator/Hose Assembly	1



WARRANTY AND REPAIR SERVICE

KEEP THIS WARRANTY

LIMITED WARRANTY

DESA International warrants this product and any parts thereof, to be free from defects in materials and workmanship for six (6) months from the date of first purchase when operated and maintained in accordance with instructions. This warranty is extended only to the original retail purchaser, when proof of purchase is provided.

This warranty covers only the cost of parts required to restore the product to proper operating condition. Transportation and incidental costs associated with warranty parts are not reimbursable under this warranty.

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 International assumes no responsibility for indirect, incidental or consequential damages.

We reserve the right to amend these specifications at any time without notice. The only warranty applicable is our standard written warranty. We make no other warranty, expressed or implied.

Model	
Serial No.	
Date of Purchase	



2701 Industrial Drive P.O. Box 90004 Bowling Green, KY 42102-9004 U.S.A.

For information, write: DESA International, P.O. Box 90004 Bowling Green, Kentucky 42102-9004 U.S.A. ATTN: Customer Service Department

When writing, always include model number and serial number.