

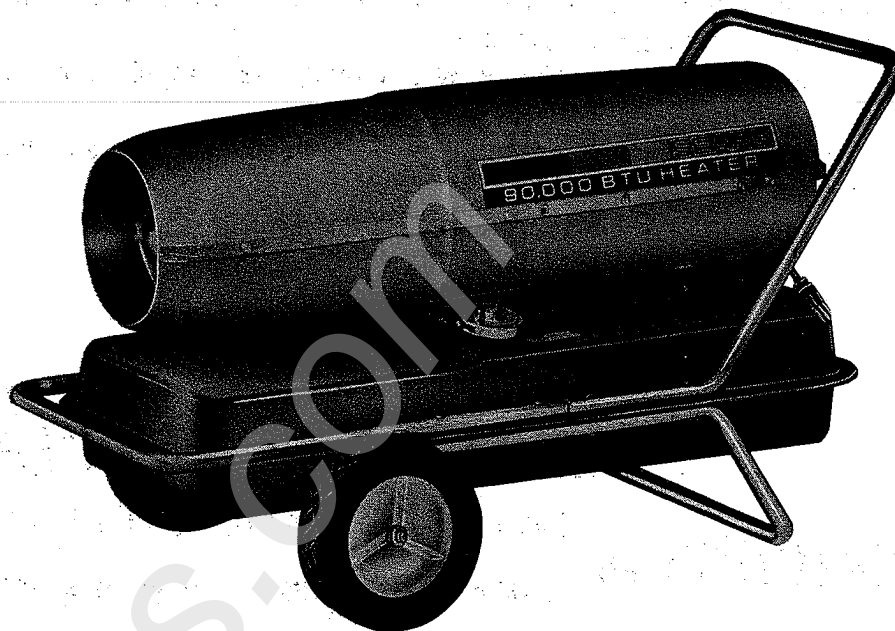
**Sears**

**OWNERS  
MANUAL**

MODEL NO.  
583.400040

SERIAL NO.

**CAUTION:**  
**Read Rules for  
Safe Operation  
and Instructions  
Carefully**



**90,000 BTU  
PORTABLE HEATER**

**Operation and Maintenance  
Instructions with Parts List**

Sears, Roebuck and Co., Chicago, Ill. 60684

## OPERATION (continued)

Plug the thermostat into a grounded outlet of 110-120V, 60 cycle (HZ) alternating current only. Then plug the heater into the thermostat receptacle as provided. The heater will start immediately provided that the surrounding air is cooler than the setting of the dial. The heater will continue to operate until the temperature of the surrounding air reaches the dial setting. It will then shut down and recycle when the temperature drops.

## RESET BUTTON

Should the heater fail to ignite or stops during operation, press the red reset button at the rear of the heater as indicated by arrow. The heater should start immediately.

Should it fail to start within 15-25 seconds, the red reset button will pop out and the safety control will cut off all power to the heater.

Disconnect the heater and check the reason for failure. Refer to the TROUBLE SHOOTING section for determining the possible cause and possible correction.

To restart heater wait 2 to 3 minutes for the safety control to cool, and then press the reset button.

## STOPPING



**CAUTION: AIR DISCHARGE END OF HEATER WILL BE HOT. ALLOW TO COOL BEFORE MOVING OR HANDLING.**

To stop heater, unplug the power cord from the outlet. For units equipped with thermostats, the dial may be turned to the off or NO HEAT position to stop operation.

When transporting disconnect power and allow the heater to cool.

## STORAGE

Drain fuel tank completely, prior to storing.

Remove and clean; or replace, air filters and spark plug as outlined in maintenance section.

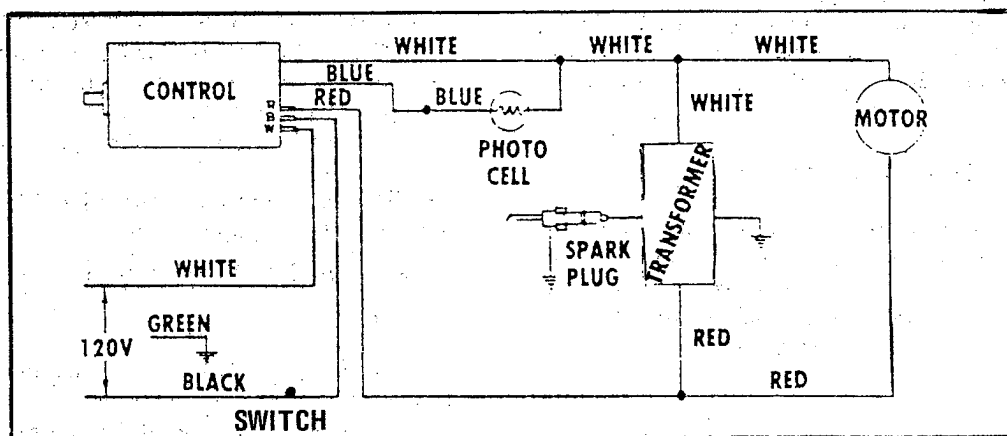
Store in a dry location free of corrosive fumes and dust.

When taking heater out of storage, it is suggested that the maintenance procedures be followed if not done prior to storage.

## WIRING DIAGRAM

The wiring diagram Figure P-1 is shown so the owner will be able to follow the schematic in the event of a replacement of an electrical component.

A wiring diagram decal is also placed in the underneath portion of the upper shell toward the rear.



Wiring Diagram, Figure P-1.

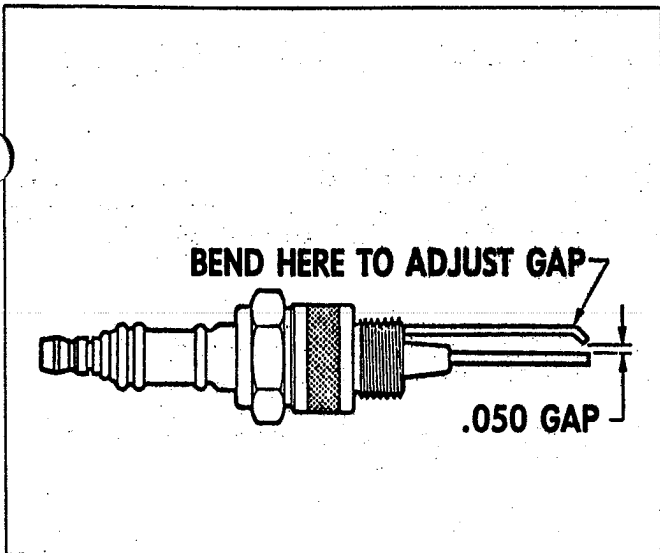


Figure P-4. Spark Plug Gap Setting

### MOTOR LUBRICATION

Oil Fan end of Motor once each heater season by placing several drops in the Oil Port located on the Motor Housing. See Figure P-5.

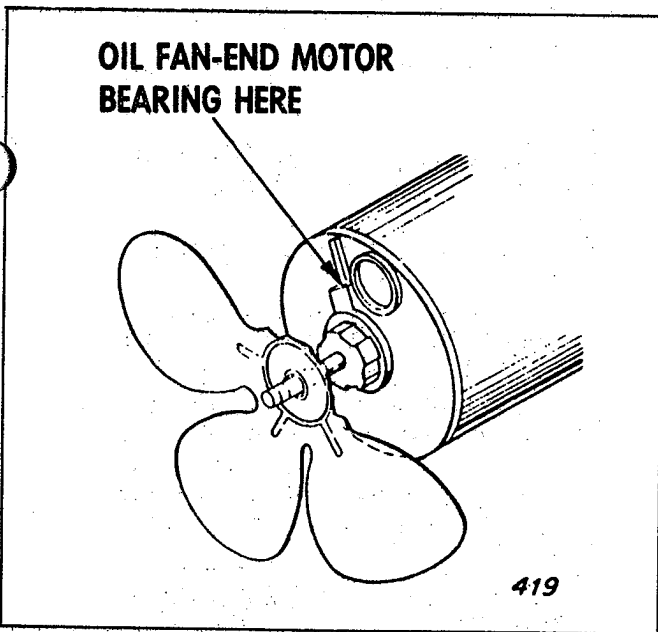


Figure P-5. Lubrication of Motor Bearing

### CLEANING THE FAN

Clean the fan blades whenever blades are noticeably dirty. A build-up of dirt will reduce the air supply and alter the combustion characteristics.

Wash the blades with a detergent and water. Be careful to prevent bending the blades. Dry the blades thoroughly.

### CLEANING THE FUEL FILTER

The fuel filter is located in the fuel filter tube.

Clean the filter at least twice a season, more often if necessary. Refer to the "TROUBLE SHOOTING" section for the need for filter cleaning.

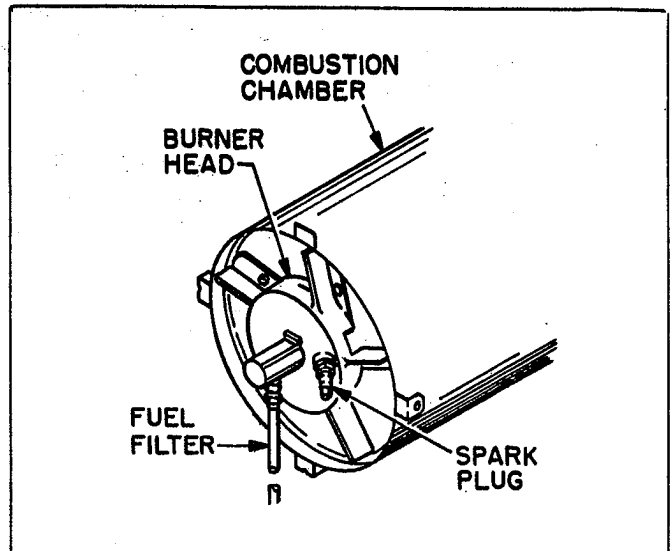


Figure P-6. Burner Head, Spark Plug, and Fuel Filter

Clean as follows:

Loosen the hex nut attaching the fuel filter tube to the nozzle adapter. Move tube to side of fitting.

Withdraw the filter element from the tube. Rinse the element thoroughly in clean fuel. Inspect for damage. Replace if necessary.

If the filter has been damaged, or cannot be washed clean, install a new element. Never operate the heater without the element in place.

Install the element into the filter tube. Make sure that it seats properly.

Position the filter tube carefully to seat on the male connector and thread the flared nut onto the connector. Tighten securely.

### SPARK PLUG

**CAUTION: MAKE CERTAIN THE POWER CORD IS NOT PLUGGED IN. THE SPARK PLUG WIRE IS AT HIGH VOLTAGE AND FAILURE TO UNPLUG THE UNIT CAN CAUSE SERIOUS SHOCK.**

At the beginning of each heater season and after every 300 hours of operation thereafter, remove the bracket, loosen nut and remove, clean and adjust spark plug electrodes. (See figure P-4)

If electrodes are burned or eroded, replace plug. Install plug in burner head as shown in figure P-10.

### ELECTRICAL

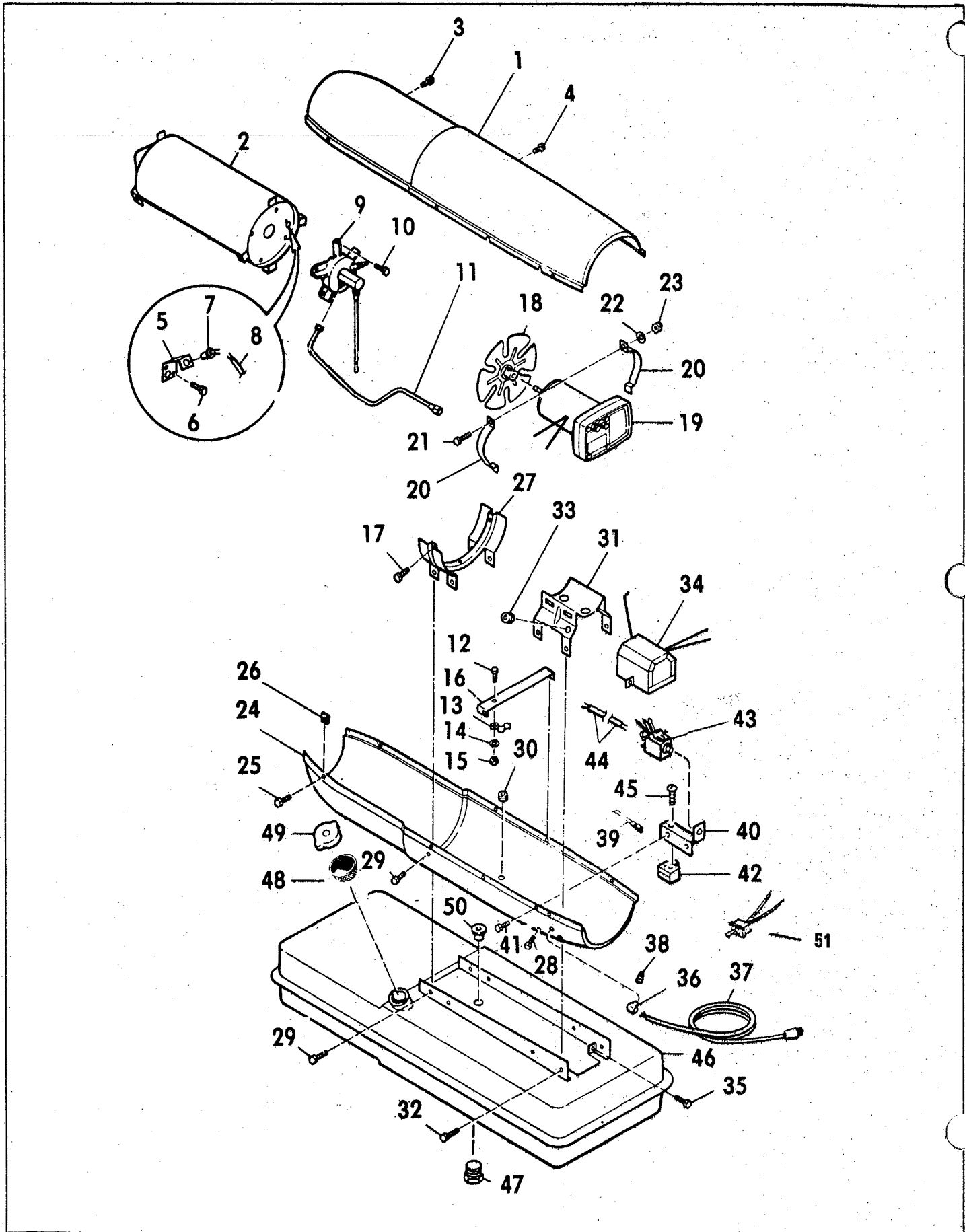
**CAUTION: DO NOT SERVICE HEATER WHEN POWER CORD IS PLUGGED IN.**

Electrical maintenance consists of inspection of electrical cord, wiring, connections and components for deterioration, damage and looseness.

Refer to wiring diagram located on under side of upper shell.

Repair or replace as required or see your nearest Sears Service Center.

**HEATER ASSEMBLY  
MODEL 583.400040  
FIGURE P-8 HEATER EXPLODED VIEW**



**HEATER ASSEMBLY**  
**FIGURE P-8 PARTS LIST**  
**MODEL 583.400040**

Key No.	Part Number	Part Name or Description	Qty.
1	M13134-3BB	Shell, Upper	1
2	M16781-4	Combustion Chamber	1
3	M11084-27	Screw, Self-tapping, hex hd., No. 10-12 x ½ in.	2
4	M11084-29	Screw, Self-tapping, hex hd., No. 10-12 x ¾ in.	2
5	M16660	Bracket, Photo Cell	1
6	STD600602	Screw, 6-32 x ¼ in.	2
7	M16656-4	Cell and Bushing Assy.	1
9	M23150-1	Burner Head Assy. (See Page 15 for details)	1
10	M11084-27	Screw, Self-tapping, hex hd., No. 10-12 x ½ in.	3
11	M16879	Air Line	1
12	STD511105	Screw, No. 10-32 x ½ in.	1
13	M24717	Clamp, Air Line	1
14	STD551110	Lockwasher	1
15	STD541110	Nut, Plain No. 10-32	1
16	M15807	Strap, Retainer	1
17	M11084-27	Screw, Self-tapping, hex hd., No. 10-12 x ½ in.	2
18	M23147	Fan	1
	STD502503	Setscrew, Socket hd., cup pt., ¼ - 28 (Furnished with Fan)	2
19	M23149-7	Motor Package Assy. (See Page 14 for details)	1
20	M16661	Clamp, Motor	4
21	STD522512	Screw, Hex hd., ¼ - 20 x 1 - ¼ in.	2
22	STD551125	Lockwasher, ¼ in.	2
23	STD541025	Nut, Plain Hex, ¼ - 20	2
24	M16777-02BB	Shell, Lower	1
25	M11084-27	Screw, Self-tapping, hex hd., No. 10-12 x ½ in.	6
26	M11271-6	Nut, Speed, Tinnerman	6
27	M12330	Bracket, Shell Support	1
28	M11084-27	Screw, Self-tapping, hex hd., No. 10-12 x ½ in.	4
29	M11084-29	Screw, Self-tapping, hex hd., No. 10-12 x ¾ in.	2
30	1000576	Grommet, Rubber	2
31	M25059-02	Bracket, Motor Support	1
32	M11084-27	Screw, Self-tapping, hex hd., No. 10-12 x ½ in.	6
33	1000576	Grommet, Rubber	1
34	M16697-02	Transformer, 5000V	1
35	M11084-27	Screw, Self-tapping, hex hd., No. 10-12 x ½ in.	2
36	M11143-1	Bushing, Strain Relief	1
37	M10813-82	Service Cord	1
38	M13942-7	Connector, Wire Nut	3
	M13942-5	Connector, Wire Nut	2
39	M9900-62	Wire Assy., Starting Relay	1
40	M25296-1	Bracket Mounting	1
41	M11084-27	Screw, Self-tapping, hex hd., No. 10-12 x ½ in.	1
42	M12462-6	Relay, Motor Starting	1
43	M50300-01	Safety Control Assembly	1
44	M9900-80	Wire Assy., Circuit Breaker	1
45	M11084-26	Screw, Hex hd., No. 10-12 x 3/8 in. (Grounding)	1
46	M27552-01AA	Fuel Tank	1
47	M27417	Drain Plug	1
48	M50323	Screen, Filler Neck	1
49	M23284	Cap, Fuel Tank	1
50	M10990-3	Bushing, Rubber	1
51	M50940-01	Switch, On-Off	1
	M50941-01	Plate Indicator	1

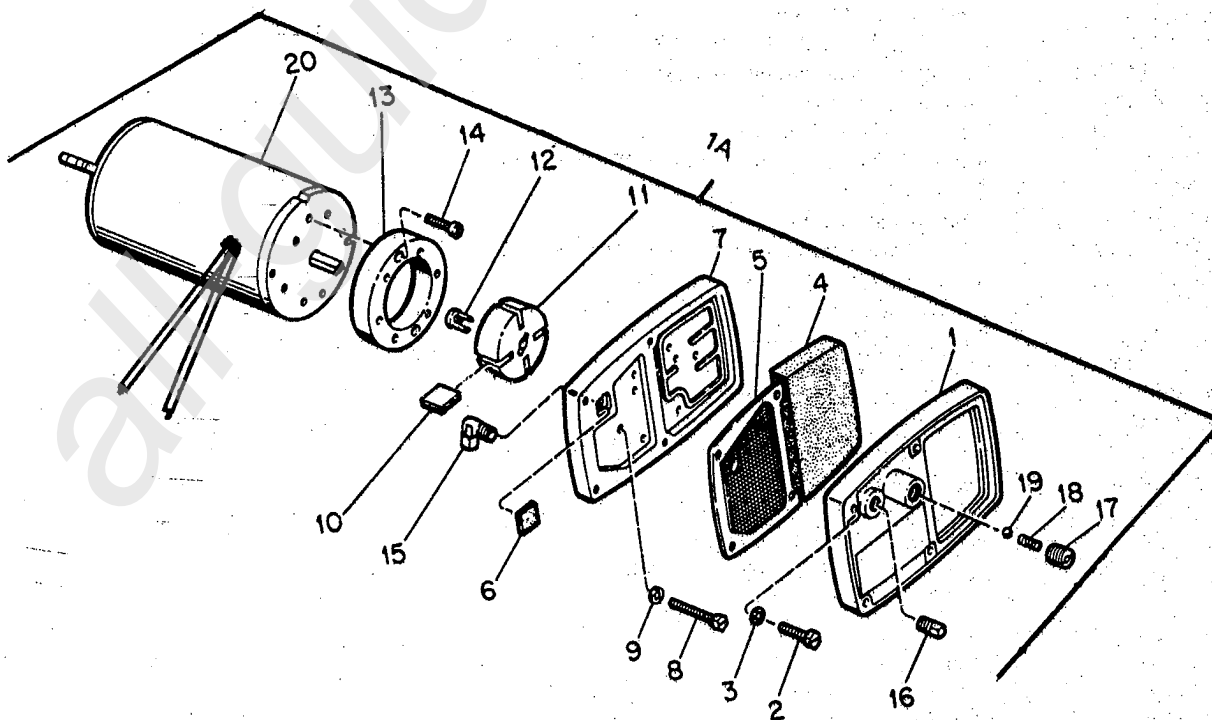
OPTIONAL ACCESSORIES

583.40996

Pressure gauge

**FIGURE P-9 PARTS LIST  
MOTOR PACKAGE ASSEMBLY  
MODEL 583.400040**

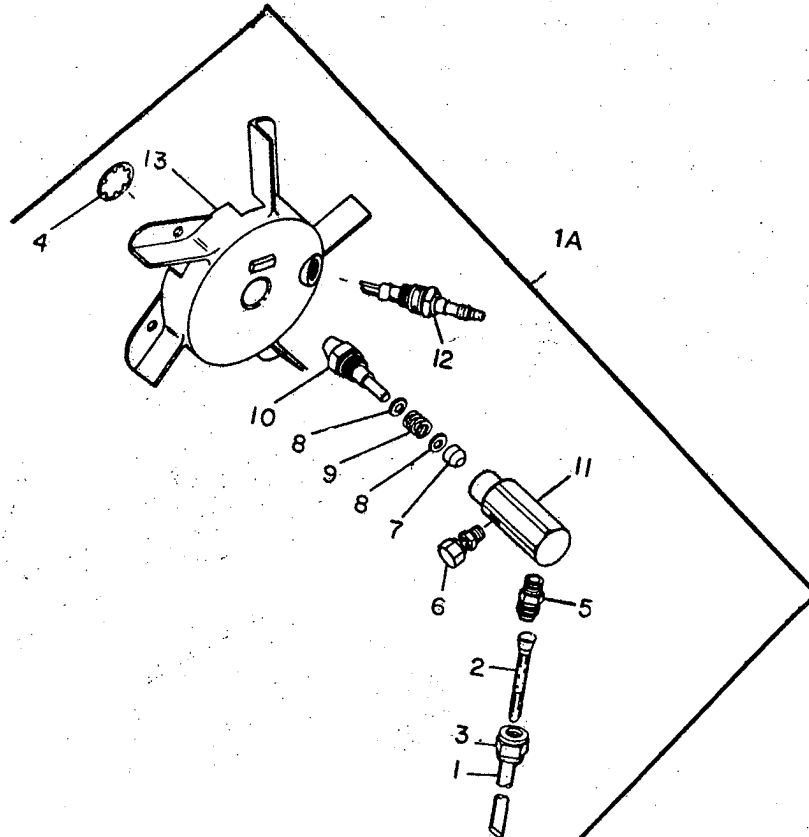
Key No.	Part Number	Part Name or Description	Qty.
1A	M23149-7 M16886-1	Motor Package Assembly . Pump and Filter Parts (Includes Keys 1 thru 19)	1
1	M16545	.. End Cover	1
2	STD51110	.. Screw, 10-32 x 1 in.	4
3	STD5512-10	.. Lockwasher, No. 10	4
4	M12179	.. Intake Filter	1
5	M12244-1	.. Filter Assy.	1
6	M11637	.. Filter, Lint	1
7	M50545	.. End Cover, Pump (Port Plate)	1
8	M12461-32	.. Screw, 10-32 x 1-1/8 in.	6
9	STD551210	.. Lockwasher, No.10	6
10	M8643	.. Blade	4
11	M22456-1	.. Rotor	1
12	M22009	.. Insert	1
13	M50456-01	.. Pump Body	1
14	FHPF3-4C	.. Screw, Fil. Hd., 10-32 x 1/2 in.	2
15	M5976	.. Connector, Male	1
16	M22997	.. Pipe Plug	1
17	M27964	.. Screw, Pressure Adjustment	1
18	M10993-1	.. Spring, Compression	1
19	M8940	.. Ball, 1/4 in. dia.	1
20	M30718-01	. Motor	1



**Motor Package Assembly**

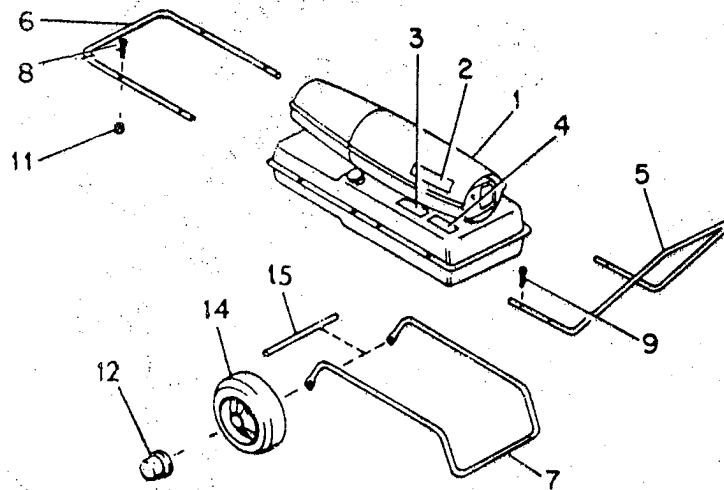
**FIGURE P-10 PARTS LIST  
BURNER HEAD ASSEMBLY  
MODEL 583.400040**

Key No.	Part Number	Part Name or Description	Qty.
1A	M23150-1	Burner Head Assembly	1
1	M16790-8	. Tube, Filter	1
2	M19630	. Filter, Fuel	1
3	M13849	. Nut, Flared	1
4	M16741-18	. Ring, Retaining	1
	M23151-1	. Nozzle Adapter Assembly (Includes Keys 5-12)	1
5	M16791	.. Connector, Male	1
6	M5976	.. Connector, Male	1
7	M8882	.. Sleeve, Nozzle Seal	1
8	M10659-1	.. Washer, Nozzle Seal	1
9	M10809-1	.. Spring, Nozzle Seal	2
10	M23103	.. Nozzle, Aspirating, 0.61 gph	1
11	M16535	.. Adapter, Nozzle	1
12	M10962-2	.. Spark Plug	1
13	M16534	. Body, Burner Head	1



**FIGURE P-11 PARTS LIST**  
**MODEL 583.400040**

Key No.	Part Number	Part Name or Description	Qty.
1	M50530	Decal, Wiring (inside Upper Shell)	1
2	M50832-03	Decal, Trade Name	1
3	M50841	Decal, Sears Label	1
4	M50581	Decal, Nameplate & Operation Inst., Warning	1
5	M15131-3	Handle, Rear	1
6	M15808-3	Handle, Front	1
7	M12342-3	Frame, Wheel Support	1
8	M12345-29	Screw, Oval hd., mach, no. 10-24 x 1 3/4 in.	8
9	M12345-33	Screw, Oval Hd., mach, no. 10-24 x 1-3/4 in.	10
11	STD541410	Nut, no. 10-24, Torque Lock	2
12	M28526	Nut, Cap	2
14	M19294	Wheel	1
15	M16801A	Axle	1
PARTS AVAILABLE - NOT ILLUSTRATED			
	M5092901	Decal Nameplate, Warning	1
	M50840	Decal, Warranty	1
	M50838	Decal, Warning ARL	1
	M25325	Decal, Reset	1
	M29870-109	Manual - Instruction	1
	M50839	Decal, Fuel	1
	M20532-6	Decal, Pump Pressure	1
	M50832	Decal, Tradename	1
	M50841	Decal, Sears	1
	M50927-01	Decal, Wiring Diagram	1





**Sears**

**OWNERS  
MANUAL**

**SERVICE**

**MODEL NO.  
583.400040**

**HOW TO ORDER  
REPAIR PARTS**

# SEARS PORTABLE HEATER

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 the Heater towards the rear.

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

1. Part Number
2. Model Number
3. Part Description
4. Name of 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."