

REDDY HEATER®

OWNER'S OPERATING MANUAL

MODELS R30, R50, R70, R100 & M150S

Congratulations - You have just purchased one of the finest oil-fired heaters on the market today. Your REDDY HEATER® has been designed and engineered to provide you with years of warm comfort. You will need to read this manual carefully before using your REDDY HEATER®.

IMPORTANT: READ AND UNDERSTAND OWNER'S 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.

NEVER USE 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.

USE ONLY IN WELL VENTILATED AREAS. PROVIDE VENTILATION OF AT LEAST THREE (3) SQUARE FEET FOR EACH 100,000 OF BTU RATING.

NEVER ATTACH DUCT WORK TO FRONT OF HEATER.

USE ONLY WITH ELECTRICAL VOLTAGE AND FREQUENCY SPECIFIED ON MODEL PLATE.

USE ONLY A PROPERLY GROUNDED THREE-WIRE EXTENSION CORD. MAKE SURE HOT AIR OUTLET IS AT LEAST FIVE (5) FEET FROM COMBUSTIBLE MATERIALS.

FOR BEST RESULTS, USE ONLY KEROSENE OR NO. 1 FUEL OIL.

UNPLUG HEATER BEFORE FILLING FUEL TANK.

HEATER MUST BE LEVEL WHILE HOT OR OPERATING, OR A FIRE MAY OCCUR.

DO NOT MOVE, HANDLE OR SERVICE A HOT OR OPERATING HEATER. 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 OR ANIMALS ARE LIKELY TO BE PRESENT.

NEVER USE HEATER WHILE SLEEPING.

STORE HEATER IN A LEVEL POSITION WHEN FILLED OR FUEL LEAKAGE MAY OCCUR.

USE HEATER ONLY IN ACCORDANCE WITH LOCAL ORDINANCES AND CODES.



ASSEMBLY

(Does not apply to models R30, R50 and R70.)

Some models are equipped with wheels and a handle, and are shipped with these items removed from the unit and can be found in the shipping carton along with the mounting hardware.

TOOLS REQUIRED

Medium Phillips Screwdriver, 3/8" Open or Adjustable Wrench, Hammer.

1. Slide the axle through the wheel support frame. Install the wheels on the axle. **IMPORTANT:**

The extended hub of the wheel should be positioned toward the wheel support frame. Position the cap nuts on the axle ends and gently tap with a hammer to secure.

2. Position the heater on the wheel support frame assembly with the motor end over the wheels.
3. Use four screws and nuts to attach the handle to the top of the tank flange. The screws will go through the handle, the tank flange and the wheel support frame. Install the nuts finger tight only until all four have been installed. Then tighten all nuts.

VENTILATION

FRESH AIR OPENING REQUIREMENTS

HEATER SIZE	SQUARE FOOT OPENING
30,000 BTU	1.0
50,000 BTU	1.5
70,000 BTU	2.0
100,000 BTU	3.0
150,000 BTU	4.5

WARNING: USE ONLY IN WELL VENTILATED AREAS.

FUELS

1. Use only kerosene or #1 fuel oil.
2. Never use gasoline, naphtha, paint thinners, alcohol or other volatile fuels.
3. Use of #2 fuel oil or #2 diesel oil may result in:
 - a. More frequent clogging of fuel filter and nozzle.

- b. The formation of carbon on the spark plug.

Do not allow your spark plug to get a carbon buildup on the electrodes.

Carbon deposits on the spark plug can cause interrupted starting and raw fuel emission from the heater.

SPECIFICATIONS

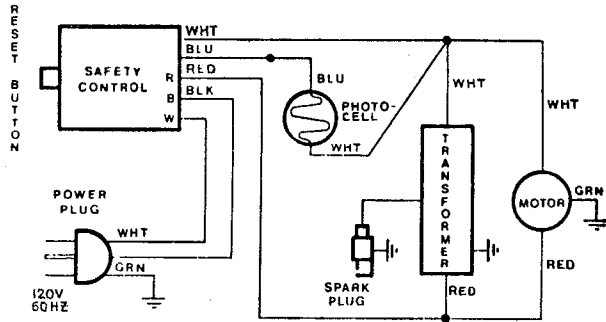
MODEL	R30	R50	R70	R100	M150S
Output Rating (BTU Per Hour)	30,000	50,000	70,000	100,000	150,000
Fuel		Use Only Kerosene or #1 Fuel Oil			
Fuel Tank Capacity (U. S. Gallons)	3.00	4.00	5.00	9.00	13.50
Fuel Consumption (Approx. U. S. Gal. Per Hr.)	0.23	0.37	0.52	0.74	1.10
Electric Requirements	120 Volt 60 Hz	(Same All Models)			
Amperage	2.78	2.9	3.0	5.5	5.0
Motor RPM	1710	1730	3340	3450	3450
Hot Air Output (Approx. CFM)	123	106	174	273	538
Air Pump Pressure (PSI)	3.0	3.6	4.0	4.0	5.0
Shipping Weight (Approx. Lbs.)	42	43	44	64	94
Heater Weight Without Fuel (Approx. Lbs.)	35	36	37	55	77

OPERATION

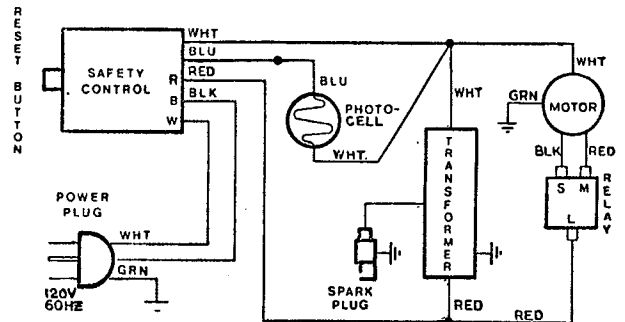
STARTING PROCEDURE

1. Fill fuel tank with correct fuel.
2. The heater has a short power cord; use an extension cord of at least six (6) feet long.
3. Make sure the front, hot air outlet, is at least five (5) feet from any flammable materials.
4. Check reset button to be sure it is pushed in.
5. Heater will start when plugged in. Outlet must be grounded.

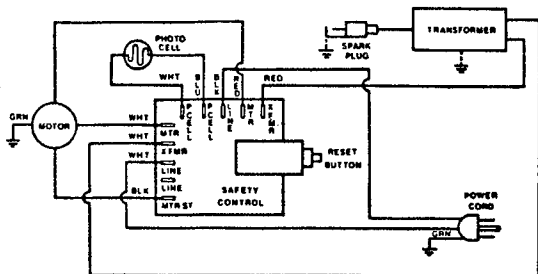
MAINTENANCE AND STORAGE



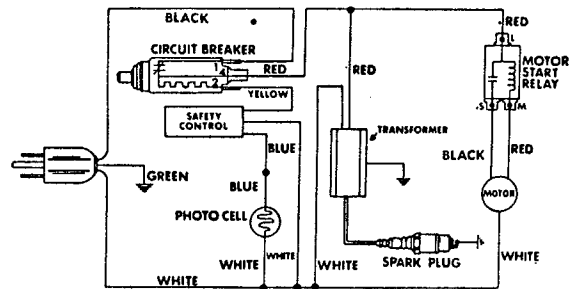
R30 and R50



R70



R100



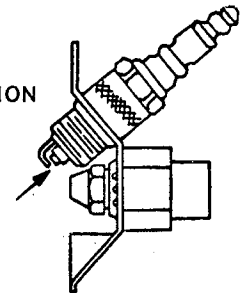
M150S

SPARK PLUG

After every 300 hours of operation, clean and adjust spark plug electrodes. Adjust gap or replace spark plug as required. Spark plug gap: .050 inches.

SPARK PLUG ORIENTATION R30 AND R50

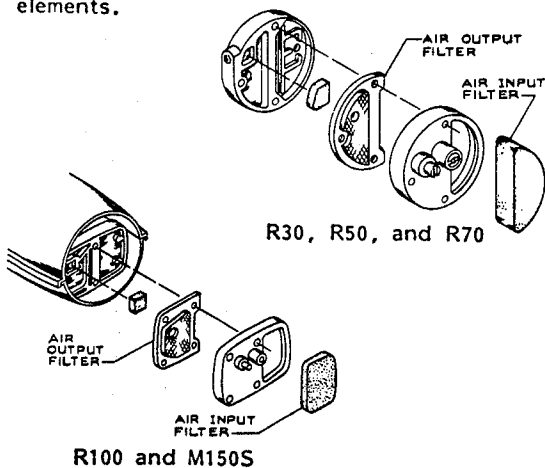
Rotate spark plug to position electrode as shown.



Store heater in a dry location, free of corrosive fumes and dust.

Flush tank with clean fuel before storing. Drain all fuel from tank.

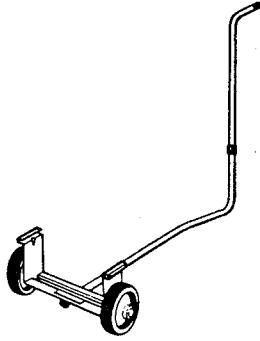
Service manual is available from your authorized service center.



R30, R50, and R70

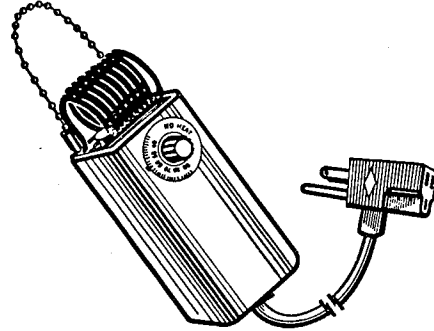
R100 and M150S

ACCESSORIES



WHEELS AND HANDLE KIT - HA1206

Makes heater even more portable and convenient. Easy to assemble. For models R30, R50 and R70.



THERMOSTAT KIT - HA1200

Keeps your building at the temperature you select day and night. For all models.

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 SIX MONTH WARRANTY (U.S.A.)

AMCA International, warrants this product to be free from defects in materials and workmanship for six months from the date of first purchase when operated and maintained in accordance with instructions.

This warranty covers only the cost of parts and labor 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.

AMCA International assumes no responsibility for indirect, incidental or consequential damages. Some states do not allow the exclusion or 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 OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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

For information, write: AMCA International, P.O. Box 719, Bowling Green, Kentucky 42101
Attention: Customer Service Dept.



CONSUMER PRODUCTS
AMCA
INTERNATIONAL

PFA-1

Issued: September, 1983
 Revised: August, 1984

**PORTABLE FORCED AIR
 HEATER**

Illustrated Parts List

**REDDY
 HEATER
 R30 & R50**

IMPORTANT DO NOT USE KEY NUMBERS WHEN ORDERING SERVICE PARTS. ALWAYS ORDER COMPONENTS BY PART NUMBER AND DESCRIPTION. INCLUDE MODEL AND SERIAL NUMBERS.

KEY NO.	PART NO.	PART DESCRIPTION	R30 QTY.	R50 QTY.
1	M51104-01	Handle	1	1
2	M50901-01AC	Shell, Upper	1	1
3	M50589-01	Screw, Handle	2	2
4	M11084-27	Screw, #10-16X½	6	6
5	M50785-02	Combustion Chamber	1	
	M50785-04	Combustion Chamber		1
6	M10908-2	Screw, #6-32X3/8	2	2
7	M16660	Bracket, Photo Cell	1	1
8	M16656-4	Photo Cell Assembly	1	1
9		Burner Head Assembly (See Back)	1	1
9-1	M29681	Nozzle	1	
	M50597	Nozzle		1
9-2	M16741-18	Ring, Retainer	1	1
9-3	M29835-2	Spark Plug	1	1
9-4	M29805	Adapter, Nozzle	1	1
9-5	M51013-01	Bracket	1	
	M29615-01	Bracket		1
9-6	M29824	Nut, 14mm	1	1
10	M11084-27	Screw, #10-16X½	2	2
11	M30884	Fan 7" dia.-1.437	1	1
12	29750-05	Motor Package Assembly (See Back)	1	
	M29750-04	Motor Package Assembly (See Back)		1
12-1	M50843-01	Motor		1
	M50843-02	Motor	1	
12-2	M8645	Pump Body	1	1
12-3	M22009	Insert, Rotor	1	1
12-4	M22456-1	Rotor	1	1
12-5	M29608	Cover, End Pump	1	1
12-6	M29632	Filter, Lint	1	1
12-7	M29633	Filter, Intake	1	1
12-8	M29609	Filter, End Cover	1	1
12-9	M12461-31	Screw, #10-32X1	3	3
12-10	M27694	Screw, Adjusting	1	1
12-11	M10993-1	Spring-Relief	1	1
12-12	M22997	Plug	1	1
12-13	M8940	Ball, Steel ¼ Dia.	1	1
12-14	M29612-01	Filter, Output	1	1
12-15	M12461-31	Screw, #10-32X1	6	6
12-16	M50016	Elbow 90°	1	1
12-17	M8643	Blade	4	4
12-18	FHPF3-4C	Screw, #10-32X½	2	2

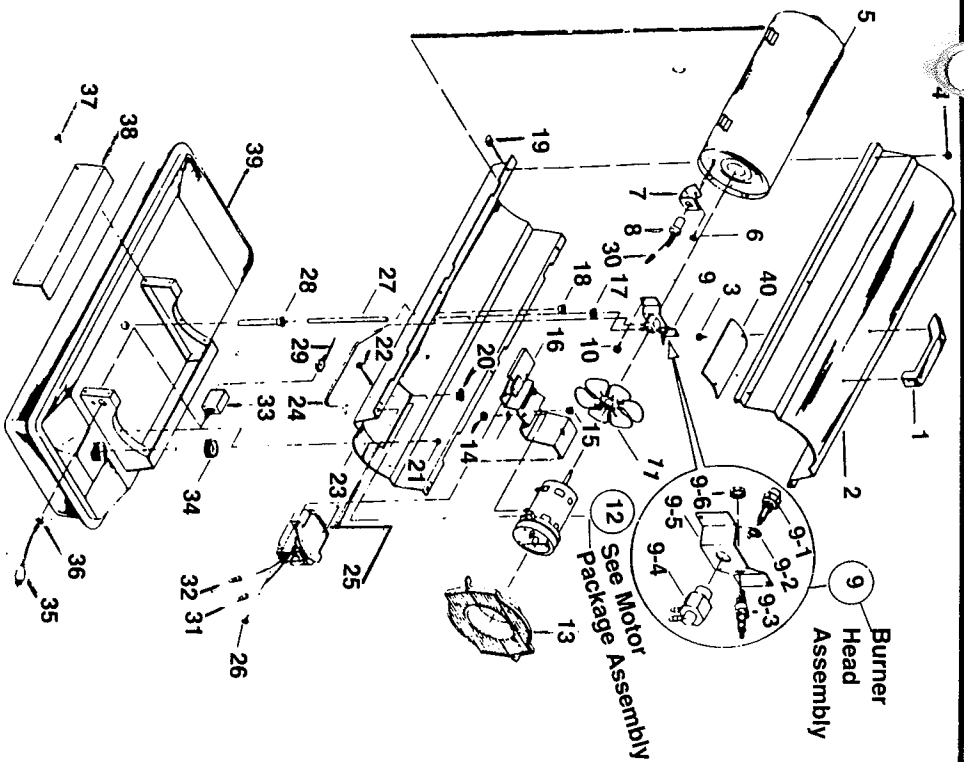
KEY NO.	PART NO.	PART DESCRIPTION	R30 QTY.	R50 QTY.
13	M51105-01	Guard Fan	1	1
14	NTC-4C	Nut-Hex Jam	2	2
15	M50631	Bumper, Rubber	2	2
16	M51061-01	Bracket, Motor	1	1
17	M30865-02	Bushing	1	1
18	M25907	Bushing Photo Cell	1	1
19	M11271-8	Nut-Tinnerman	6	6
20	M50104-02	Bushing Wires	1	1
21	M11084-26	Screw, #10-12X3/8	6	6
22	M15823-37	Screw, #8X¼	1	1
23	M50902-01AC	Shell, Lower	1	1
24	M29652-05	Airline Rubber	1	1
25	M50570-03	Transformer, 5000 Volt	1	1
26	M11084-26	Screw, #10-12X3/8	2	2
27	M29652-04	Fuel Line	1	1
28	M50876-04	Fuel Filter	1	
	M50876-02	Fuel Filter		1
29	M9900-157	Wire, Red	1	1
30	M13942-7	Wire, Nut (Small)	1	1
31	M13942-5	Wire, Nut (Medium)	1	1
32	M13942-6	Wire, Nut (Large)	1	1
33	M50671-01	Control, Flame Out	1	1
34	M51027-06	Cap. Fuel (Includes Gasket)	1	1
35	M10813-81	Cord, Power	1	1
36	M11143-1	Bushing, Strain-Relief	1	1
37	M11084-26	Screw, #10-12X3/8	2	2
38	M50899-03AA	Cover, Side	1	1
39	M50811-04AA	Tank, Fuel	1	
	M50811-05AA	Tank, Fuel		1
40	M51108-01	Shield, Heat	1	1

PARTS AVAILABLE - NOT SHOWN

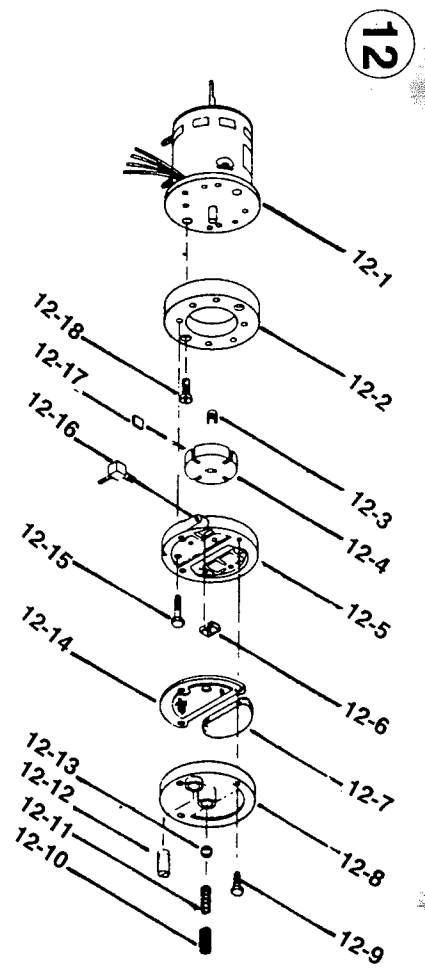
	M51109-02	Decal, Nameplate		
	M51110-01	Decal, Warning		
	M51111-01	Decal, Tradename		

OPTIONAL ACCESSORIES

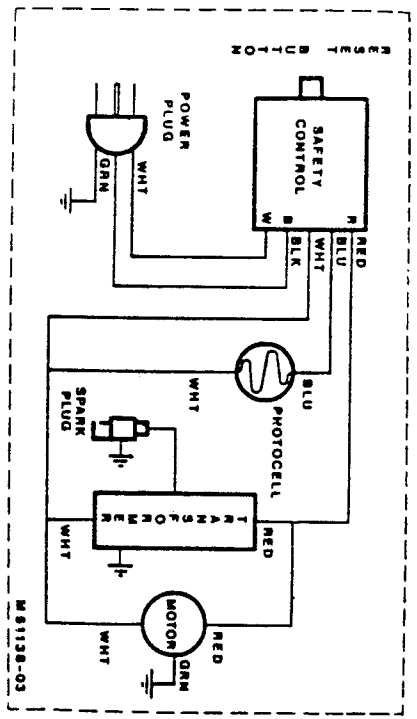
	HA1200	Hang-Up Thermostat		
	HA1206	Wheel Kit		



HEATER EXPLODED VIEW



MOTOR PACKAGE ASSEMBLY



WIRING DIAGRAM

SPECIFICATIONS

		R30	R50
OUTPUT Rating (BTU Per Hour)		30,000	50,000
Fuel		kerosene or #1 fuel oil	
Fuel Tank Capacity, U.S. Gallons		3.00	4.00
Fuel Consumption, Approx. U.S. Gal. Per Hour		0.23	0.37
Electric Requirements		120 60Hz	
Amperage (During Normal Run)		2.78	2.90
Starting Amps		4.00	4.00
		R30	R50
Motor RPM		1710	1730
Air Output (CFM)		123	106
Air Pump Pressure		3.00	3.60
Shipping Weight (Approx. Lbs.)		42	43
Without Fuel (Approx. Lbs.)		35	36
Duct		No Duct Recommended	



CONSUMER PRODUCTS
AMCA
INTERNATIONAL

PFA-2

Issued: September, 1983

Revised: August, 1984

**PORTABLE FORCED AIR
HEATERS**

Illustrated Parts List

**REDDY
HEATER
R70**

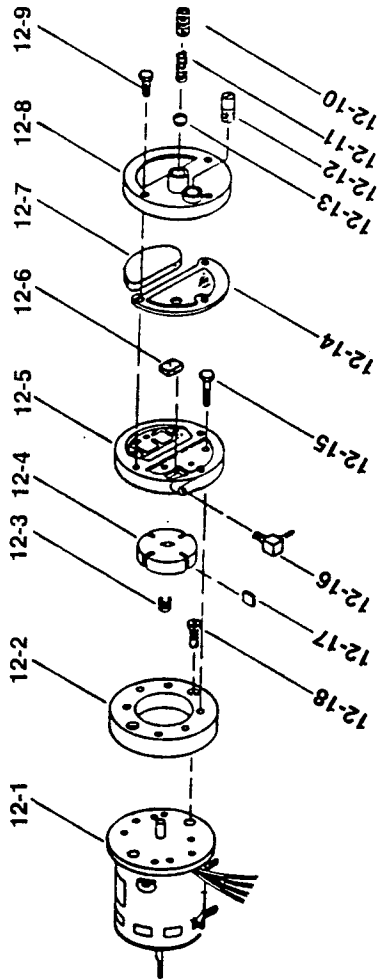
IMPORTANT DO NOT USE KEY NUMBERS WHEN ORDERING SERVICE PARTS. ALWAYS ORDER COMPONENTS BY PART NUMBER AND DESCRIPTION. INCLUDE MODEL AND SERIAL NUMBERS.

KEY NO.	PART NO.	PART DESCRIPTION	QTY.
1	M51104-01	Handle	1
2	M50901-01AC	Shell, Upper	1
3	M50589-01	Screw, Handle	2
4	M11084-27	Screw, #10-16X $\frac{1}{2}$	6
5	M50785-05	Combustion Chamber	1
6	M10908-2	Screw, #6-32X $\frac{3}{8}$	2
7	M16660	Bracket, Photo Cell	1
8	M16656-4	Photo Cell	1
9		Burner Head Assembly (See #9 on back)	1
9-1	M50880-01	Nozzle	1
9-2	M10659-1	Washer, Nozzle	2
9-3	M10809-1	Spring, Nozzle	1
9-4	M8882	Seal, Nozzle	1
9-5	M16741-18	Ring, Retainer	1
9-6	M25020	Body, Burner Head	1
9-7	M50820-01	Fitting, Barb	2
9-8	M16535	Adapter, Nozzle	1
9-9	M10962-2	Spark Plug	1
10	M11084-27	Screw, #10-16X $\frac{1}{2}$	3
11	M51107-01	Fan 7" dia. X 1 $\frac{1}{4}$ Pitch	1
12	078892-03	Motor and Pump Assembly (See #12 on back)	1
12-1	078894-02	Motor <i>097308-01</i>	1
12-2	M8645	Body, Pump <i>079975-02</i>	1
12-3	M22009	Insert, Rotor	1
12-4	M22456-1	Rotor	1
12-5	M29608	Cover, End Pump	1
12-6	M29632	Filter, Lint	1
12-7	M29633	Filter, Intake	1
12-8	M29609	Filter, End Cover	1
12-9	M12461-31	Screw, #10-32X1	3
12-10	M27694	Screw, Adjusting	1
12-11	M10993-1	Spring-Relief	1
12-12	M22997	Plug	1
12-13	M8940	Ball, Steel $\frac{1}{4}$ Dia.	1
12-14	M29612-01	Filter, Output	1
2-15	M12461-31	Screw, #10-32X1	6
12-16	M50016	Elbow, 90°-Barb Fitting	1
12-17	M8643	Blade	4
12-18	FHPF3-4C	Screw, #10-32X $\frac{1}{2}$	2

KEY NO.	PART NO.	PART DESCRIPTION	QTY.
13	M51105-01	Guard, Fan	1
14	M9900-157	Wire, Red	1
15	M25061-1	Relay	1
16	NJC-4C	Nut-Jam	2
17	M50631	Bumper, Rubber	2
18	RC2-2C	Screw, #8-32X $\frac{1}{4}$	1
19	M51061-01	Bracket, Motor	1
20	M30865-02	Bushing	1
21	M25907	Bushing	1
22	M11271-6	Nut-Tinnerman	6
23	M50104-02	Bushing	1
24	M11084-26	Screw, #10-12X $\frac{3}{8}$	6
25	M15823-37	Screw, #8X $\frac{1}{4}$	1
26	M50902-01AC	Shell, Lower	1
27	M29652-05	Airline Rubber	1
28	M50578-08	Transformer, 5000 Volt <i>M16697-02</i>	1
29	M11084-26	Screw, #10-12X $\frac{3}{8}$	2
30	M29652-04	Fuel Line	1
31	M50876-05	Filter, Fuel	1
32	M9900-162	Wire, White	1
33	M13942-6	Wire, Nut (Large)	1
34	M13942-5	Wire, Nut (Medium)	1
35	M13942-7	Wire, Nut (Small)	1
36	M50671-01	Control, Flame Out	1
37	M51027-06	Cap, Fuel (Includes gasket)	1
38	M10813-81	Cord, Power	1
39	M11143-1	Bushing Strain Relief	1
40	M11084-26	Screw, #10-12X $\frac{3}{8}$	2
41	M50899-03AA	Cover, Side	1
42	M50811-06AA	Tank, Fuel	1
PARTS AVAILABLE - NOT SHOWN			
	M51109-03	Decal, Nameplate	
	M51110-01	Decal, Warning	
	M51111-01	Decal, Tradename	
OPTIONAL ACCESSORIES			
	HA1200	Hang-Up Thermostat	
	HA1200 <i>06</i>	Wheel Kit	

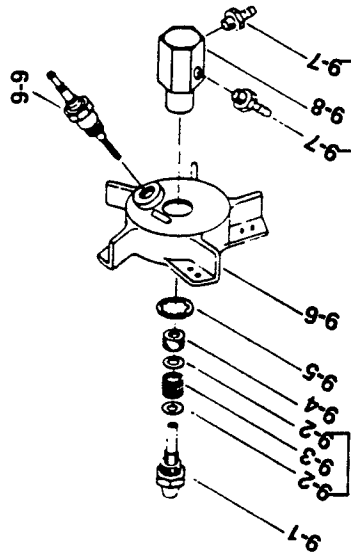
12

MOTOR PACKAGE ASSEMBLY

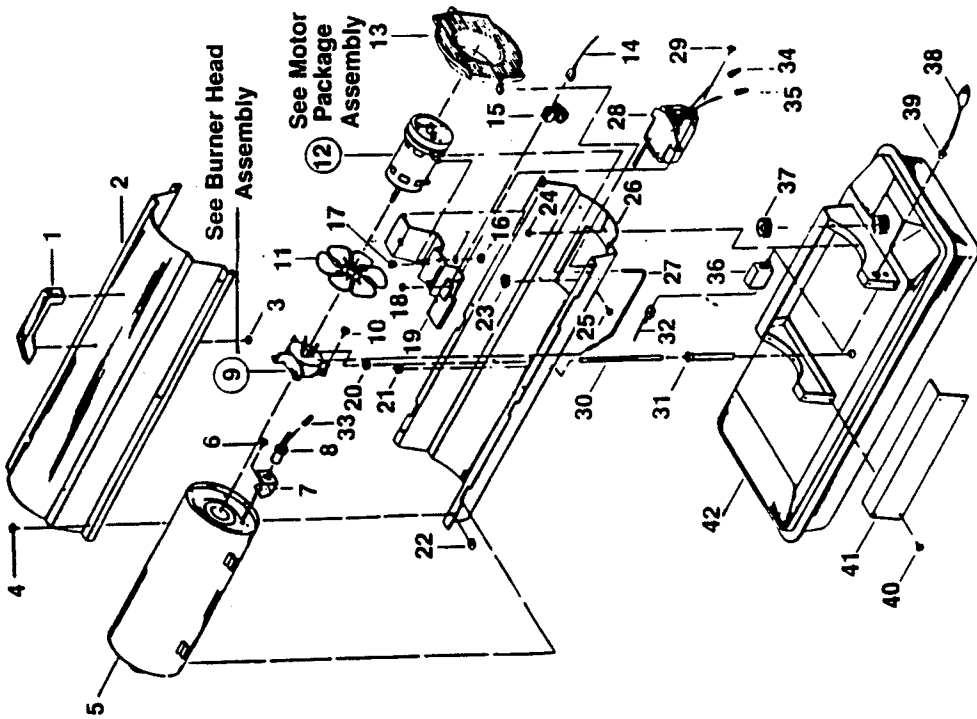
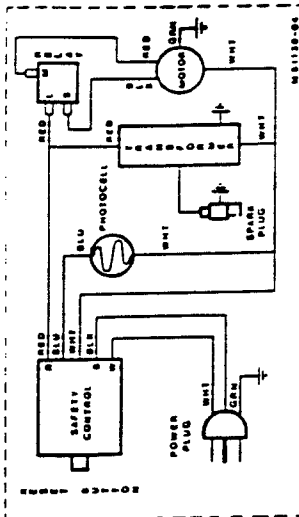


9

BURNER HEAD ASSEMBLY



WIRING DIAGRAM



HEATER EXPLODED VIEW

SPECIFICATIONS

R-70

OUTPUT Rating (BTU Per Hour)
 Fuel
 Fuel Tank Capacity, U.S. Gallons
 Fuel Consumption, Approx. U.S. Gal. Per Hour
 Electric Requirements
 Amperage (During Normal Run)
 Starting Amps

70,000
 kerosene, # fuel oil
 5.00
 0.52
 120 60Hz
 3.00
 8.00

R-70

Motor RPM
 Air Output (CFM)
 Air Pump Pressure
 Shipping Weight (Approx. Lbs.)
 Without Fuel
 Duct

3340
 1/4
 4.00
 44
 37
 No Duct Recommended

PORTABLE FORCED AIR HEATER

Illustrated Parts List

**REDDY
 HEATER
 R100**

IMPORTANT DO NOT USE KEY NUMBERS WHEN ORDERING SERVICE PARTS. ALWAYS ORDER COMPONENTS BY PART NUMBER AND DESCRIPTION. INCLUDE MODEL AND SERIAL NUMBERS.

KEY NO.	PART NO.	PART DESCRIPTION	QTY.
1	M51072-01AC	Shell, Upper	1
2	M15823-27	Screw, #10X½	6
3	M51075-01	Combustion Chamber <i>098512-07</i>	1
4	M16660	Bracket, Photo Cell	1
5	M10908-2	Screw, #6-32X3/8	2
6	M16656-10	Photo Cell	1
7		Burner Head Assembly (See #7 on Back)	1
7-1	M51120-01	Nozzle	1
7-2	M10659-1	Washer, Nozzle	2
7-3	M10809-1	Spring, Nozzle	1
7-4	M8882	Seal, Nozzle	1
7-5	M50924-03	Body, Burner Head	1
7-6	M50820-02	Fitting, Barb	2
7-7	M10962-2	Spark Plug	1
8	M11084-26	Screw, #10-12X3/8	3
9	M51153-01	Fan	1
10	SF4.25K	Setscrew, ¼-20	1
11	M23149-14	Motor & Pump Assembly (See #11 on Back)	1
11-1	M51131-01	Motor-Split Single Phase	
11-2	M8645	Pump Body	1
11-3	FHPF3-4C	Screw, #10-32X½	2
11-4	M22009	Insert, Rotor	1
11-5	M22456-1	Rotor, Pump	1
11-6	M50545	Cover, End Pump	1
11-7	M12179	Filter, Intake	1
11-8	M16545	Cover, End Filter	1
11-9	M8940	Ball, Steel ¼ dia.	1
11-10	M10993-1	Spring Relief	1
11-11	M27694	Screw, Adjusting	1
11-12	M22997	Plug	1
11-13	M12461-31	Screw, #10-32X1	4
11-14	M12244-1	Filter, Output	1
11-15	M12461-32	Screw, #10-32X1 1/8	6
11-16	M11637	Filter, Lint	1
11-17	M50820-02	Fitting, Barb	1
11-18	M8643	Blade	4

KEY NO.	PART NO.	PART DESCRIPTION	QTY.
12	M50631	Bumper, Rubber	2
13	M51074-01	Bracket, Motor	1
14	NJC-4C	Nut, Hex Jam	2
15	M51114-01	Guard, Fan	1
16	<i>098557-02</i>	Transformer, 5000 Volt	1
17	M11084-26	Screw, #10-12X3/8	2
18	M51345-01	Fuel Line	1
19	M51150-01	Filter, Fuel	1
20	M51151-01	Tube, Fuel Line	1
21	M10990-3	Bushing, Rubber	1
22	M50814-06	Airline, Rubber	1
23	M51073-01AC	Shell, Lower	1
24	M30865-02	Bushing	3
25	M50104-02	Bushing	1
26	M11084-26	Screw, #10-12X3/8	6
27	M11271-8	Nut, Tinnerman	6
28	M15823-37	Screw, #8X¼	1
29	M51115-01AA	Tank, Fuel	1
30	M51027-06	Cap, Fuel (Includes gasket)	1
31	M51122-01	Support-PCB	3
32	<i>09752801</i>	Control, DSI	1
33	M51157-01	Nut Hex 12mm	1
34	M11143-1	Bushing, Strain Relief	1
35	M10813-84	Cord, Power	1
36	M51077-01AA	Cover, Side	1
37	M11084-26	Screw, #10-12X3/8	4

PARTS AVAILABLE - NOT SHOWN

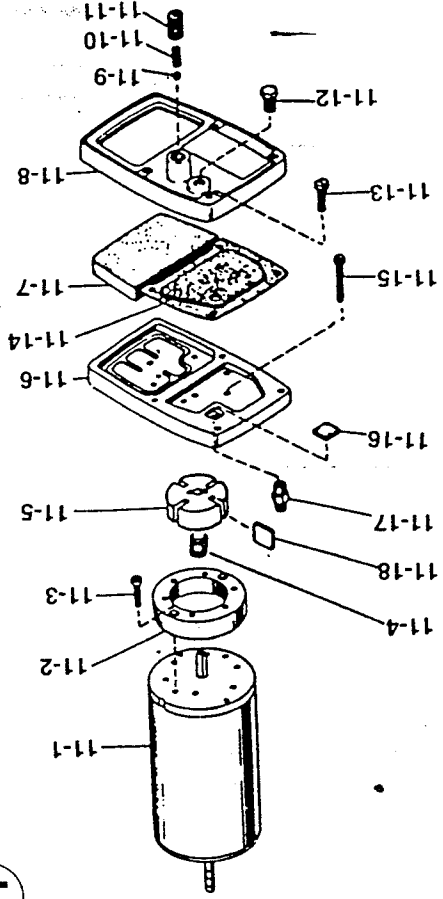
	M19457	Decal, Tradename	
	M19294	Wheels	2
	M51015-01	Axle	1
	M12342-3	Frame Support Wheel	1
	HA2203	Front Handle	1
	M12345-33	Mounting Screws-Wheel Support	8
	M28526	Nut Cap	2
	NTC-3C	Nut, Hex Lock 10-24	8

OPTIONAL ACCESSORIES

	HA2203	Handle	
	HA1200	Hang-Up Thermostat	

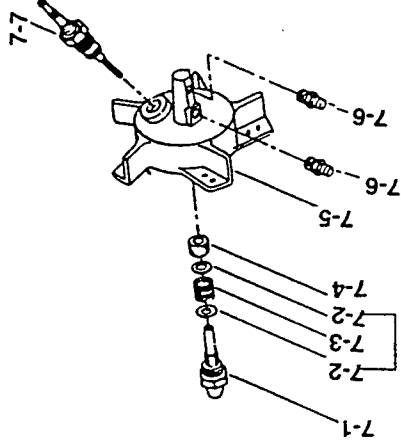
11

MOTOR PACKAGE ASSEMBLY

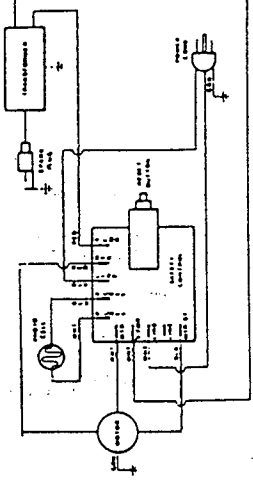


7

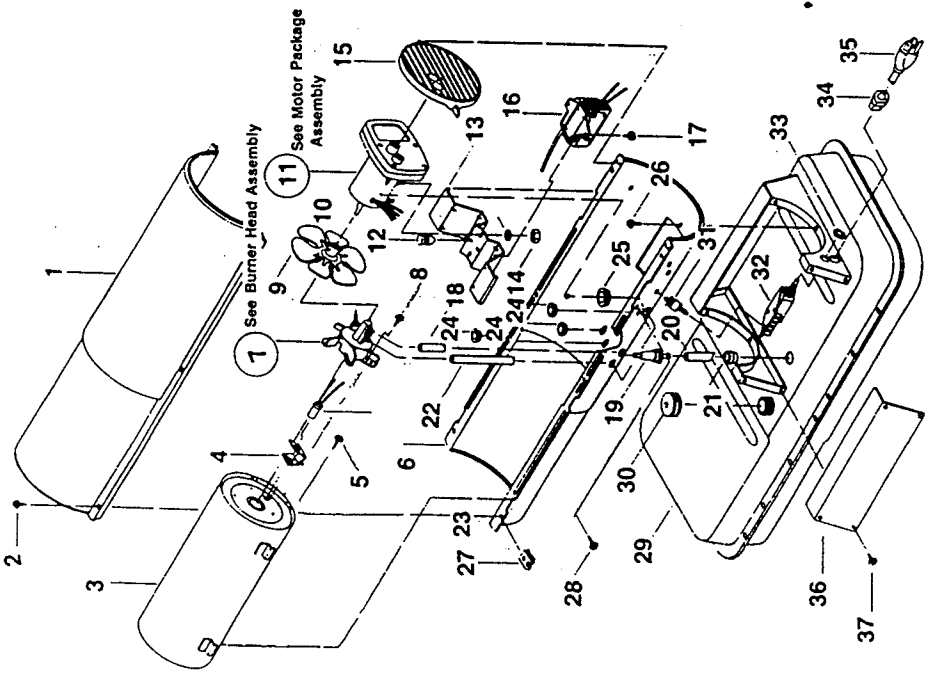
BURNER HEAD ASSEMBLY



WIRING DIAGRAM



HEATER EXPLODED VIEW



SPECIFICATIONS

<p>OUTPUT Rating (BTU Per Hour)</p> <p>Fuel</p> <p>Fuel Tank Capacity, U.S. Gallons</p> <p>Fuel Consumption, Approx. U.S. Gal. Per Hour</p> <p>Electric Requirements</p> <p>Amperage (During Normal Run)</p> <p>Starting Amps</p>	<p>R100</p> <p>100,000</p> <p>kerosene or #1 fuel oil</p> <p>9.00</p> <p>0.74</p> <p>120 60Hz.</p> <p>5.5</p> <p>10.0</p>	<p>Motor RPM</p> <p>Air Output (CFM)</p> <p>Air Pump Pressure</p> <p>Shipping Weight (Approx. Lbs.)</p> <p>Without Fuel (Approx. Lbs.)</p> <p>Duct</p>	<p>R100</p> <p>3450</p> <p>273</p> <p>4.00</p> <p>64.00</p> <p>55.00</p> <p>No Duct Recommended</p>
---	---	--	---

DESA INTERNATIONAL

Corporate Headquarters
P.O. Box 719
2701 Industrial Drive
Bowling Green, KY 42101

PFA-4

Issued: September, 1983
Revised: August, 1984

PORTABLE FORCED AIR HEATER

Illustrated Parts List

REDDY HEATER M150S

IMPORTANT DO NOT USE KEY NUMBERS WHEN ORDERING SERVICE PARTS. ALWAYS ORDER COMPONENTS BY PART NUMBER AND DESCRIPTION. INCLUDE MODEL AND SERIAL NUMBERS

KEY NO.	PART NO.	PART DESCRIPTION	QTY.
1	M17014AC	Shell, Upper	1
2	M16679	Shield, Heat	1
3	M16887-6	Combustion Chamber	1
4	M16656-4	Photo Cell Assembly	1
5	M16660	Bracket, Photo Cell	1
6		Burner Head Assembly (See #6 on back)	1
6-1	M16790-12	Fuel Line	1
6-2	M19630	Filter, Screen Fuel	1
6-3	M13849	Nut, Flare	1
6-4	M16741-18	Ring, Retaining	1
6-5	M16791	Connector, Male	1
6-6	M50817-01	Fitting, Barb	1
6-7	M8882	Seal, Nozzle	1
6-8	M10659-1	Washer, Nozzle	2
6-9	M10809-1	Spring, Nozzle	1
6-10	M18022	Nozzle, 1.1 GPH	1
6-11	M16535	Adapter, Nozzle	1
6-12	M10962-2	Spark Plug	1
6-13	M23090	Body, Burner Head	1
7	M50814-03	Airline	1
8	M12461-27	Screw, #10-32X $\frac{1}{2}$	1
9	M50873-01	Clip, Airline	2
10	M17058	Fan	1
11	SF4 2.5K	Setscrew, $\frac{1}{4}$ -20	2
12	M16661	Clamp, Motor	4
13	M51043-01	Screw, $\frac{1}{4}$ -20X1 $\frac{1}{2}$	2
14	WLM-4C	Lockwasher, $\frac{1}{4}$ in.	2
15	NPC-4C	Nut, $\frac{1}{4}$ -20	2
16	078892-02	Motor & Pump Assembly (See #16 on back)	1
16-1	M16545	Cover, End Filter	1
16-2	M12461-31	Screw, #10-32X1	4
16-3	M12179	Filter, Intake	1
16-4	M12244-1	Filter, Output	1
16-5	M11637	Filter, Lint	1
16-6	M50545	Cover, End Pump	1
16-7	M12461-32	Screw, #10-32X1 8	6
16-8	M8643-3	Blade	4

KEY NO.	PART NO.	PART DESCRIPTION	QTY.
16-9	M22456-3	Rotor	1
16-10	M22009	Insert, Rotor	1
16-11	M8645-3	Body, Pump	1
16-12	FHPF3-7C	Screw, #10-32X7 8	2
16-13	M50817-01	Fitting, Barb	1
16-14	M22997	Plug	1
16-15	M27694	Screw, Adjusting	1
16-16	M10993-01	Spring, Relief	1
16-17	M8940	Ball, $\frac{1}{4}$ dia.	1
16-18	M51159-01	Motor	1
17	M12828	Bracket, Shell Support	1
18	M11271-6	Nut, Tinnerman	8
19	M16810D	Shell, Lower	1
20	M11084-27	Screw, #10-12X $\frac{1}{2}$	19
21	M16645	Bracket, Motor	1
22	1000577	Grommet	1
23	M16697-02	Transformer, 5000 Volt	1
24	M11143-1	Bushing, Strain Relief	1
25	M10813-74	Cord, Power	1
26	M13942-7	Wire, Nut (Small)	2
27	M51011-01AA	Tank, Fuel	1
28	M51027-06	Cap, Fuel (Includes gasket)	1
29	M10990-3	Bushing, Fuel Line	1
30	M27417	Plug, Drain-(Includes "O" Ring)	1
31	1000576	Grommet	2
32	M12462-17	Relay	1
33	M25296-1	Bracket, Relay	1
34	M11084-27	Screw, #10-12X $\frac{1}{2}$	1
35	M50671-01	Control, Flame Out	1

PARTS AVAILABLE - NOT SHOWN

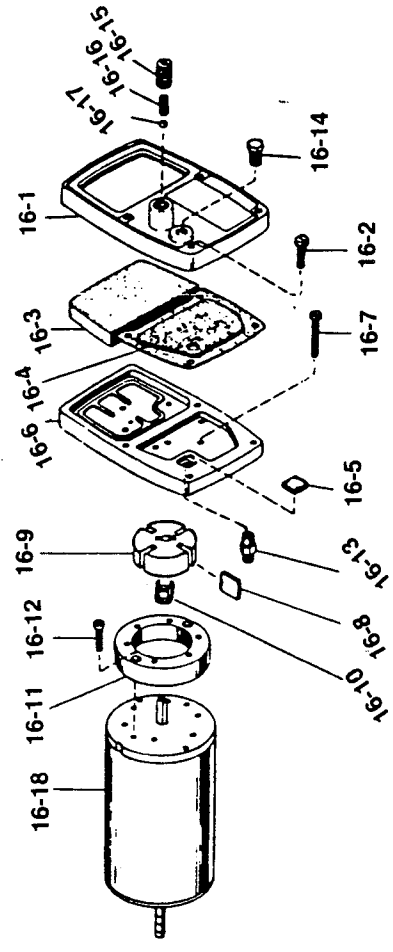
M19294-2	Wheels	2
M51015-01	Axle	1
M12342-3	Frame Support Wheel	1
HA2203	Front Handle	1
M12345-33	Mounting Screws-Wheel Support	8
M28526	Nut Cap	2
NTC-3C	Nut, Hex Lock 10-24	8

OPTIONAL ACCESSORIES

HA2203	Handle	
HA1200	Hang-Up Thermostat	

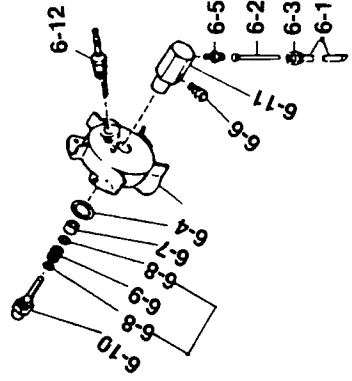
16

MOTOR PACKAGE ASSEMBLY

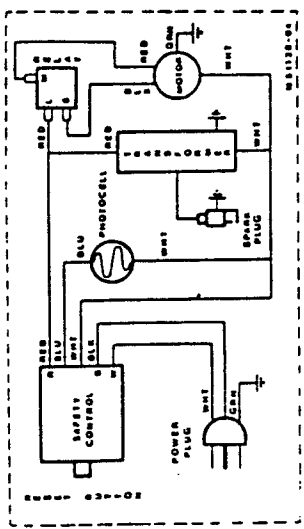


6

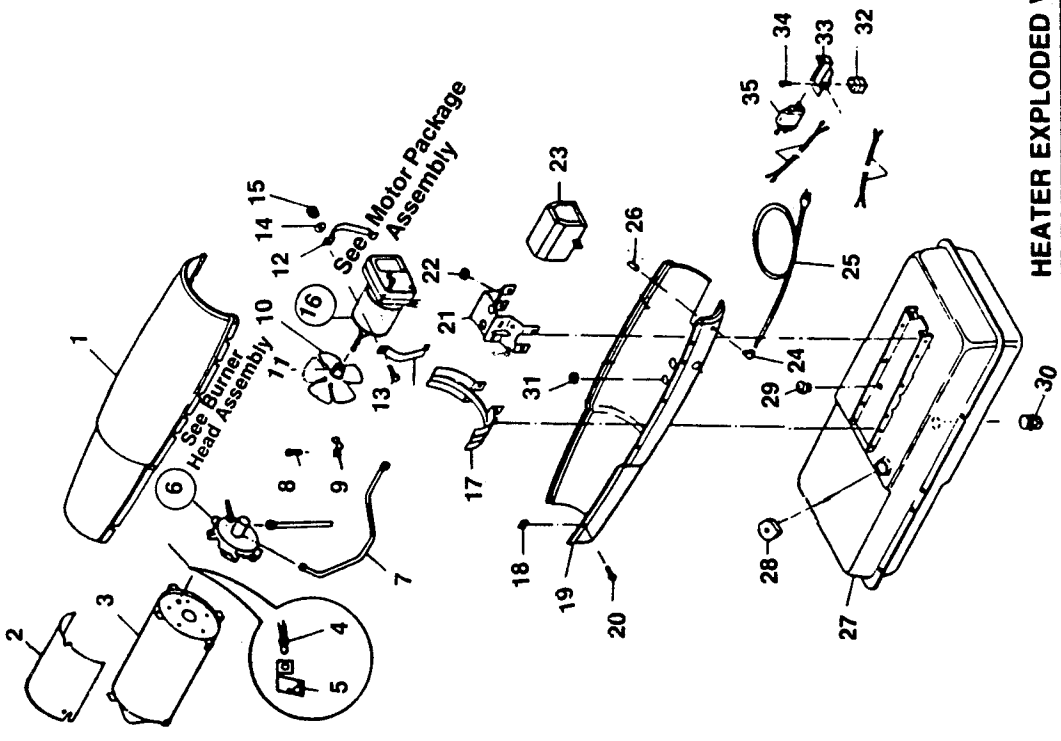
BURNER HEAD ASSEMBLY



WIRING DIAGRAM



HEATER EXPLODED VIEW



SPECIFICATIONS

	M150S	M150S
OUTPUT Rating (BTU Per Hour)	150,000	Motor RPM
Fuel	kerosene or #1 fuel oil	Air Output (CFM)
Fuel Tank Capacity, U.S. Gallons	13.50	Air Pump Pressure
Fuel Consumption, Approx. U.S. Gal. Per Hour	1.10	Shipping Weight (Approx. Lbs.)
Electric Requirements	120 60Hz.	Without Fuel (Approx. Lbs.)
Amperage (During Normal Run)	5.00	Duct
Start-up Amps	10.00	No Duct Recommended