

NOTES

1.0 PART DESCRIPTION

1.1 OWNER'S MANUAL

2.0 MECHANICAL SPECIFICATIONS

2.1 MATERIAL: 20 POUND WHITE
BOND PAPER.2.2 COLOR: BLACK PRINTING ON
WHITE BACKGROUND.2.3 CONSTRUCTION: SINGLE FOLD-
STAPLED AT
CENTER.

2.4 FINISHED SIZE: 8.5 x 11.0

2.5 SEE ADDITIONAL SHEETS OF
THIS DRAWING FOR DETAILS.

3.0 ORDERING INFORMATION

3.1 ARTWORK TO BE PROVIDED
BY DESA TECHNICAL EDITING.

REVISIONS

REV	DESCRIPTION	CHECKED	APPROVED
N	E26671-1 HWH 10-6-97 REVISED & REDRAWN. PAGE 4: C. BURNER MAINTENANCE AND SERVICE: NOTE 2: INCREASED NOZZLE TIGHTENING TORQUE TO ENSURE A SEAL.	T.M. 10-7-97	C.H. 10-7-97

M29870-144

CAD DATA
for ref only
FILE: M2987014
anvil
level 10 format & notes

DRAWN	T. MATTHEWS
DATE	8/12/87
CHECKED	T. MATTHEWS
DATE	8/19/87
APPROVED	J. LEE
DATE	8/20/87
TOLERANCE UNLESS OTHERWISE SPECIFIED	
ANGULAR	FINISH ✓
2 PLACE DECIMAL	
3 PLACE DECIMAL	
REMOVE BURRS & BREAK SHARP EDGES	

DESA INTERNATIONAL

CORPORATE HEADQUARTERS
BOWLING GREEN, KY.

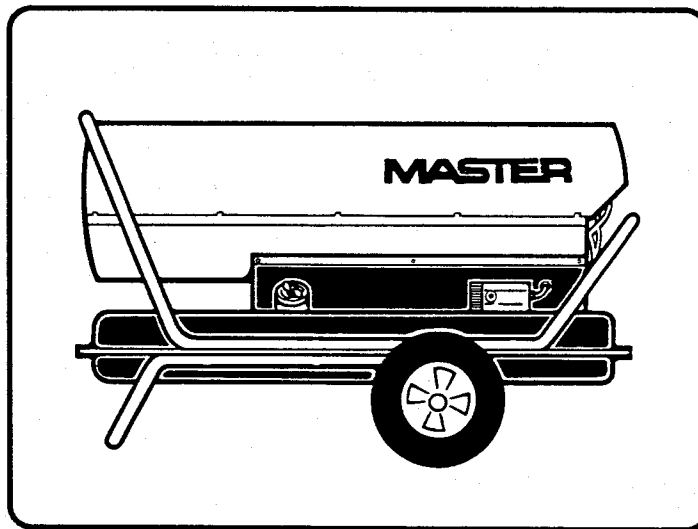
TITLE

MANUAL
OWNER'S

SIZE	DWG NO	M29870-144
A		
SCALE	NONE	SHEET 1 OF

MASTER®

OPERATING, MAINTENANCE and SERVICE INSTRUCTIONS with PARTS LIST



MODEL BC350 HIGH PRESSURE HEATER

IMPORTANT: Read and Understand Instruction Manual Before Starting or Servicing!



WARNING

IMPROPER USE OF THIS HEATER CAN RESULT IN SERIOUS BODILY INJURY DUE TO HAZARDS OF FIRE OR EXPLOSION, CARBON MONOXIDE POISONING, BURN, AND ELECTRICAL SHOCK.

SAFETY REQUIREMENTS

- Use **ONLY** Kerosene or Number 1 Fuel Oil. Never burn Gasoline, Naphtha, Paint Thinners, Alcohol or other volatile fuels!
- Use **ONLY** in areas free of flammable vapor or high dust content. **NEVER** use heater where gasoline, paint thinner or other highly flammable vapors are present.
- Make sure hot air outlet is **At Least 8 Feet from Combustible Materials**.
- Fill fuel tank or move heater **ONLY** when heater is **UNPLUGGED**.
- **NEVER** use heater in rooms used for sleeping.
- Use **ONLY** in well ventilated rooms. Provide ventilation of At Least 3 Square Feet For Each 100,000 BTU of Rating. (For example, a 30,000 BTU Heater would require a two foot wide window raised six inches.)
- When used with a thermostat, heater may start anytime.
- **KEEP CHILDREN AWAY** from heater at all times—**NEVER** leave a heater plugged in without an adult present if children are likely to be present.
- Use **ONLY** with electrical voltage and frequency specified on model plate.
- Use **ONLY** a properly grounded three-wire extension cord.
- **DO NOT** move, handle or service while hot or burning.
- Use **ONLY** in accordance with local ordinances and codes.
- **NEVER** add duct work to front of heater.

REFER TO CSA STANDARD B139-1976

"INSTALLATION CODE FOR OIL BURNING EQUIPMENT"

Recommendation of local authorities having jurisdiction should be followed.

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TUNE UP

To keep your heater in top operating condition, perform the following services at the start of each heater season then at the interval specified below:

Clean and/or replace fuel filter

Clean at least twice a season. More often if heater performance indicates the need. Replace if necessary.

Clean fan

Clean fan after every 500 hours of operation. Clean more frequently if heater is operating in dusty areas or if there is a build-up of dirt on the blades.

Replace burner nozzle

Replace nozzle at least once during the heater season or more often if heater performance indicates the need.

Clean and adjust spark plug

After every 300 hours of operation, clean and adjust spark plug electrodes. Adjust gap or replace the plug if electrodes have been burned, eroded, or carboned.

Clean photocell

Clean the photocell face with a soft cloth at least once during the heater season. If cell face tends to soot up, check with your nearest service station to determine the cause.

SECTION I INTRODUCTION

The heater is designed for use where large amounts of heat are needed. It must be used where adequate ventilation and proper electrical power are available.

This manual contains operating, maintenance and troubleshooting instructions for the heater. A complete parts list is included at the end of the manual.

A. PRINCIPLES OF OPERATION

Operation of the heater involves four simple systems:

1. **Fuel System.** A gear-type fuel pump, attached to one end of the motor shaft, delivers fuel at 100 PSI from the fuel tank to the nozzle. The fuel is injected into the combustion chamber in a fine spray.
2. **Air System.** A fan attached to the other end of the motor pushes air through the heater. Part of the air enters the combustion chamber and mixes with the atomized fuel to form a combustible mixture.
The rest of the air passes over and around the combustion chamber. At the front of the heater it mixes with the hot air coming from inside the combustion chamber. This results in a jet of clean, heated air flowing out of the front of the heater.
3. **Ignition System.** A transformer provides high voltage to a spark plug which extends through the burner head into the combustion chamber. A constantly firing spark from the spark plug ignites the mixture of fuel and air.
4. **Control System.** The control system is actuated by a light sensing, instantly reacting photocell used in conjunction with the safety control to initiate a safety shutdown of the heater in the event of ignition or flame failure. In addition, the control system provides a period of blower operation after normal shutoff to purge and cool the combustion chamber.
5. A thermostat, mounted on the heater, will operate the heater in response to the temperature setting provided that the setting is higher than the surrounding air temperature.

NOTE: The installation of this unit shall be in accordance with the regulations of the authorities having jurisdiction.

B. SPECIFICATIONS

BTU Rating	315,000 per hour
Air Delivery	1332 CFM
Voltage	120, 60 Hz, 1 phase
Amperes Starting	28.0
Amperes Running	7.1
Fuel	Kerosene or No. 1 Fuel Oil Not heavier than stove oil.
Fuel Tank Capacity	30 U.S. Gallons
Nozzle	2.25 GPH 80° hollow cone
Motor	1/3 HP 1725 RPM
Weight Empty	180 lbs.
Weight Full Tank	390 lbs.
Pump Pressure	100 PSI

SECTION II OPERATION

A. OPERATING CAUTIONS

1. Use heater only with adequate ventilation. If used in a closed room, a partly-opened door or window near the heater will provide enough ventilation. Do not use this heater as a source of heat in sleeping quarters.
2. Use only kerosene or No. 1 fuel oil; do not use No. 2 or heavier fuel oil as they contain tars which will contaminate the heater.
DO NOT USE GASOLINE: IT IS VOLATILE AND DANGEROUS.
3. Use the heater only on the electrical power specified on the instruction plate.
4. Plug the heater into a grounded receptacle or use a grounding adapter. Be sure the heater is properly grounded whenever it is in operation and whenever you are working on or near it.
5. Keep the heater at least 8 feet from any combustible materials.
6. **DO NOT** use the heater in the presence of flammable vapors such as paint, gasoline, or solvents.
7. **NEVER** add fuel while the heater is operating.
8. Keep the air inlet and discharge areas free of loose materials and any obstructions what would hinder the free flow of air into and out of the heater.

NOTE: The motor contains a manual reset overload protector. If this should stop the motor due to low voltage or overload, the motor can be re-started by pressing the red button on the motor. Be sure to disconnect the power cord before opening the heater or checking the motor.

B. PREPARING FOR OPERATION

1. Remove the heater from its shipping container and take off any protective packing material which may be provided.
2. Check the heater for possible shipping damage. If any is found, **IMMEDIATELY** notify the agent of the carrier which delivered the heater to you, and make out a claim for the damage.
3. Fill the fuel tank with the proper fuel.

NOTE: If the heater is to be used at below zero temperatures, the fuel may congeal. To prevent this, add two tablespoons of Frostex or similar anti-icer to each 5 gallons of fuel. Be sure tank and fuel is water-free before filling.

C. ELECTRICAL SUPPLY

Do not use a power source other than that specified on the nameplate. It is important to use extension cords of the right size if the heater is to be operated at a distance from the electrical source.

The following table shows the minimum recommended wire sizes for various lengths of extension cords. This wire size is calculated to assure adequate voltage at the heater. Use of a smaller wire size than those recommended will result in slower starting and may possibly result in malfunction of electrical components.

Length of Cord (Feet)	200	100	50
Minimum Wire Size (AWG)	8	10	12

D. OPERATING INSTRUCTIONS

1. Starting.
 - a. Plug heater into adequate electrical outlet receptacle.
 - b. Set the thermostat dial to the desired temperature. The heater operation is automatically controlled by the thermostat.
2. Stopping.
 - a. Stop the heater by turning the thermostat dial to the **NO HEAT** position. However, if the heater is to be left unattended, disconnect power cord.
 - b. You can also stop the heater temporarily by setting the thermostat to a temperature lower than the surrounding air.
 - c. The heater flame will go out immediately, but the thermal switch will keep motor operating long enough so that air flow from the fan will cool the combustion chamber.
 - d. Do not shut the heater off by unplugging it, as this deprives it of the purge cycle. After the purge cycle is complete, the heater should be unplugged when being left unattended.

E. OPERATING SEQUENCE

The following is a description of the normal automatic operating sequence of the heater (See the Wiring Diagram, Figure 1).

1. The heater is turned on by the thermostat automatically in response to a temperature setting of the dial, provided the setting is higher than the surrounding air temperature.
2. When operation is called for, the transformer and the motor, fan and fuel pump start operating immediately.
3. After fan reaches running speed, the solenoid valve will open. This allows fuel to flow to the nozzle. The heater will then ignite.

4. After about 2 minutes, the purge circuit is energized.
5. When the thermostat setting equals the surrounding air temperature or is turned to the **NO HEAT** position, the solenoid valve shuts off the flow of fuel to the nozzle, and the flame goes out immediately. The fan continues to run, purging heat from the combustion chamber.
6. When the combustion chamber cools, the thermal switch changes back to its starting position, shutting off the motor. It is not unusual for the thermal switch to call for an additional purge cycle. The motor would then restart (solenoid valve remains closed) and the fan will purge the remaining latent heat from the combustion chamber. This is normal operation.
7. If, for some reason, the flame goes out before the thermostat is satisfied, or if the heater fails to ignite when operation is called for, the safety control will shut off the heater within 15 seconds. If this should occur, unplug the heater, and determine the cause of the shutdown. Correct the cause then press the reset button on the safety control and restart the heater.

F. FUEL PUMP MAINTENANCE AND SERVICE

1. The pump operates at 100 psi. To check pressure, remove the hex head pipe plug from the part marked gage on the fuel pump and install a pressure gage. (Pressure Gage, Part No. M4574 is available from our service dealers.)
2. If the pressure gage does not read 100 psi, plus or minus 5 psi, when the motor is running and pumping fuel, adjust the pump.
3. To adjust the pump pressure, turn the screw on the side of the pump body marked pressure adjustment. To increase the fuel pressure, turn the slotted screw inside the port clockwise. To decrease the fuel pressure, turn the screw inside the port counter-clockwise. After completion of the adjustment, remove the gage and install the plug into the fuel pump.
4. If the fuel pressure cannot be adjusted, replace the pump.

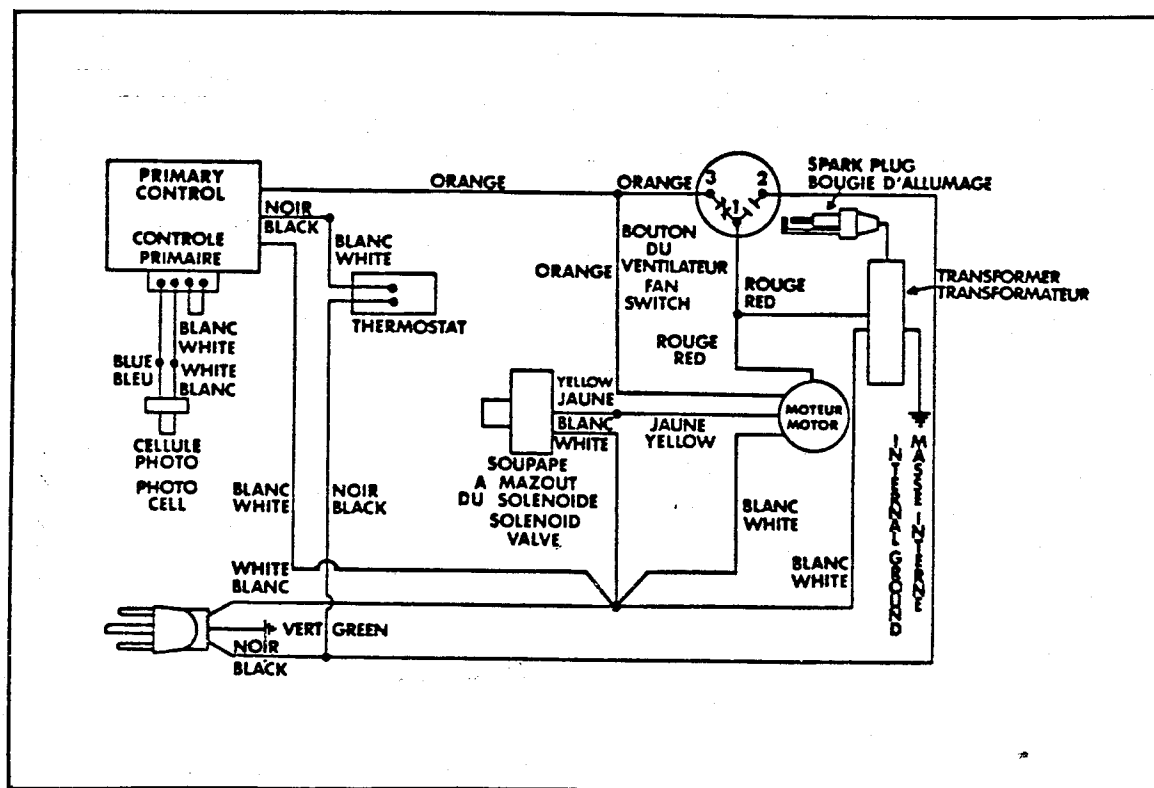


Figure 1. Wiring Diagram

SECTION III MAINTENANCE AND SERVICE

WARNING: Disconnect Heater From Power Source Before Attempting Any Maintenance and/or Servicing Operations.

Maintenance consists of the operations the owner or user of the heater can perform to keep the heater operating properly. If routine maintenance fails to return a heater to top-operating condition, refer to the Trouble Shooting Table. Keep the heater clean to reduce the need for extensive maintenance or repair.

A. FUEL SYSTEM MAINTENANCE

1. Use the cleanest fuel available. Dirt and water in the fuel will clog the filter, and may cause the heater to burn with an odor. If there is excessive water in the fuel, the flame may go out. Every 250 hours (or more often) drain the tank and rinse it with clean, "dry" fuel (having no water in it), then refill with clean fuel.
2. Every 250 hours of operation, unscrew the filter can to remove the filter element. Rinse the bowl in clean kerosene and wipe dry with a clean cloth to remove all accumulated dirt. Replace filter element and gasket before reassembling filter bowl.
3. Check the fuel line connections occasionally to be sure they are tight.
4. If the solenoid valve should begin to stick open or closed, replace it.

B. AIR SYSTEM MAINTENANCE

1. If the heater is used in dusty or dirty air, enough dirt may build up on the fan blades to reduce the overall efficiency of the heater. Inspect them occasionally, and wipe off any loose dirt. Use a rag moistened with kerosene or non-flammable cleaning solvent to get stubborn dirt off the blades.
2. Keep the air deflector plates and the air passages around the burner head free from dirt and trash.

C. BURNER MAINTENANCE AND SERVICE

WARNING: Disconnect Heater From Power Source Before Attempting Any Maintenance and/or Servicing Operations.

1. For access to the nozzle (see Figures 3 & 5) remove the upper shell. Disconnect the fuel line and spark plug lead from the burner head. Remove the screws attaching the burner head assembly to the combustion chamber.
2. Do not attempt to clean the nozzle. If the nozzle is badly carboned or dirty, replace it. When replacing the nozzle, the tightness torque should be 175 to 200 inch pounds.

CAUTION: Never use a drill, wire or any other tool in the nozzle orifice as this will damage the nozzle and require replacement. Guard the nozzle from damage or dirt. This is important! If the nozzle is damaged or dirty, replace it.

D. SPARK PLUG

WARNING: Disconnect Heater From Power Source Before Attempting Any Maintenance and/or Servicing Operations. The Spark Plug Wire Carries High Voltage During Heater Operation.

1. Disconnect the spark plug wire.
2. Remove the spark plug from the burner head, and check the gap between the electrodes. The gap must be within the limits shown in Figure 2.

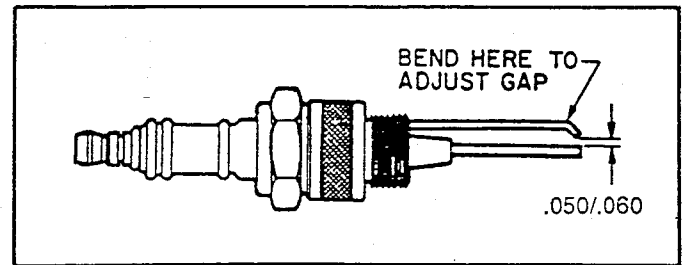


Figure 2. Spark Plug Gap Setting.

3. Adjust the gap by bending the outside electrode where shown in Figure 2. If you do not install the plug immediately, protect it from damage until it is reinstalled.
4. Reinstall the spark plug into the burner head. Be sure the spark plug is firmly seated in the burner head.
5. If the spark plug is heavily covered with carbon or badly eroded, replace it.

E. SAFETY CONTROL CIRCUIT TESTING

NOTE: The following testing procedures should be performed only if trouble indicates the safety control circuit may be at fault.

1. Unplug the heater cord. Disconnect the two photocell wires from the control "PHOTOCELL" terminals.
2. Make certain the reset buttons on the motor and the control are pressed in. Set the thermostat above the temperature of the surrounding air.
3. Plug in the heater and after the flame is established, quickly jumper the "PHOTOCELL" terminals marked F1 and F2 on the side of the control. If the heater shuts off within 15 seconds, the control is defective and should be replaced.
If the heater continues to run for a couple of minutes, remove the jumper and the control should trip out in 15 seconds. When the control trips out, the flame will disappear, but the motor will continue to run to purge heat from the combustion chamber. If the heater continues to burn, first check solenoid. If solenoid functions normally, the control is defective and should be replaced.
4. If the control does not function normally from the tests above, there are two possible causes for the problem. The heater does not have a well established flame pattern or the problem is in the photocell. The photocell is a light sensitive device that changes resistance from a high resistance (greater than 100,000 ohms), when no flame is sensed, to a low resistance (less than 3000 ohms) when a proper flame is sensed. Operate the heater as per Part 3 above. Connect an ohmmeter across the photocell leads to check for this change in photocell resistance at the time of heater shutdown. If at anytime the ohmmeter reads zero or open, the photocell should be checked for dirt on its face, an open condition, or a shorted condition. If the face of the photocell is dirty, clean with soft cloth and replace. Recheck for the resistance change in the photocell from flame to no flame. If the photocell still reads zero or open check the wiring from one end to the other for an open or shorted condition. If no problems are found replace the photocell and check once again for the resistance change.
5. If the photocell and primary safety control function properly, the problem is that the heater is not burning properly. Refer to Section IV Trouble Shooting.
6. If the control fails to shut down the heater, it is defective and must be replaced.
7. After replacing the control system components, test fire the heater to make sure it will function properly. If it does not, check all wiring connections according to the wiring diagram, Figure 1. Repeat the testing procedure if necessary.

SECTION IV

TROUBLE SHOOTING

The following table lists troubles which may occur with the heater and each trouble gives a list of possible causes with a suggested remedy for each

TROUBLE	POSSIBLE CAUSE	REMEDY
Odor from heater.	Air leak in suction system.	Check filter for leakage. Tighten all fuel line connections.
	Low pump pressure.	Adjust pump pressure.
	Dirty filter.	Replace filter element and clean the filter bowl.
	Dirty burner nozzle.	Clean the burner and replace the nozzle.
	Low voltage causing motor to operate below rated speed.	Check voltage at heater. Voltage at heater should be not less than 90% of rated voltage (180 volts for 120-volt heaters).
	Water droplets suspended in fuel.	Wait for water to settle out after filling tank; then drain tank and refill with fuel containing no water.
	Low motor RPM.	Check voltage, if OK, check motor RPM. Motor must run at least 1700 RPM on proper voltage. If not, replace motor.
Failure to Start. (Motor does not start when thermostat is set to call for operation.)	Proper power not reaching heater.	Check that heater is connected to a live power line with good fuses, and that the voltage at the heater is correct.
	Loose electrical connections.	Check; tighten if necessary.
	Control not activated.	Press and release reset button on control.
	Motor overload protector tripped.	Check for cause of motor overload. Correct cause or replace motor.
	Thermostat defective.	Replace thermostat.
Failure to Ignite. (Motor runs when the thermostat is set to call for heat.)	Fuel tank empty.	Fill fuel tank.
	Spark plug dirty or not properly gapped.	Reset spark plug after cleaning, according to dimensions in Figure 2.
	Solenoid valve not opening.	If electrical connections to solenoid valve are good, replace solenoid valve.
	Improperly wired after servicing.	Check wiring according to Wiring Diagram, Figure 1.
	Pump not providing fuel, or providing fuel at too-low pressure.	Check pump output pressure; adjust if necessary; replace pump if adjustment cannot be made or will not hold. Filter element needs replacing.
	Water in fuel.	Drain tank; rinse with clean fuel; clean filter housing. Replace filter element.
		Refill with clean fuel.
Nuisance Trip-Outs.	Open or damaged photocell.	Replace photocell.
	Defective fan switch.	Replace fan switch.

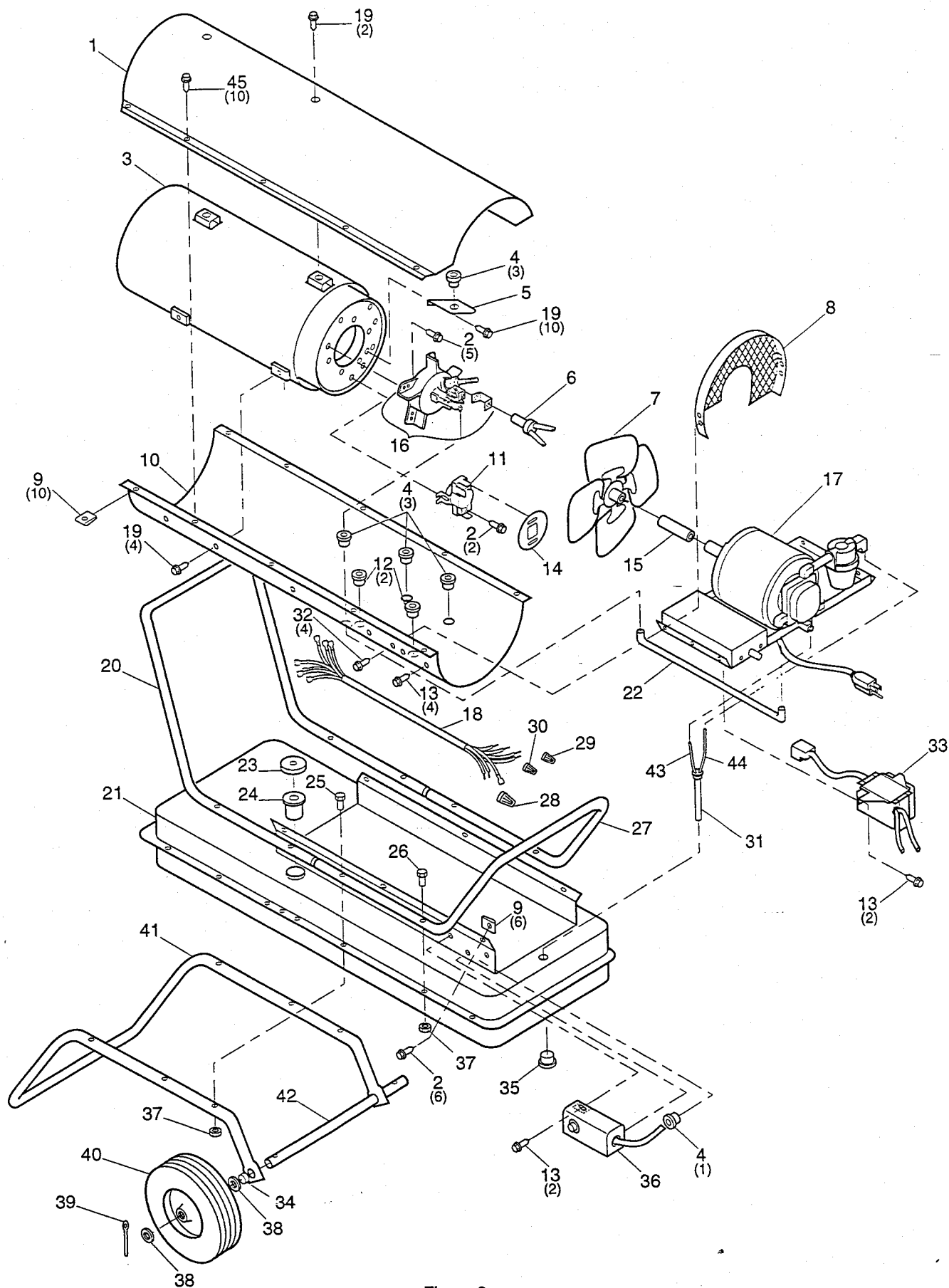


Figure 3

SECTION V PARTS LIST

This list contains all replaceable parts used in the heater covered by this manual, with index numbers for easy reference between the list and the exploded view.

When ordering parts, check the model decal for the correct model number, specification number, and serial number of the

heater. Include the MODEL, SPECIFICATION, and SERIAL numbers when ordering parts. ORDER PARTS BY PART NAME AND PART NUMBER ONLY. DO NOT use the index numbers from the illustration when ordering parts.

INDEX NO.	PART NO.	NAME	QTY.
1	099329-02	Upper shell	1
2	M11084-27	Screw, #10-16 x 1/2"	13
3	M50542-01	Combustion chamber & shield	1
4	M30865-02	Bushing	8
5	M50086	Air deflector	5
6	HA3019	Photocell assembly	1
7	M50121	Fan	1
8	M50097-01AA	Fan Guard	1
9	M11271-8	Clip nut	16
10	099329-01	Lower shell	1
11	M51336-02	Fan switch	1
12	M50104-02	Bushing	2
13	M11084-26	Screw, #10 x 3/8" hex head	8
14	M51160-01	Fan switch cover	1
15	M50278	Sleeve	1
16	†	Burner head assembly	1
17	†	Motor & pump assembly	1
18	M50391-02	Wire harness	1
19	M11084-3	Screw, #12 -14x 1/2"	16
20	M50062-02	Front handle	1
21	098513-05	Fuel tank	1
22	M50295	Fuel line	1
23	097702-01	Fuel cap	1
24	HA2210	Filler neck screen	1
25	HC4-18C	Screw, 1/4-20 x 2 1/4"	6
26	M51043-01	Screw, 1/4-20 x 1 1/2"	2
27	M50062	Rear handle	1
28	M13942-5	Wire connector	1
29	M13942-7	Wire connector	2
30	M13942-5	Wire connector	4
31	M50262-01	Filter Screen assembly	1
32	M10908-27	Screw, #10-32 x 1/2"	4
33	098557-08	Transformer, 5000 volt	1
34	M50296	Wheel Spacer	2
35	M27417	Drain plug	1
36	M25046	Thermostat	1
37	NTC-4C	Nut, Hex lock 1/4-20	8
38	WP-10C	Flatwasher, 5/8"	4
39	C5-10C	Cotter Pin, 5/32 x 1 1/4"	2
40	M50389	Wheel	2
41	M50063	Wheel support frame	1
42	M18774	Axle	1
43	M50550-01	Fuel line - Return	1
44	M50996-02	Fuel line - Suction	1
45	100647-01	Screw, #10-16 x 1/2"	10
PARTS AVAILABLE - NOT SHOWN			
	097648-01	Tradename Decal	
	M50573-05	Nameplate Decal	

†Not available as an assembly.

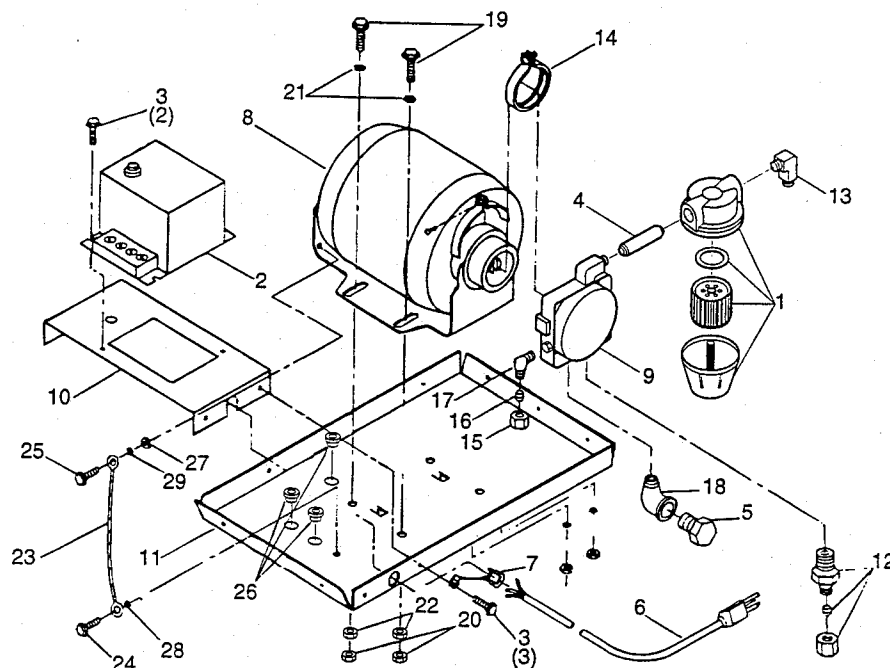


Figure 4 - Motor and Pump Assembly

Motor and Pump Assembly

INDEX			
NO.	PART NO.	NAME	QTY.
1	098102-01	Fuel Filter Assembly	1
	098103-01	Filter Element (inside fuel filter assembly, includes rubber gaskets)	1
2	M50230	Safety Control Assembly	1
3	M11084-26	Screw, #10 x 3/8"	5
4	M17499-2	1/4 Pipe Nipple	1
5	M13990	Pipe Plug 1/4	1
6	099055-03	Power Cord	1
7	099492-01	Strain Relief Bushing	1
8	099562-01	Motor	1
9	098560-01	Fuel Pump	1
10	M50082AA	Wiring Cover	1
11	099520-02AA	Motor Support	1
12	M50113-02	Straight Fitting 1/8	1
13	M50114-02	Male Elbow 1/4	1
14	M50116	Flanged Clamp	1
15	M50298	Compression Nut	1
16	M50299	Compression Sleeve	1
17	M50297	Compression Elbow	1
18	57413	Street Elbow 1/4	2
19	HF5-5C	Screw, 5/16-24 x 5/8"	4
20	NPF-5C	Nut, 5/16-24	4
21	WLE-5	Star Washer 5/16	4
22	†	Lock Washer 5/16	4
23	†	Ground Wire Assembly	1
24	097221-01	Screw, #10 x 3/8"	1
25	M12461-14	Screw, #8-32 x 1/4"	1
26	M50104-02	Bushing	3
27	NPC-2C	Nut, #8-32	1
28	WLE-3	Star Washer #10	1
29	WLE-2C	Star Washer #8	1

†Not available

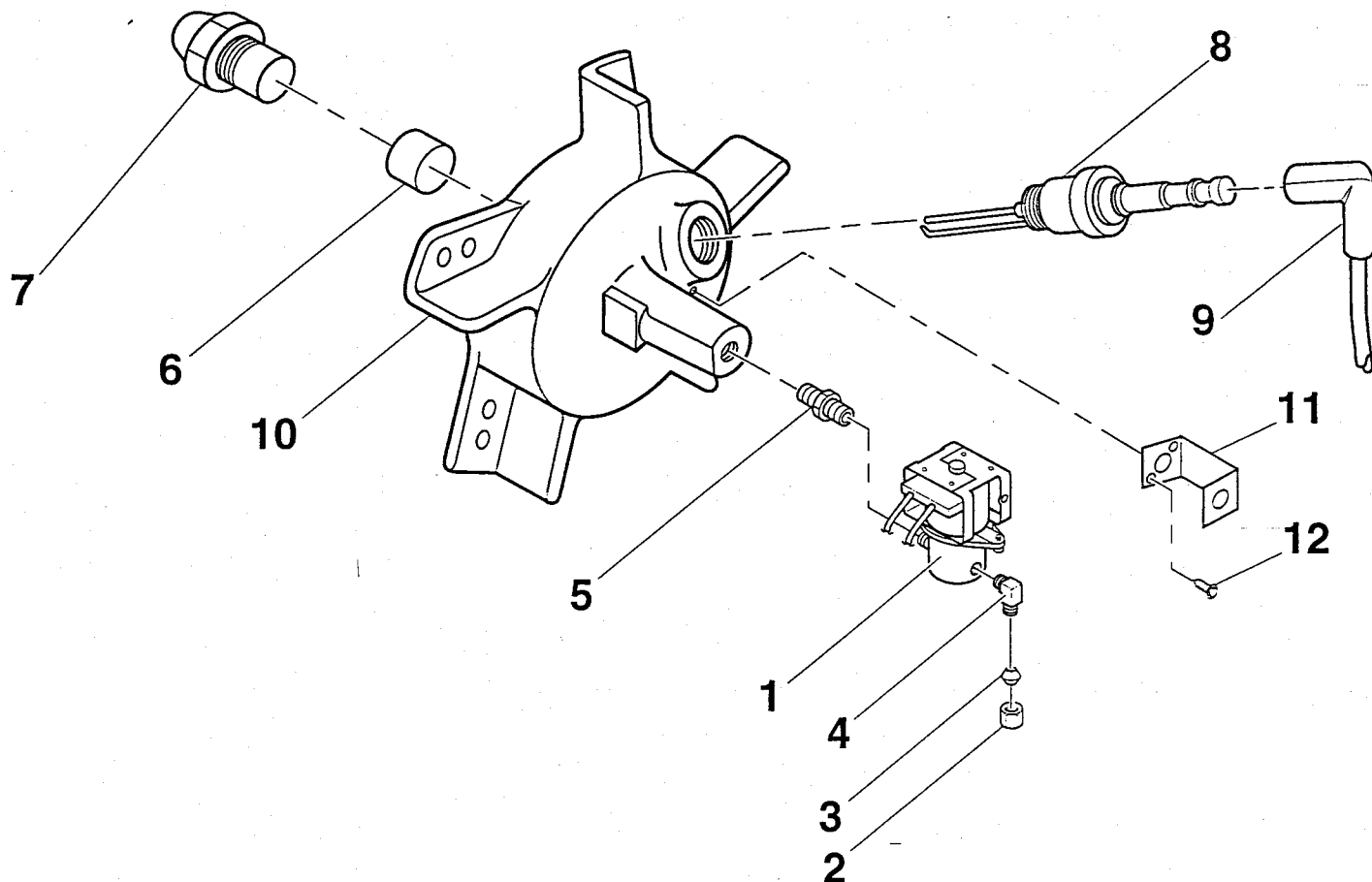


Figure 5 - Burner Head Assembly

Burner Head Assembly

INDEX			
No.	Part Number	Name	Qty..
1	M50077	Solenoid Valve	1
2	M50298	Compression Nut	1
3	M50299	Compression Sleeve	1
4	M50297	Compression Elbow	1
5	69246	Straight Pipe Nipple	1
6	M51170-01	Burner Head Nozzle Plug	1
7	M22626	Nozzle	1
8	HA3012	Spark Plug	1
9	M50050	Spark Plug Boot	1
10	M50924-02	Burner Head Body	1
11	099229-01	Photocell Bracket	1
12	M10908-2	Screw, #6-32 x 3/8"	2

KEEP THIS WARRANTY

Model _____

Serial No. _____

Date Purchased _____

Fill in above information for your own record

ALWAYS SPECIFY MODEL AND SERIAL NUMBERS WHEN COMMUNICATING WITH THE FACTORY.

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.

LIMITED TWELVE MONTH WARRANTY

Desa Industries warrants this product to be free from defects in materials and workmanship for twelve months from the date of first purchase when operated and maintained in accordance with instructions.

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

Warranty service is available only from authorized dealers or service centers.

This warranty does not cover repairs necessary due to normal wear, misuse, accidents, or lack of proper maintenance. Regular routine maintenance is the responsibility of the owner.

Desa Industries assumes no responsibility for indirect, incidental or consequential damages. Some provinces do not allow the exclusion of limitation of incidental and consequential damages so the above may not apply to you.

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

This warranty gives you specific legal rights and you may have other rights which vary from province to province.

For information, write: DESA
Desa Industries of Canada, Inc.
2220 Argentia Road
Unit #4
Mississauga, Ontario
L5N 2K7