

SEARS

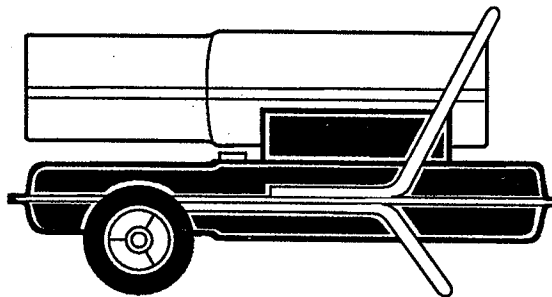
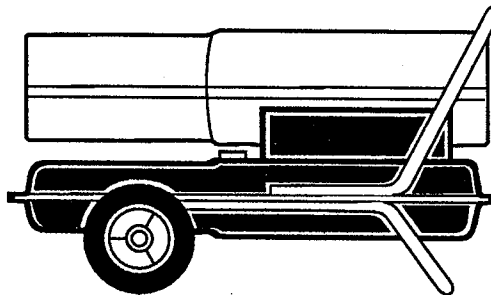
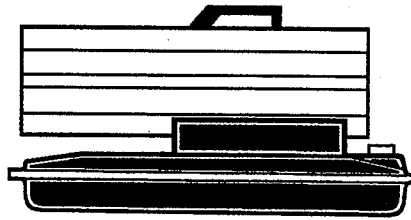
OWNER'S MANUAL

**MODEL
NUMBERS:**
583.356500
583.356510
583.356530
583.356540

SERIAL NO. _____
(owner - write in No.)

CAUTION:
Read Rules for
Safe Operation
and Instructions
Carefully

SAVE THIS MANUAL FOR
FUTURE REFERENCE



Heater Sizes:
35,000 50,000 100,000
and 150,000 BTU/Hr

Operation and Maintenance
Instructions with Parts List



Pump Pressure Adjustment

1. Remove pressure gauge plug from filter end cover.
2. Install accessory pressure gauge (part number 583.35802).
3. Start heater (see *Operation*, page 7). Allow motor to reach full speed.
4. Adjust pressure. Turn relief valve to right to increase pressure. Turn relief valve to left to decrease pressure. See specifications at right for correct pressure for each model.
5. Remove pressure gauge. Replace pressure gauge plug in filter end cover.

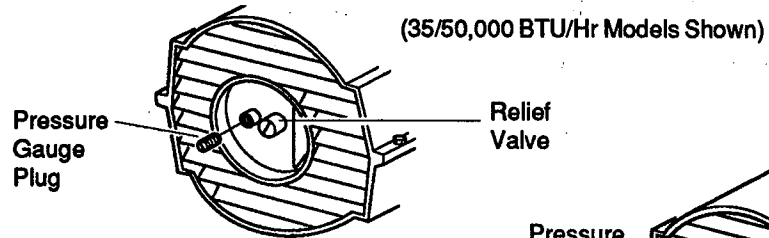


Figure 13 - Pressure Gauge Plug Removal

Model	Pump Pressure
35,000 BTU/Hr	3.0 PSI
50,000 BTU/Hr	3.6 PSI
100,000 BTU/Hr	4.0 PSI
150,000 BTU/Hr	5.0 PSI

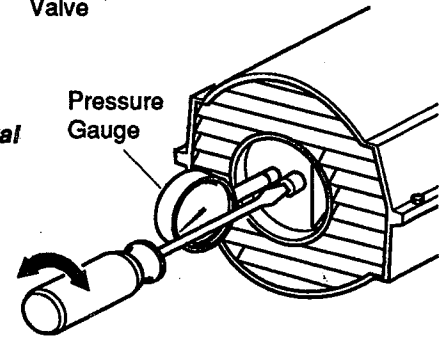


Figure 14 - Adjusting Pump Pressure

Fuel Filter

1. Remove side cover screws using 5/16" nut-driver.
2. Remove side cover.
3. Pull upper fuel line off fuel filter neck.
4. Carefully pry bushing, fuel filter, and lower fuel line (100/150,000 BTU/Hr models only) out of fuel tank.
5. Wash fuel filter with clean fuel and replace in tank.
6. Attach upper fuel line to fuel filter neck.
7. Replace side cover.

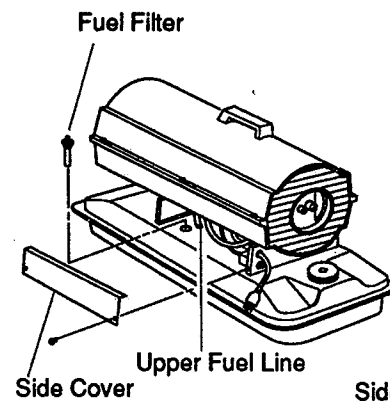


Figure 15 - Fuel Filter Removal, 35/50,000 BTU/Hr Models

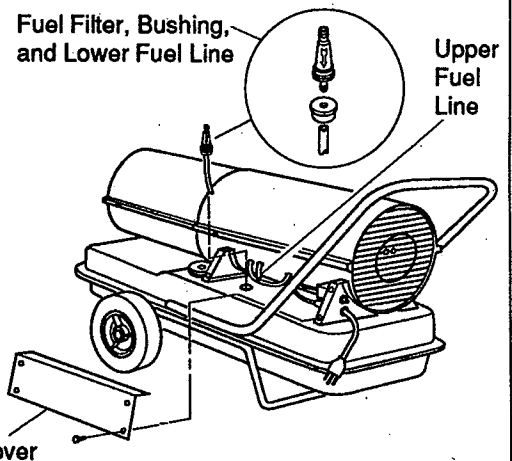


Figure 16 - Fuel Filter Removal, 100/150,000 BTU/Hr Models

Spark Plug

(35/50,000 BTU/Hr Models)

1. Remove upper shell (see page 10).
2. Remove fan (see page 10).
3. Remove fuel and air line hoses from nozzle assembly.
4. Remove spark plug cable from spark plug.
5. Remove two (2) screws using 5/16" nut-driver and remove burner strap.
6. Place hex-body of spark plug into vise and tighten.
7. Remove spark plug mounting nut using 11/16" open-end wrench.
8. Remove burner strap from spark plug.
9. Clean and regap spark plug electrodes to .055" gap.
10. Replace burner strap onto spark plug. Rotate burner strap to position spark plug electrodes (see Figure 19, page 12).

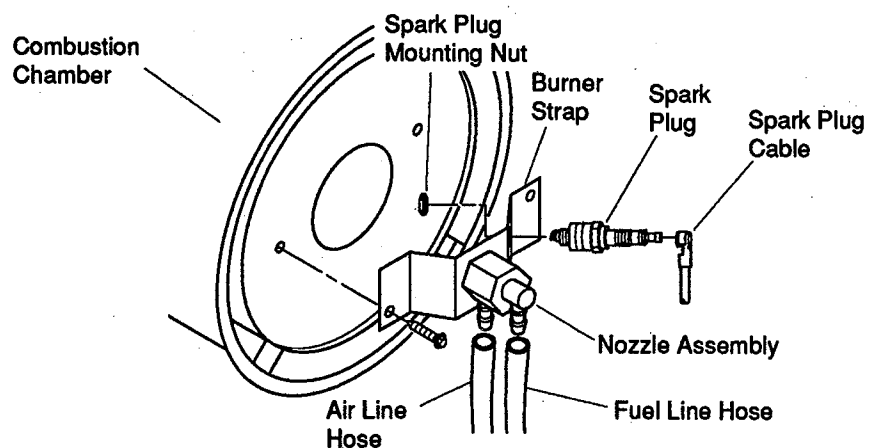


Figure 17 - Spark Plug Removal, 35/50,000 BTU/Hr Models

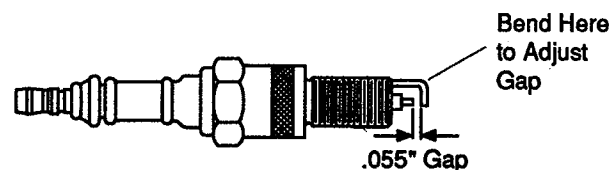


Figure 18 - Spark Plug Gap, 35/50,000 BTU/Hr Models

Continued

(Pump Rotor, continued)

10. Install blades, pump plate, air filters, and filter end cover.
11. Replace fan guard and upper shell.
12. Adjust pump pressure (see page 11).

Note: If rotor is still binding, proceed as follows.

13. Perform steps 1 thru 6 (see page 13).
14. Place fine grade sandpaper (600 grit) on flat surface. Sand rotor lightly in "figure 8" motion four times (see Figure 30).
15. Reinstall insert and rotor.
16. Perform steps 10 thru 12 above.

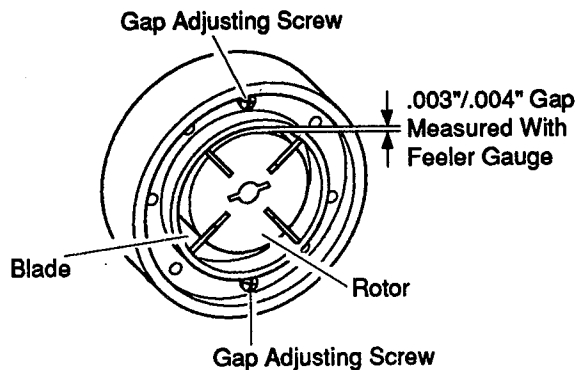


Figure 29 - Gap Adjusting Screw Locations

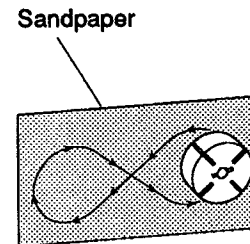


Figure 30 - Sanding Rotor

SPECIFICATIONS

Output Rating (BTU/Hr.)	35,000	50,000	100,000	150,000
Fuel	Use Only Kerosene or No. 1 Fuel Oil			
Fuel Tank Capacity (U.S. Gal.)	3.0	4.0	9.0	13.5
Fuel Consumption (Gal. Per Hr.)	.26	.37	.74	1.10
Electric Requirements	120 V/60 Hz (Same All Models)			
Amperage (Normal Run)	2.0	2.0	4.5	4.5
Hot Air Output (CFM)	165	165	480	500

WIRING DIAGRAMS

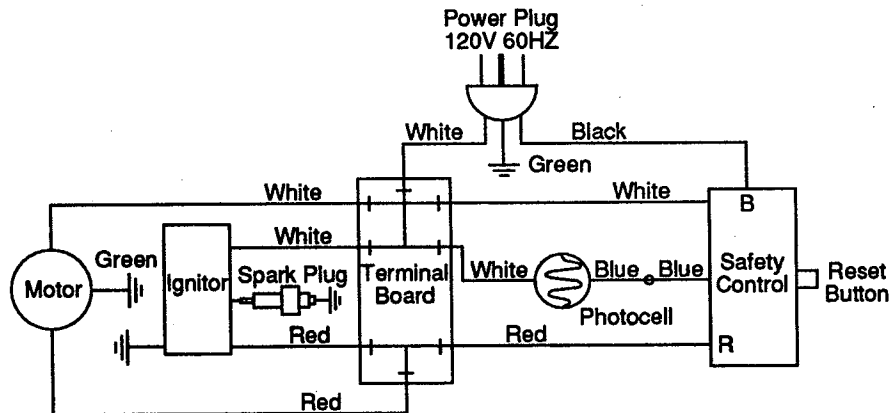


Figure 31 - Wiring Diagram, 35/50,000 BTU/Hr Models

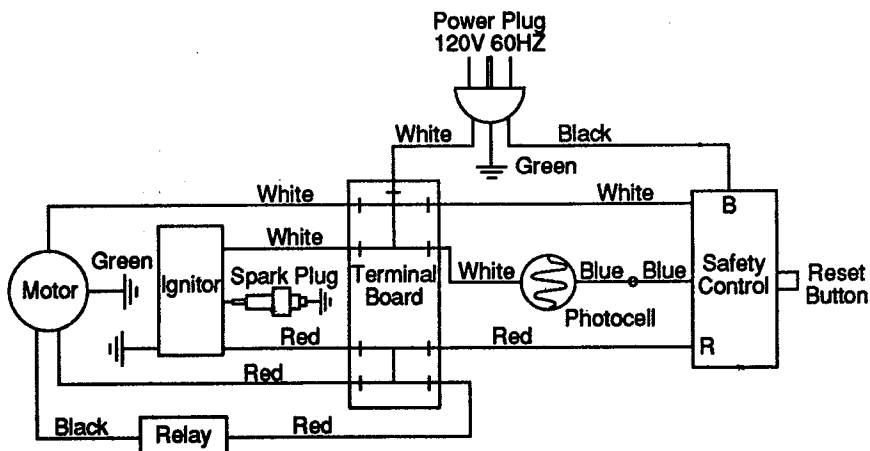
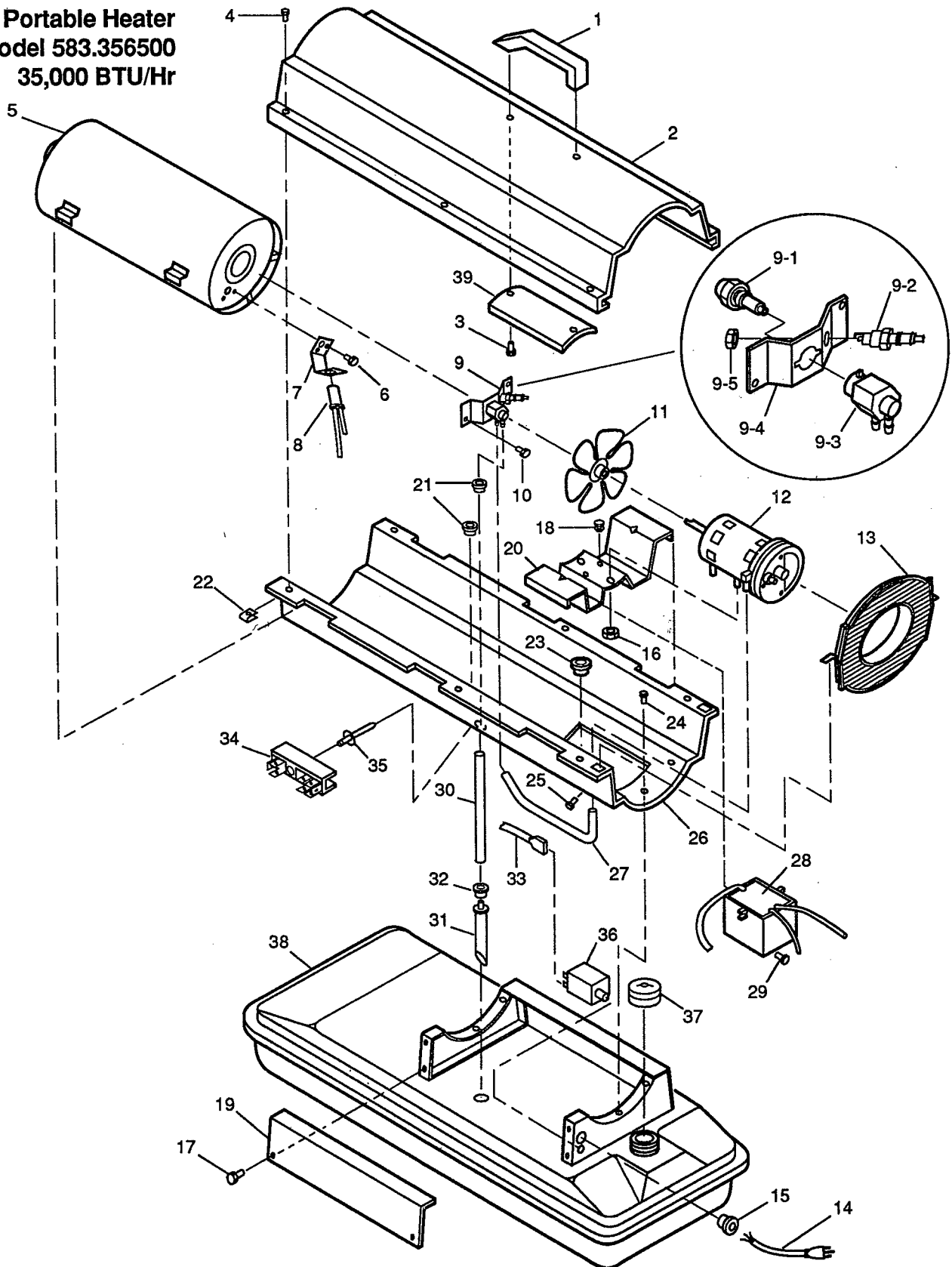


Figure 32 - Wiring Diagram, 100/150,000 BTU/Hr Models

ILLUSTRATED PARTS BREAKDOWN

Sears Portable Heater
Model 583.356500
35,000 BTU/Hr

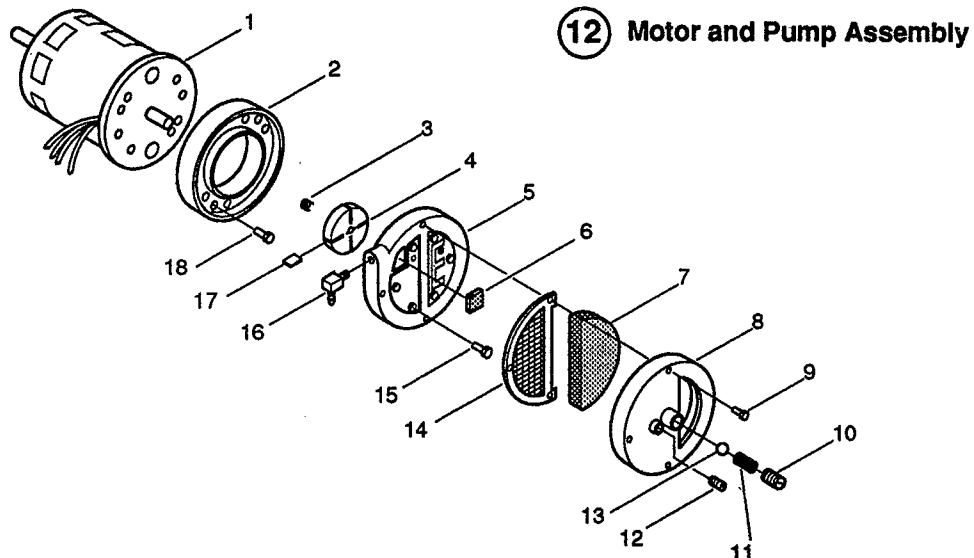


PARTS LIST

Sears Portable Heater
Model 583.356500
35,000 BTU/Hr

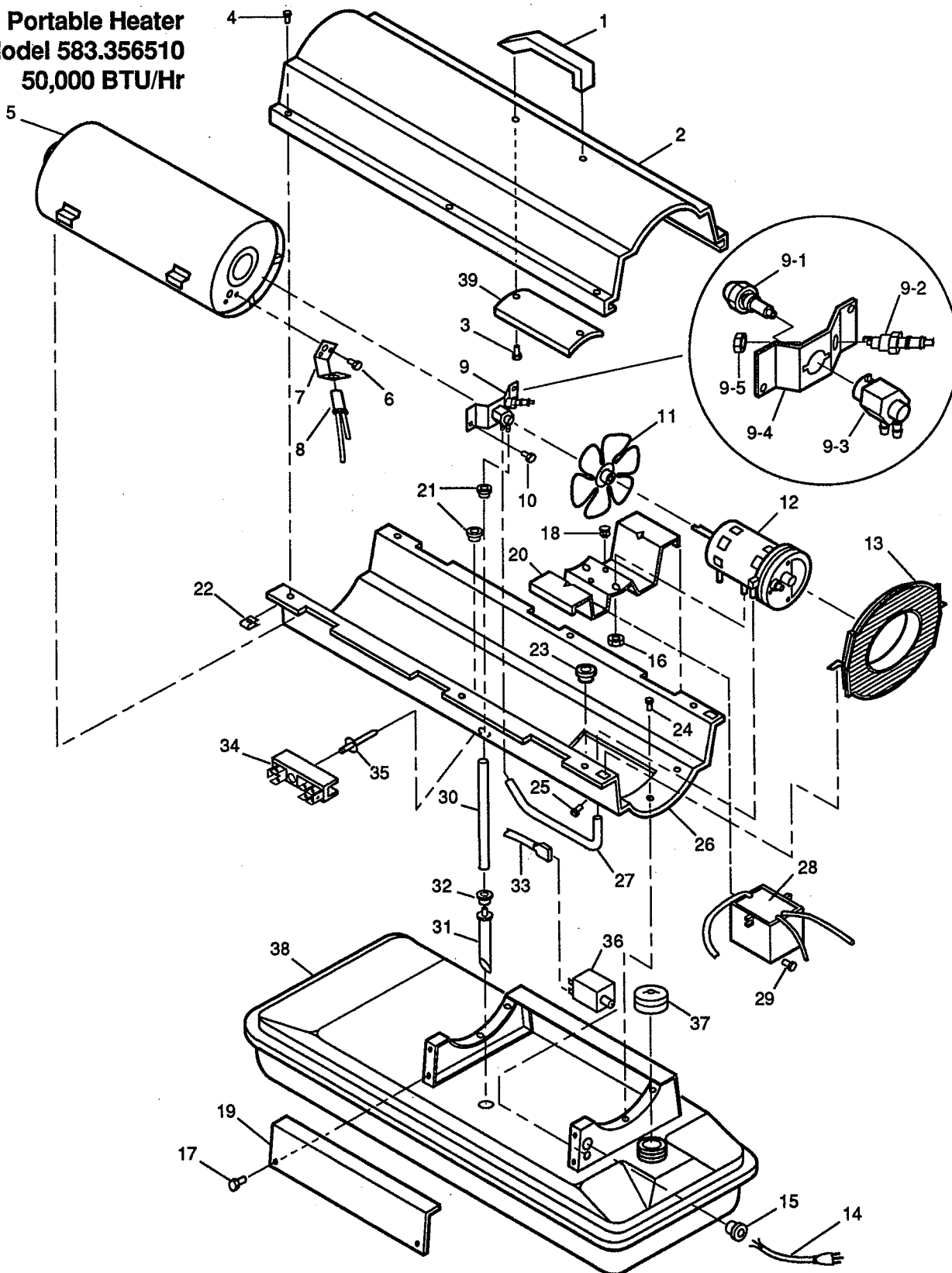
KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51104-01	Handle	1	13	M51105-01	Fan Guard	1
2	098511-156	Upper Shell	1	14	098219-18	Power Cord	1
3	M11084-29	Screw, #10-16 x 3/4"	2	15	M11143-1	Strain Relief Bushing	1
4	M15823-27	Screw, #10-16 x 1/2"	6	16	NTC-4C	Hex Lock Nut, 1/4-20	2
5	098512-05	Combustion Chamber	1	17	M11084-26	Screw, #10-16 x 3/8"	2
6	M10908-2	Screw, #6-32 x 3/8"	2	18	M50631	Rubber Bumper	2
7	M16660	Photocell Bracket	1	19	M50899-03AA	Side Cover	1
8	HA3019	Photocell Assembly	1	20	098138-01	Motor Bracket	1
9	**	Burner Head Assembly	1	21	M30865-02	Bushing	2
9-1	HA3006	Nozzle	1	22	M11271-8	Clip Nut	6
9-2	HA3013	Spark Plug	1	23	M50104-02	Bushing	1
9-3	079980-01	Nozzle Adapter	1	24	M11084-26	Screw, #10-16 x 3/8"	6
9-4	097125-01	Bracket	1	25	M15823-37	Screw, #8-18 x 1/4"	1
9-5	M29824	Nut, 14mm	1	26	098511-155	Lower Shell	1
10	M11084-26	Screw, #10-16 x 3/8"	2	27	M29652-04	Rubber Airline	1
11	M30884	Fan	1	28	098557-06	Ignitor Kit	1
12	**	Motor and Pump Assembly	1	29	M11084-29	Screw, #10-16 x 3/4"	2
12-1	097073-02	Motor	1	30	M29652-05	Fuel Line	1
12-2	079975-01	Pump Body	1	31	M50876-04	Fuel Filter (With Bushing)	1
12-3	M22009	Insert	1	32	M10990-3	Rubber Bushing	1
12-4	M22456-1	Rotor	1	33	M16841-57	Wire Assembly (Red, 6")	1
12-5	M29608	Pump End Cover	1	34	099125-02	Terminal Board	1
12-6	M29632	Lint Filter	1	35	099157-01	Rivet	1
12-7	M29633	Intake Filter	1	36	HA3003	Safety Control	1
12-8	M29609	Filter End Cover	1	37	097702-01	Fuel Cap (Includes Gasket)	1
12-9	M12461-31	Screw, #10-32 x 1"	3	38	098513-23	Fuel Tank	1
12-10	M27694	Adjusting Screw	1	39	M51108-01	Heat-Shell Shield	1
12-11	M10993-1	Pressure Relief Spring	1	PARTS AVAILABLE - NOT SHOWN			
12-12	M22997	Plug	1				
12-13	M8940	Steel Ball, 1/4" diameter	1		097072-04	General Information Decal	
12-14	M29612-01	Output Filter	1		099454-01	Owner's Manual	
12-15	M12461-31	Screw, #10-32 x 1"	6				
12-16	M50016	Elbow, 90°	1				
12-17	M8643	Blade	4				
12-18	FHPF3-2C	Screw, #10-32 x 1/4"	2				

** Not available as an assembly.



ILLUSTRATED PARTS BREAKDOWN

Sears Portable Heater
Model 583.356510
50,000 BTU/Hr

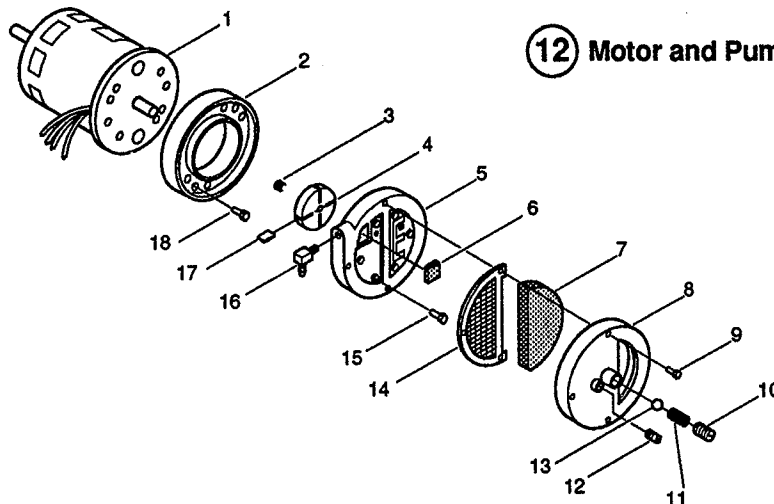


PARTS LIST

Sears Portable Heater
Model 583.356510
50,000 BTU/Hr

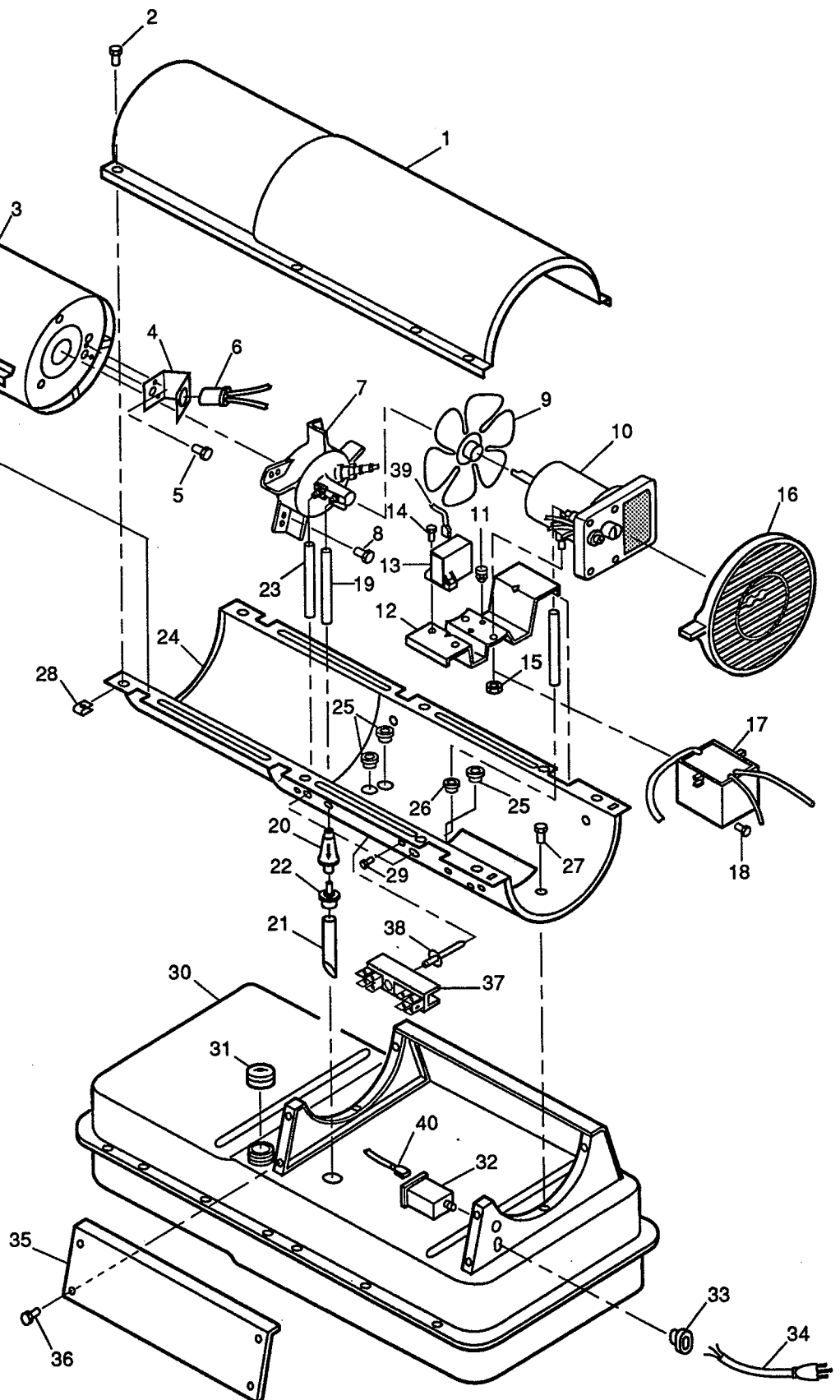
KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51104-01	Handle	1	13	M51105-01	Fan Guard	1
2	098511-156	Upper Shell	1	14	098219-18	Power Cord	1
3	M11084-29	Screw, #10-16 x 3/4"	2	15	M11143-1	Strain Relief Bushing	1
4	M15823-27	Screw, #10-16 x 1/2"	6	16	NTC-4C	Hex Lock Nut, 1/4-20	2
5	098512-13	Combustion Chamber	1	17	M11084-26	Screw, #10-16 x 3/8"	2
6	M10908-2	Screw, #6-32 x 3/8"	2	18	M50631	Rubber Bumper	2
7	M16660	Photocell Bracket	1	19	M50899-03AA	Side Cover	1
8	HA3019	Photocell Assembly	1	20	098138-01	Motor Bracket	1
9	**	Burner Head Assembly	1	21	M30865-02	Bushing	2
9-1	HA3007	Nozzle	1	22	M11271-8	Clip Nut	6
9-2	HA3013	Spark Plug	1	23	M50104-02	Bushing	1
9-3	079980-01	Nozzle Adapter	1	24	M11084-26	Screw, #10-16 x 3/8"	6
9-4	097125-01	Bracket	1	25	M15823-37	Screw, #8-18 x 1/4"	1
9-5	M29824	Nut, 14mm	1	26	098511-155	Lower Shell	1
10	M11084-26	Screw, #10-16 x 3/8"	2	27	M29652-04	Rubber Airline	1
11	M30884	Fan	1	28	098557-06	Ignitor Kit	1
12	**	Motor and Pump Assembly	1	29	M11084-29	Screw, #10-16 x 3/4"	2
12-1	097073-02	Motor	1	30	079973-01	Fuel Line	1
12-2	079975-01	Pump Body	1	31	M50876-02	Fuel Filter (With Bushing)	1
12-3	M22009	Insert	1	32	M10990-3	Rubber Bushing	1
12-4	M22456-1	Rotor	1	33	M16841-57	Wire Assembly (Red, 6")	1
12-5	M29608	Pump End Cover	1	34	099125-02	Terminal Board	1
12-6	M29632	Lint Filter	1	35	099157-01	Rivet	1
12-7	M29633	Intake Filter	1	36	HA3003	Safety Control	1
12-8	M29609	Filter End Cover	1	37	097702-01	Fuel Cap (Includes Gasket)	1
12-9	M12461-31	Screw, #10-32 x 1"	3	38	098513-20	Fuel Tank	1
12-10	M27694	Adjusting Screw	1	39	M51108-01	Heat-Shell Shield	1
12-11	M10993-1	Pressure Relief Spring	1	PARTS AVAILABLE - NOT SHOWN			
12-12	M22997	Plug	1				
12-13	M8940	Steel Ball, 1/4" diameter	1				
12-14	M29612-01	Output Filter	1		097072-05	General Information Decal	
12-15	M12461-31	Screw, #10-32 x 1"	6		099454-01	Owner's Manual	
12-16	M50016	Elbow, 90°	1				
12-17	M8643	Blade	4				
12-18	FHPF3-2C	Screw, #10-32 x 1/4"	2				

** Not available as an assembly.



ILLUSTRATED PARTS BREAKDOWN

Sears Portable Heater
Model 583.356530
100,000 BTU/Hr

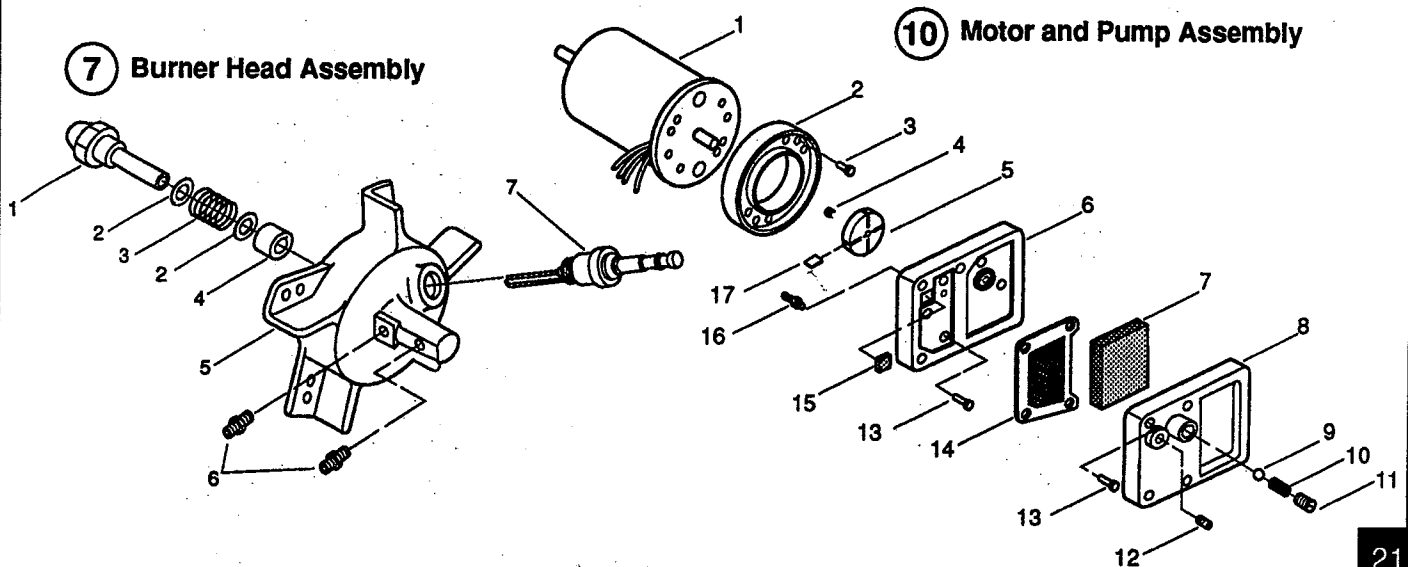


PARTS LIST

Sears Portable Heater
Model 583.356530
100,000 BTU/Hr

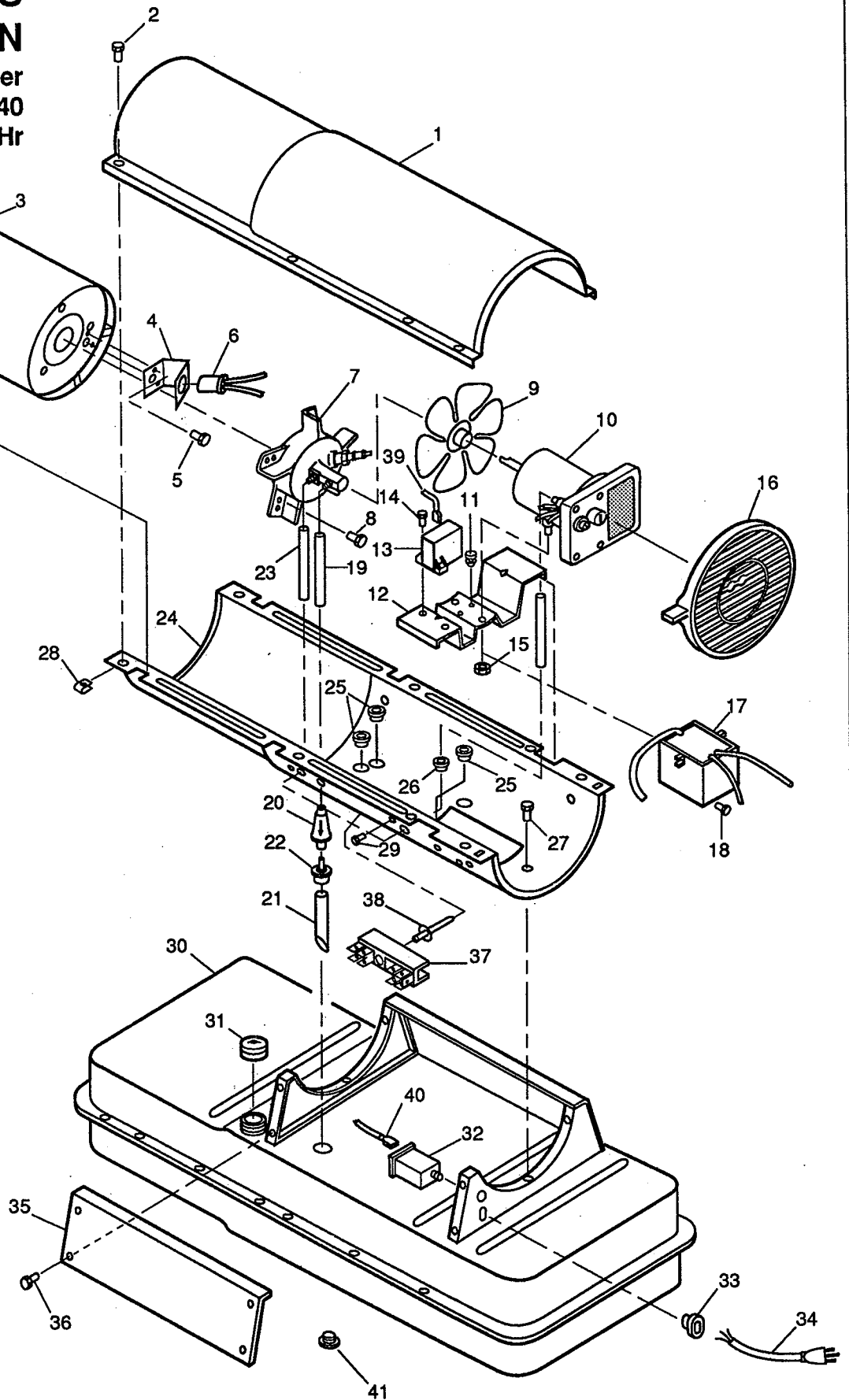
KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	098511-158	Upper Shell	1	11	M50631	Rubber Bumper	2
2	M15823-27	Screw, #10-16 x 1/2"	8	12	098138-02	Motor Mounting Bracket	1
3	098512-07	Combustion Chamber	1	13	097061-01	Solid State Relay	1
4	M16660	Photocell Bracket	1	14	M15823-39	Screw, #8-18 x 1/2"	2
5	M10908-2	Screw, #6-32 x 3/8"	2	15	NTC-4C	Hex Lock Nut, 1/4-20	2
6	HA3019	Photocell Assembly	1	16	M51114-01	Fan Guard	1
7	**	Burner Head Assembly	1	17	098557-06	Ignitor Kit	1
7-1	HA3009	Nozzle with Sleeve	1	18	M11084-29	Screw, #10-16 x 3/4"	2
7-2	M10659-1	Nozzle Washer	2	19	M51345-01	Fuel Line	1
7-3	M10809-1	Nozzle Spring	1	20	M51150-01	Fuel Filter	1
7-4	M8882	Nozzle Sleeve	1	21	M51151-01	Fuel Line Tube	1
7-5	M50924-03	Burner Head Body	1	22	M10990-3	Rubber Bushing	1
7-6	M50820-02	Barb Fitting	2	23	M50814-03	Airline	1
7-7	HA3012	Spark Plug	1	24	098511-157	Lower Shell	1
8	M11084-27	Screw, #10-16 x 1/2"	3	25	M30865-02	Bushing	3
9	M51153-01	Fan	1	26	M50104-02	Bushing	1
10	**	Motor and Pump Assembly	1	27	M11084-27	Screw, #10-16 x 1/2"	6
10-1	097300-02	Motor (Split Phase)	1	28	M11271-8	Clip Nut	8
10-2	079975-01	Pump Body	1	29	M15823-37	Screw, #8-18 x 1/4"	1
10-3	FHPF3-2C	Screw, #10-32 x 1/2"	2	30	098513-21	Fuel Tank	1
10-4	M22009	Rotor Insert	1	31	097702-01	Fuel Cap (Includes Gasket)	1
10-5	M22456-1	Pump Rotor	1	32	HA3003	Safety Control	1
10-6	M50545	Pump End Cover	1	33	M11143-1	Strain Relief Bushing	1
10-7	M12179	Intake Filter	1	34	098219-19	Power Cord	1
10-8	M16545	Filter End Cover	1	35	M51077-01AA	Side Cover	1
10-9	M8940	Steel Ball, 1/4" diameter	1	36	M11084-27	Screw, #10-16 x 1/2"	4
10-10	M10993-1	Relief Spring	1	37	099125-03	Terminal Board	1
10-11	M27694	Adjusting Screw	1	38	099157-01	Rivet	1
10-12	M22997	Plug	1	39	079010-18	Wire Assembly (Red, 14 1/2")	1
10-13	M12461-31	Screw, #10-32 x 1"	10	40	M16841-57	Wire Assembly (Red, 6")	1
10-14	M12244-1	Output Filter	1	PARTS AVAILABLE - NOT SHOWN			
10-15	M11637	Lint Filter	1				
10-16	M50820-02	Barb Fitting	1		097083-02	General Information Decal	
10-17	M8643	Blade	4		099454-01	Owner's Manual	

** Not available as an assembly.



ILLUSTRATED PARTS BREAKDOWN

Sears Portable Heater
Model 583.356540
150,000 BTU/Hr

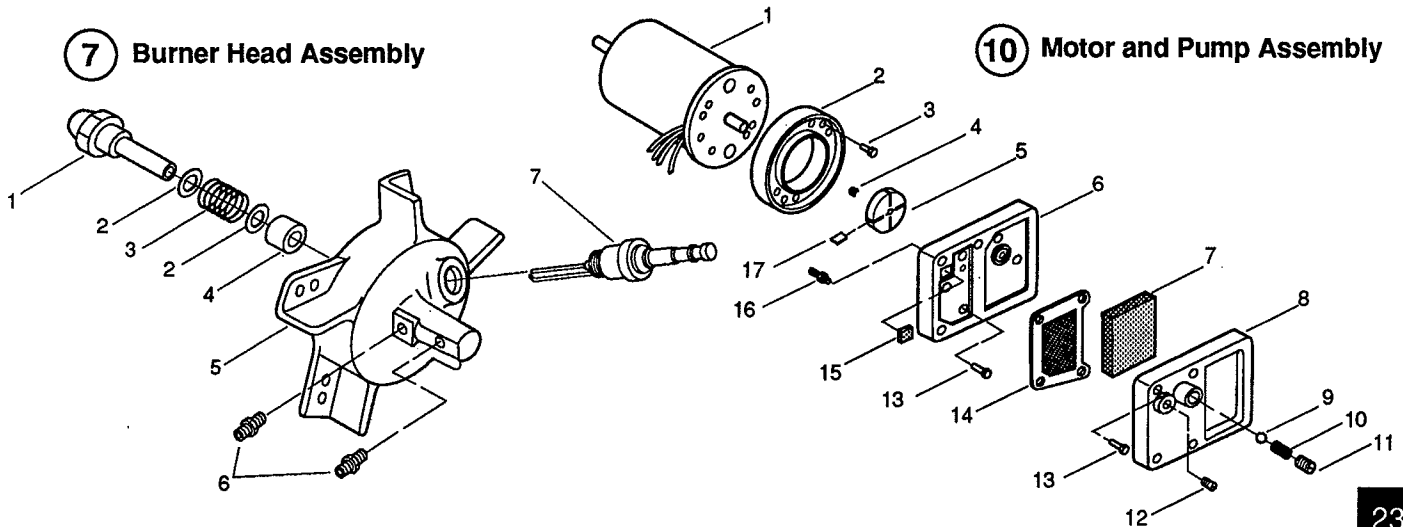


PARTS LIST

Sears Portable Heater
Model 583.356540
150,000 BTU/Hr

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	098511-158	Upper Shell	1	13	097061-01	Solid State Relay	1
2	M15823-27	Screw, #10-16 x 1/2"	8	14	M15823-39	Screw, #8-18 x 1/2"	2
3	098512-28	Combustion Chamber	1	15	NTC-4C	Hex Lock Nut, 1/4-20	2
4	099229-01	Photocell Bracket	1	16	M51114-01	Fan Guard	1
5	M10908-2	Screw, #6-32 x 3/8"	2	17	098557-06	Ignitor Kit	1
6	HA3019	Photocell Assembly	1	18	M11084-29	Screw, #10-16 x 3/4"	2
7	**	Burner Head Assembly	1	19	M51345-02	Fuel Line	1
7-1	099245-01	Nozzle	1	20	M51150-01	Fuel Filter	1
7-2	M10659-1	Nozzle Washer	2	21	M51151-02	Fuel Line Tube	1
7-3	M10809-1	Nozzle Spring	1	22	M10990-3	Rubber Bushing	1
7-4	M8882	Nozzle Sleeve	1	23	M50814-03	Airline	1
7-5	M50924-03	Burner Head Body	1	24	098511-157	Lower Shell	1
7-6	M50820-02	Barb Fitting	2	25	M30865-02	Bushing	3
7-7	HA3012	Spark Plug	1	26	M50104-02	Bushing	1
8	M11084-27	Screw, #10-16 x 1/2"	3	27	M11084-27	Screw, #10-16 x 1/2"	6
9	097293-01	Fan	1	28	M11271-8	Clip Nut	8
10	**	Motor and Pump Assembly	1	29	M15823-37	Screw, #8-18 x 1/4"	1
10-1	097300-02	Motor (Split Phase)	1	30	098513-55	Fuel Tank	1
10-2	079975-01	Pump Body	1	31	097702-01	Fuel Cap (Includes Gasket)	1
10-3	FHPF3-2C	Screw, #10-32 x 1/2"	2	32	HA3003	Safety Control	1
10-4	M22009	Rotor Insert	1	33	M11143-1	Strain Relief Bushing	1
10-5	M22456-1	Pump Rotor	1	34	098219-19	Power Cord	1
10-6	M50545	Pump End Cover	1	35	M51077-01AA	Side Cover	1
10-7	M12179	Intake Filter	1	36	M11084-27	Screw, #10-16 x 1/2"	4
10-8	M16545	Filter End Cover	1	37	099125-03	Terminal Board	1
10-9	M8940	Steel Ball, 1/4" diameter	1	38	099157-01	Rivet	1
10-10	M10993-1	Relief Spring	1	39	079010-18	Wire Assembly (Red, 14 1/2")	1
10-11	M27694	Adjusting Screw	1	40	M16841-57	Wire Assembly (Red, 6")	1
10-12	M22997	Plug	1	41	M27417	Drain Plug (Includes "O" Ring)	1
10-13	M12461-31	Screw, #10-32 x 1"	10	PARTS AVAILABLE - NOT SHOWN			
10-14	M12244-1	Output Filter	1				
10-15	M11637	Lint Filter	1		099230-01	Screw (for combustion chamber)	
10-16	M50820-02	Barb Fitting	1		097091-02	General Information Decal	
10-17	M8643	Blade	4		099454-01	Owner's Manual	
11	M50631	Rubber Bumper	2				
12	098138-02	Motor Mounting Bracket	1				

** Not available as an assembly.





**OWNER'S
MANUAL**

**HOW TO ORDER
REPAIR PARTS**

**MODEL
NUMBERS:
583.356500
583.356510
583.356530
583.356540**

**SEARS
PORTABLE HEATERS**

Now that you have purchased your portable heater, should a need ever exist for repair parts or service, simply contact any Sears service center. Be sure to provide all pertinent facts when you call or visit. The model and serial number of your portable heater will be found on a decal located on side of the Heater.

**WHEN ORDERING REPAIR PARTS,
ALWAYS GIVE THE FOLLOWING INFORMATION:**

1. Part Number
2. Model Number
3. Part Description
4. Name or Merchandise

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for "expedited handling."

Sears, Roebuck and Co., Chicago, IL 60684

Printed in U.S.A.

099454-01
Rev. B
5/91