

# SEARS

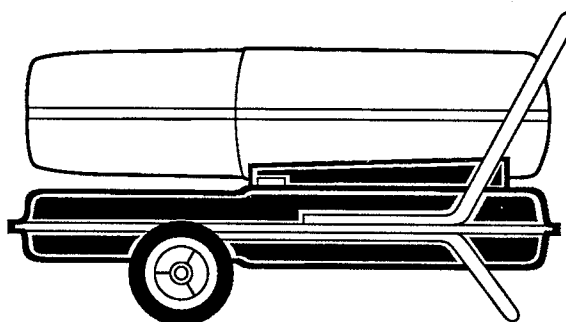
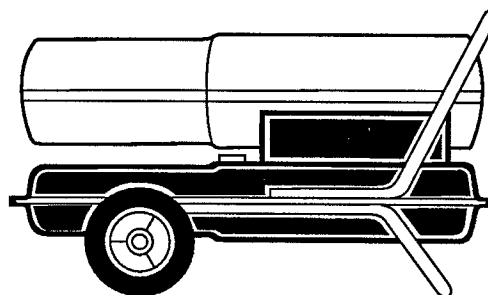
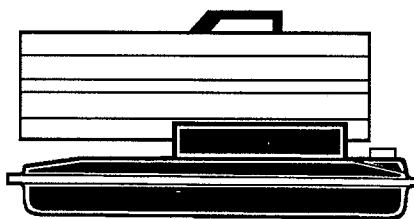
## OWNER'S MANUAL

**MODEL  
NUMBERS:**  
583.356002  
583.356012  
583.356022  
583.356031  
583.356042

SERIAL NO. \_\_\_\_\_  
(owner - write in No.)

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

SAVE THIS MANUAL FOR  
FUTURE REFERENCE



**Heater Sizes:**  
30,000 50,000 70,000  
100,000 and 150,000 BTU/HR

**Operation and Maintenance  
Instructions with Parts List**



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## SAFETY INFORMATION

**IMPORTANT:** Read this Owner's Manual carefully and completely before attempting to assemble, operate or service this heater. Improper use of heater can result in serious bodily injury or death due to hazards of fire, explosion, carbon monoxide poisoning, electrical shock and electrocution. Make certain you have read and understood all Warnings. Keep this manual for reference. It is your guide to safe and proper operation of this appliance.

## WARRANTY

For one year from the date of purchase, Sears will repair any defect in material or workmanship in this portable heater at no charge. If the portable heater is used for commercial or rental purposes, this warranty applies for only thirty days from the date of purchase. Warranty service is available by simply returning the heater to the nearest Sears Service Center. This warranty gives you the specific legal rights, and you may also have other rights which vary from state to state.

Sears, Roebuck and Co., Department 698/731A, Sears Tower, Chicago, IL 60684

## WARNINGS

- Use only kerosene or No. 1 fuel oil.
- Use only with the electrical voltage and frequency specified on model plate.
- Use only a properly grounded three-wire extension cord.
- Use only in areas free of flammable vapor or high dust content.
- Minimum clearance from any combustible materials: 8 feet from hot air outlet and 4 feet from the top and sides.
- Heater must be level while hot or operating or a fire may occur.
- Use only in well ventilated areas. Provide ventilation of at least three (3) square feet for each 100,000 BTU of rating.
- Keep children and animals away from heater at all times.
- When used with a thermostat, heater may start at anytime!
- Store heater in a level position when filled or fuel leakage may occur.
- Use heater only in accordance with local ordinances and codes.
- **NEVER** use Gasoline, Naphtha, Paint thinners, Alcohol or other highly flammable fuels!
- **NEVER** use heater where Gasoline, Paint thinner or other highly flammable vapors are present.
- **NEVER** use heater in living or sleeping areas.
- **NEVER** leave a heater plugged in without adult supervision if children or animals are likely to be present.
- **NEVER** move, handle, refuel or service a hot, operating or plugged in heater.
- **NEVER** block air inlet at motor end (rear) of heater.
- **NEVER** attach duct work to front of heater.

## UNPACKING

1. Remove all protective materials which may have been applied to the heater for shipment.
2. Remove the heater from carton.
3. Check the heater for possible shipping damage. If any damage is found immediately notify the dealer from whom heater was purchased.

## ASSEMBLY

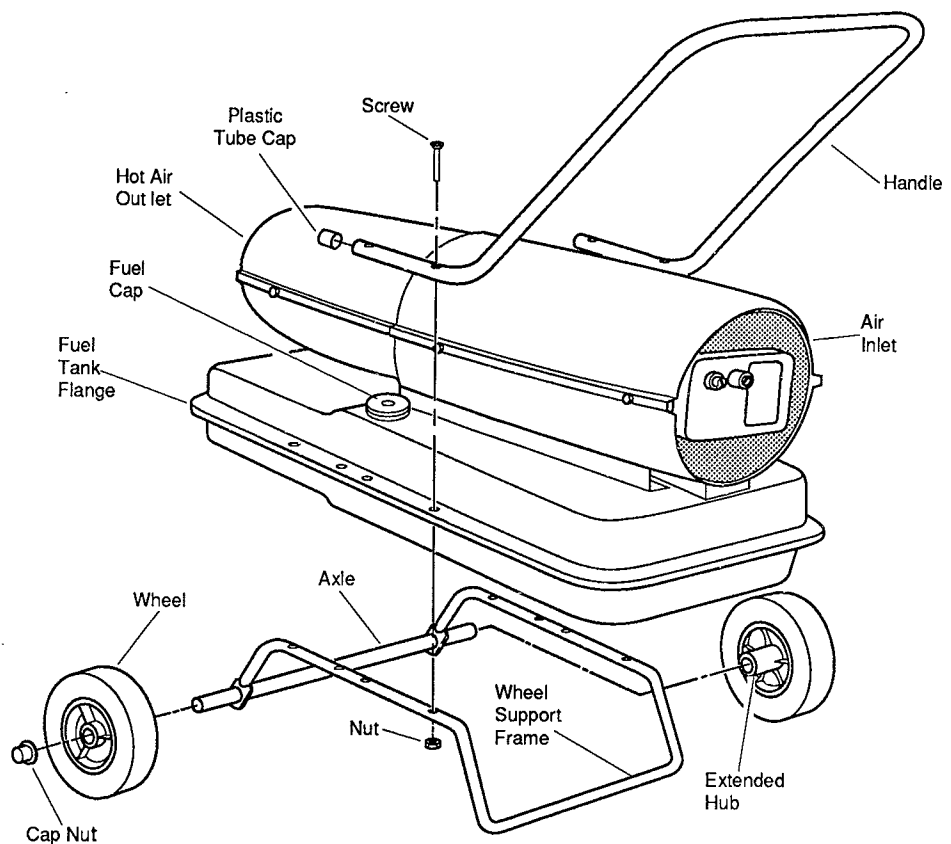
(For 100,000 and 150,000 BTU Heaters Only)

These models are equipped with wheels and a handle. These items are unassembled and can be found in the shipping carton along with the mounting hardware.

### Tools Required

Medium Phillips Screwdriver; 3/8" Open or Adjustable Wrench; and, a 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 air inlet end over the wheels.
3. Place the PLASTIC TUBE CAPS onto the open ends of the HANDLE.
4. Use four SCREWS and NUTS to attach the HANDLE to the top of the FUEL TANK FLANGE. Insert the screws through the HANDLE, the FUEL TANK FLANGE and the WHEEL SUPPORT FRAME as illustrated below. Use the remaining four SCREWS and NUTS to attach the WHEEL SUPPORT FRAME to the FUEL TANK FLANGE. Insert the screws through the remaining four holes on the FUEL TANK FLANGE and the WHEEL SUPPORT FRAME. Install the nuts finger tight only until all screws are inserted.
5. Tighten all nuts.



# THEORY OF OPERATION

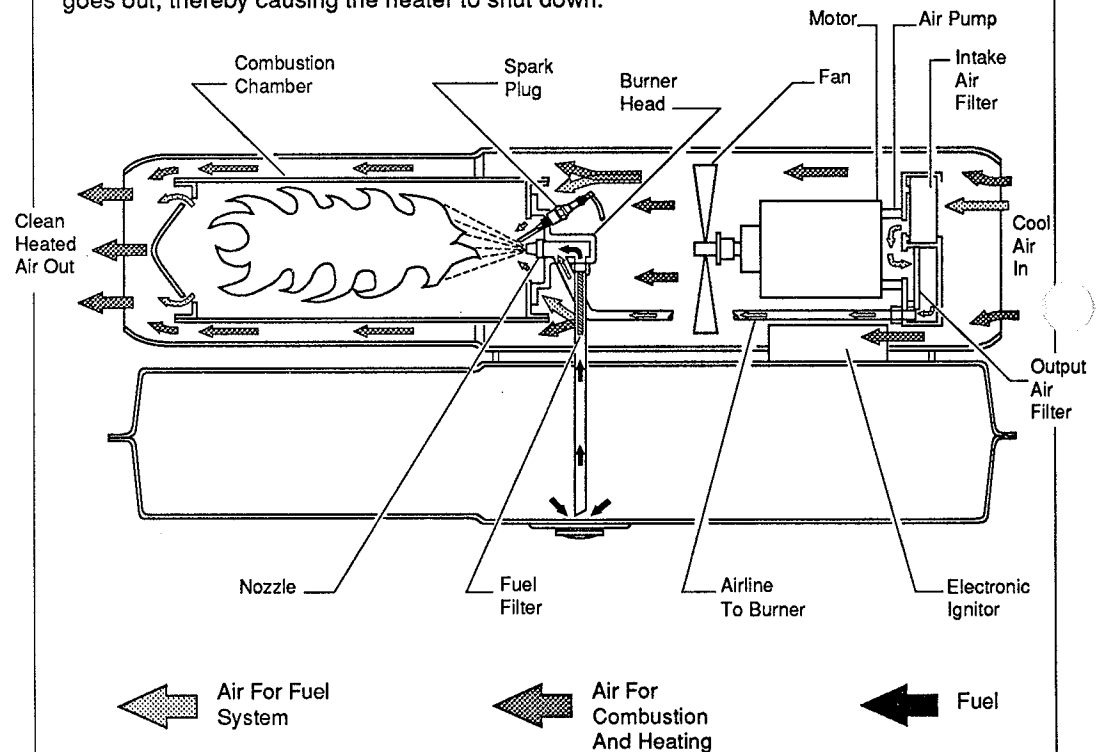
There are four basic systems within the heater; the fuel system, the air system, the ignition system and the safety control system.

**The Fuel System:** An air pump on one end of the motor shaft forces air through the air line and out the burner head nozzle. The moving air creates a pressure differential in the burner head causing fuel to be drawn from the tank. The fuel and air mixture is sprayed into the combustion chamber in a fine mist.

**The Air System:** Additional air is supplied to the combustion chamber by a fan on the opposite end of the motor shaft. Ports around the burner head allow a portion of the air to enter the combustion chamber where it mixes with the air and fuel from the nozzle. The remaining air is directed around and over the combustion chamber. This air mixes with the heated air from the combustion chamber and is ejected as a jet of clean, hot air.

**The Ignition System:** The electronic ignitor increases the input voltage to a very high level which causes an arc between the electrodes of the spark plug. The arc ignites the fuel and air mixture within the combustion chamber. The spark plug fires constantly during operation.

**The Safety Control System:** This system consists of two parts: A light-sensitive photocell (flame sensor) and the safety control. The safety control automatically trips out if the flame goes out, thereby causing the heater to shut down.



## FUELS

### ⚠ WARNING

USE **ONLY** KEROSENE OR NO. 1 FUEL OIL TO AVOID RISK OF FIRE OR EXPLOSION. **NEVER** USE GASOLINE, NAPHTHA, PAINT THINNERS, ALCOHOL OR OTHER HIGHLY FLAMMABLE FUELS.

Use of heavier fuels such as No. 2 fuel oil or No. 2 Diesel will result in the following:

- Clogging of fuel filter and nozzle.
- Carbon formation on spark plug resulting in poor ignition and raw fuel emission from the heater.
- Requires fuel additive (non-toxic anti-icer) at very low temperatures.

**IMPORTANT:** Store and handle kerosene in a sealed container clearly marked **KEROSENE ONLY**. Make certain container is free from rust, dirt, water, etc. Small amounts of contaminants in kerosene container will cause heater safety control button to trip and may require frequent cleaning of heater's internal fuel system.

## VENTILATION

### WARNING

THE MINIMUM VENTILATION REQUIREMENTS MUST BE FOLLOWED TO AVOID RISKS ASSOCIATED WITH CARBON MONOXIDE POISONING. MAKE CERTAIN THESE REQUIREMENTS ARE MET PRIOR TO OPERATING HEATER.

#### FRESH AIR OPENING REQUIREMENTS

Model Number	Heater Size	Square Feet Opening
583.356002	30,000 BTU/HR	1.2
583.356012	50,000 BTU/HR	1.5
583.356022	70,000 BTU/HR	2.0
583.356031	100,000 BTU/HR	3.0
583.356042	150,000 BTU/HR	4.5

**EXAMPLE:** A 50,000 BTU heater requires a two-car garage door raised two (2) inches or a single car garage door raised three (3) inches. A window can also be used for ventilation.

The 50,000 BTU heater requires at least two (2) thirty inch windows raised four (4) inches.

**Note:** If more than one heater is being used, provide additional ventilation of at least three (3) square feet for each 100,000 BTU/Hr rating.


## OPERATION

### IMPORTANT

Carefully Review And Understand The Warnings In The Safety Information Section. Following The Instructions Provided In The Warnings Is Very Important To The Safe Operation Of This Heater. Use Heater **ONLY** In Accordance With Local Ordinances And Codes.

#### To Start Heater

1. Fill the FUEL TANK with kerosene or No. 1 fuel oil: Replace FUEL CAP.
2. Make sure the ventilation and safety precautions are met.
3. Plug heater power cord into an approved extension cord of at least six feet in length.

 **WARNING: USE ONLY A PROPERLY GROUNDED THREE-WIRE EXTENSION CORD. A CORD WITH PROPER CAPACITY RATING IS NEEDED TO ASSURE 120 VOLT OPERATION.**

- Distances up to 10 feet use an 18 AWG Cord.
  - Distances up to 100 feet use a 16 AWG Cord.
  - Distances up to 200 feet use a 14 AWG Cord.
4. Plug the extension cord into a standard 120 volt/60 hertz 3-prong outlet.
  5. The heater will normally start as soon as it is plugged into the outlet. If not, push in the heater *Safety Control Reset Button* located at the rear of heater near the power cord.

#### Using An Optional Automatic Thermostat Control (Available at Most Sears Stores)

 **WARNING: AN UNATTENDED, THERMOSTAT-CONTROLLED HEATER WILL START ANY TIME AIR TEMPERATURE DROPS, UNLESS IT IS UNPLUGGED.**

1. Repeat steps 1 and 2 above.
2. Plug the thermostat into a standard 3-prong household outlet.
3. Set the thermostat dial to the desired temperature.
4. Plug the heater cord, with an approved extension cord, into the thermostat outlet.
5. If the air temperature is higher than the thermostat setting, the heater will *not* start. When the air temperature drops below the thermostat setting, the heater will immediately start (ignite). When the air is warmed to the temperature setting of the thermostat, the heater will turn off. The on-off cycle will continue so as to maintain the desired temperature. If the heater fails to start, push in the heater's *Safety Control Reset Button* located at the rear of heater near the power cord.

#### To Stop Heater

1. Unplug the power cord from the outlet.
2. To re-start, wait 2 minutes and repeat starting procedure.

# STORAGE

# PREVENTATIVE MAINTENANCE SCHEDULE

# TROUBLE-SHOOTING

## CAUTION

**DRAIN ALL FUEL FROM TANK BEFORE STORING.**

1. Drain the fuel tank completely and add approximately one gallon of clean kerosene. Attach the fuel cap and move the heater forwards and backwards to circulate the fuel. Remove the fuel cap or drain plug and drain tank completely.
2. Replace fuel cap or drain plug and properly dispose of the old and dirty fuel.
3. Store heater in a dry location free of corrosive fumes and dust.
4. Do not store kerosene over summer months for next heating season usage.



## WARNING

**TO AVOID RISK OF BURN AND ELECTRICAL SHOCK, NEVER ATTEMPT TO SERVICE HEATER WHILE IT IS PLUGGED IN, OPERATING OR HOT.**

<u>Item</u>	<u>How Often</u>	<u>How To</u>
Flush Fuel Tank	150-200 Hours Operation	See Storage Section
Air and Lint Filters	Replace at 250 Hours Operation	See Service Procedure No. IV
Fuel Filter	Clean Twice a Heating Season	See Service Procedure No. II
Spark Plug	Clean and Regap at 300 Hours Operation	See Service Procedure No. III
Fan Blade	Clean Every Season	See Service Procedure No. VIII
Motor	Not Required/Permanently Lubricated	

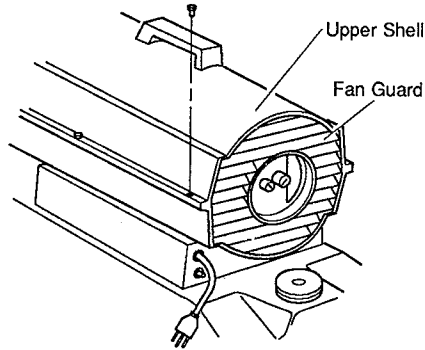
## WARNING

**TO AVOID RISK OF BURN AND ELECTRICAL SHOCK, NEVER ATTEMPT TO SERVICE HEATER WHILE IT IS PLUGGED IN, OPERATING OR HOT.**

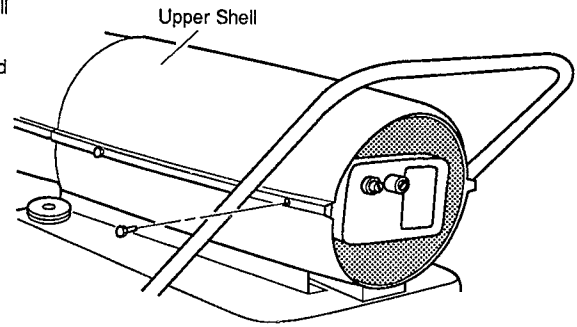
<u>OBSERVED FAULT</u>	<u>POSSIBLE CAUSE</u>	<u>REMEDY</u>
Heater ignites, however, safety control trips after a short period of time.	Dirty Fuel Filter Dirt In Nozzle Dirty Air Filter Incorrect Pump Pressure Defective Safety Control	See Procedure II See Procedure VI See Procedure IV See Procedure V Replace
Heater will not ignite, but motor runs for a short period of time.	 <b>WARNING: DISCONNECT HEATER CORD!</b> Check Spark Plug For Carbon Deposits and Proper Gap Dirty Fuel Filter Dirt In Nozzle Incorrect Pump Pressure	See Procedure III See Procedure II See Procedure VI See Procedure V
	 <b>WARNING: HIGH VOLTAGE</b> Defective Ignitor Check For Water In Tank	Visually Check For Spark At Spark Plug Drain Water and Flush Tank With Clean Kerosene
Motor hums when unit is plugged in, fan does not turn.	Temperature Sensitive Relay Is Not Allowed To Reset Rotate Fan By Hand To Determine If Fan Is Free To Turn	Wait Two (2) Minutes Before Trying To Restart Heater If Fan Is Hard To Turn, See Procedure VII (Pump Rotor)

# SERVICE PROCEDURES

**I. UPPER SHELL REMOVAL**  
Remove the six (6) screws, located along each side of heater, from the **Upper Shell** and lift the shell off. Remove **Fan Guard** (Not used on 150,000 BTU/HR model).



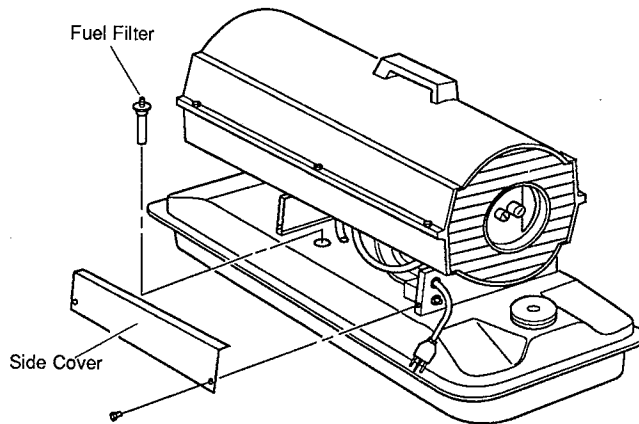
30/50/70/100,000 BTU/HR Models



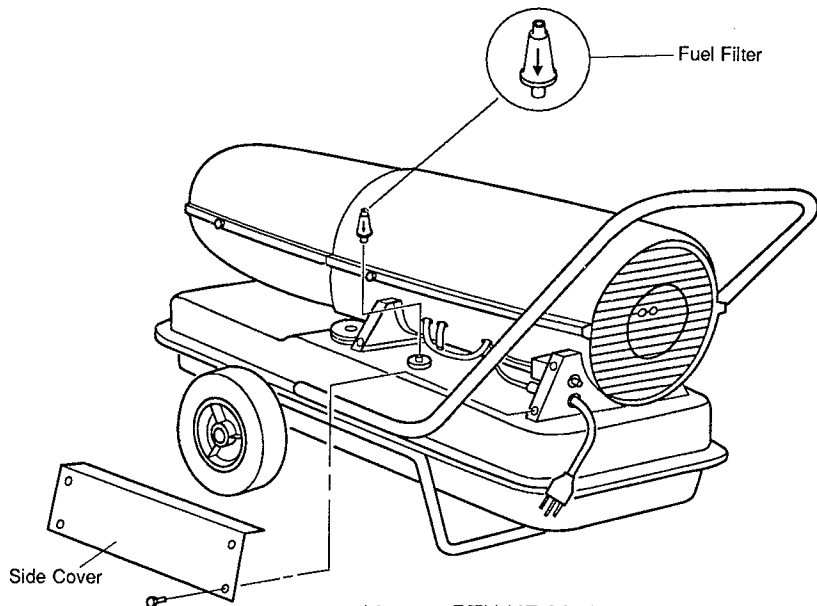
150,000 BTU/HR Model

**II. FUEL FILTER**  
(30/50/70/100,000 BTU/HR Models)

Remove screws holding **Side Cover**. Pull the rubber fuel line off **Fuel Filter** neck. Carefully pry the **Bushing**, with the filter out of the **Fuel Tank**. Wash filter with clean fuel and reinstall in tank.



30/50/70,000 BTU/HR Models

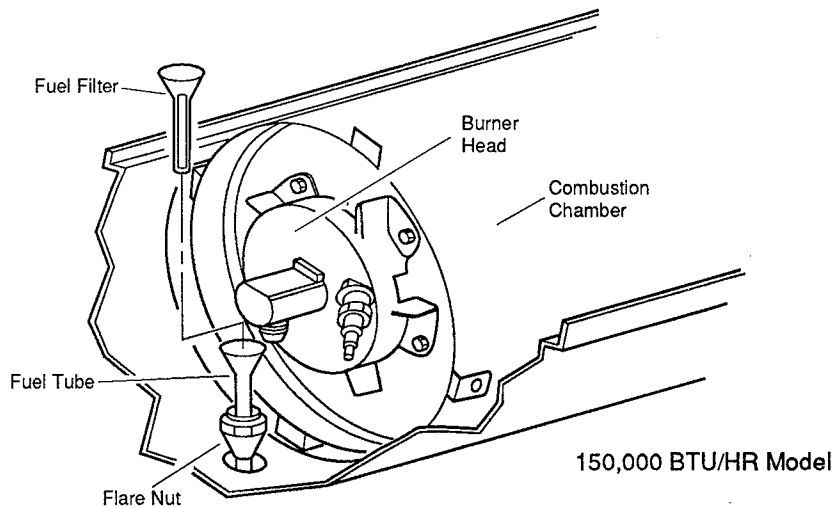


100,000 BTU/HR Model

### IIa. FUEL FILTER

(150,000 BTU/HR Model)

Remove **Upper Shell**. Loosen **Flare Nut**, as illustrated, and push **Fuel Tube** downward. **Fuel Filter** is located in line with **Fuel Tube** which extends into tank. Lift **Fuel Filter** out. Wash filter with clean fuel and reinstall in **Fuel Tube**. Install **Fuel Tube** and torque Flare Nut to 100-130 inch-pounds.



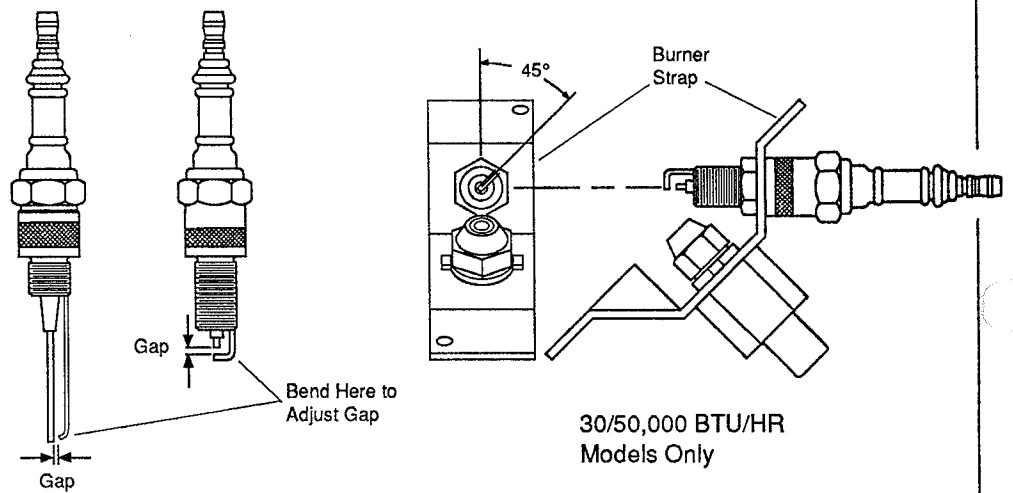
### III. SPARK PLUG

Remove **Upper Shell** to access the **Spark Plug** which is attached to the **Burner Strap or Head**. Remove Spark Plug in order to clean and regap the electrodes to the following specification:

30/50/70/100,000 BTU/HR Models = .055"

150,000 BTU/HR Model = .075"

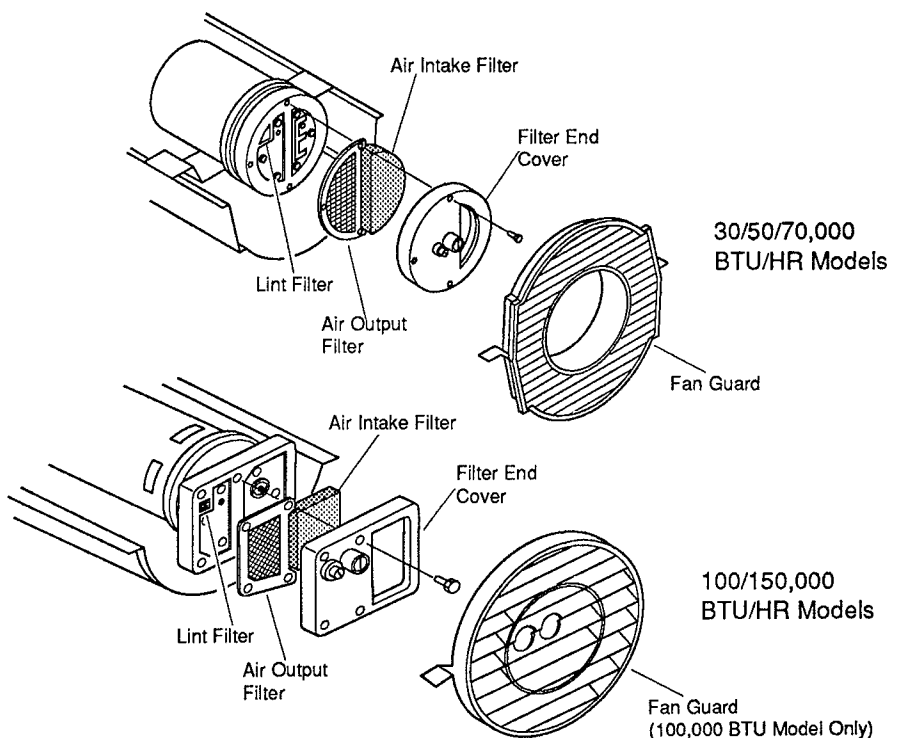
Rotate spark plug (30/50,000 BTU/HR Model Only) to position electrodes as shown.



### IV. AIR AND LINT FILTERS

Remove **Upper Shell** to access **Air and Lint Filters**. Remove the screws which hold **Filter End Cover**. Replace with new filter as illustrated.

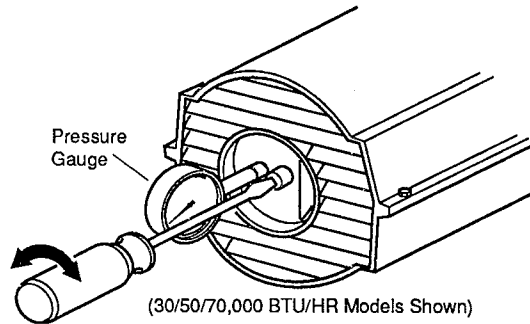
**IMPORTANT**  
DO NOT Oil The Filter Elements





## V. PUMP PRESSURE ADJUSTMENT

Remove the plug from the **Air Filter End Cover** and install accessory **Pressure Gauge** (Part No. 583.35802). Adjust pressure by turning relief valve *clockwise* to increase, *counterclockwise* to decrease. See specifications (below right) for correct pressure for each model.

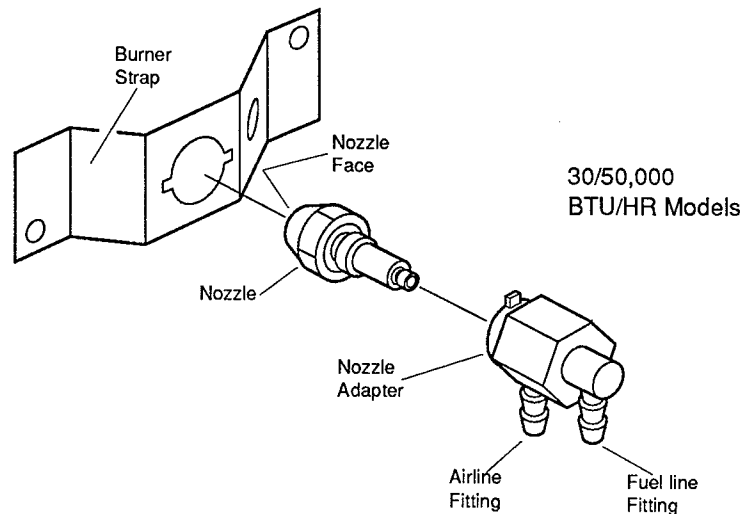


<u>Model Number</u>	<u>Heater Size</u>	<u>Pump Pressure</u>
583.356002	30,000 BTU/HR	3.0 PSI
583.356012	50,000 BTU/HR	3.6 PSI
583.356022	70,000 BTU/HR	4.0 PSI
583.356031	100,000 BTU/HR	4.0 PSI
583.356042	150,000 BTU/HR	5.0 PSI

## VI. NOZZLE

(30/50,000 BTU/HR Models)

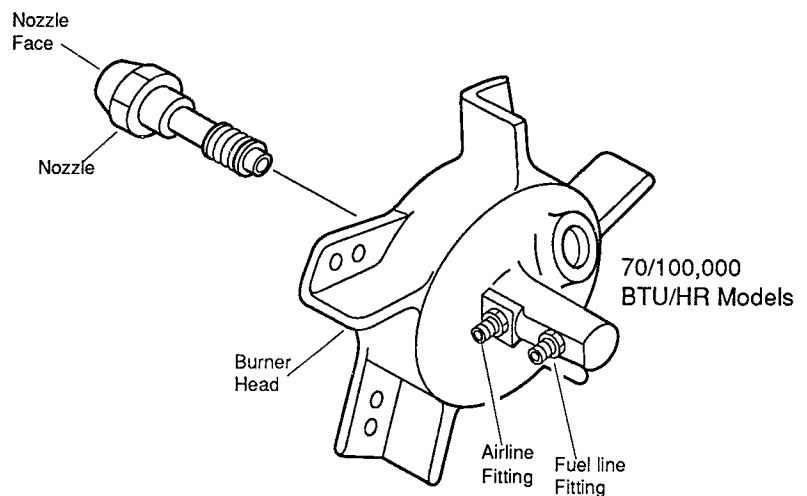
Remove **Upper Shell** to access **Burner Strap**. Remove **Fan** as described in Service Procedure VIII. Remove hoses from **Nozzle Assembly**. Turn the **Nozzle Assembly** 1/4 turn counterclockwise and pull backwards to remove. Using a 5/8" socket, carefully remove the **Nozzle** from the **Nozzle Adapter**. Blow compressed air thru the face of the nozzle to dislodge any dirt that might have accumulated in the nozzle area. Reassemble **Nozzle** to **Nozzle Adapter**, torque 40-45 inch-pounds.



## Via. NOZZLE

(70/100,00 BTU/HR Models)

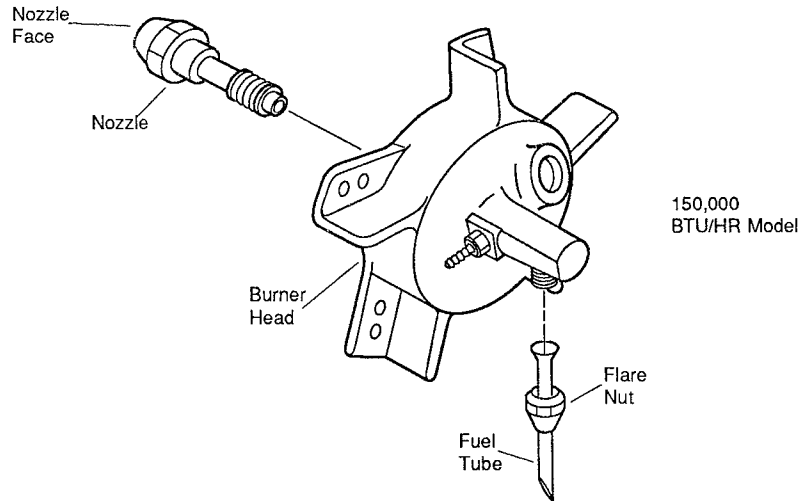
Remove **Upper Shell** to access **Burner Head**. Remove **Fan** as described in Service Procedure VIII. Remove **Fuel and Airline Hoses** from **Burner Head**. Remove the **Spark Plug** from the **Burner Head**. Remove three (3) screws to detach **Burner Head** from **Combustion Chamber**. Using a 5/8" socket, carefully remove **Nozzle** from **Burner Head**. Blow compressed air thru face of nozzle to dislodge any dirt that might have accumulated in the nozzle area. Reassemble **Nozzle** to **Burner Head**, torque 80-110 inch-pounds.



### VIb. NOZZLE

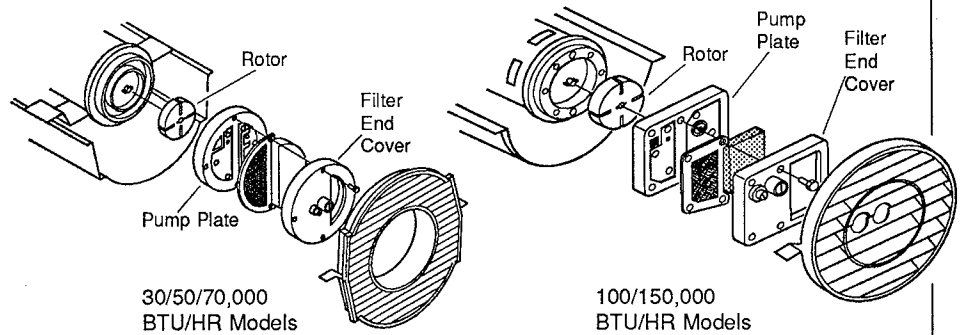
(150,000 BTU/HR Model)

Remove **Upper Shell** to access **Burner Head**. Remove **Fan** as described in Service Procedure VIII. Remove **Spark Plug** from **Burner Head**. Loosen **Flare Nut** and push **Fuel Tube** downward as described in Service Procedure IIa. Remove three (3) screws to detach **Burner Head** from **Combustion Chamber**. Using a 5/8" socket, carefully remove **Nozzle** from **Burner Head**. Blow compressed air thru face of nozzle to dislodge any dirt that might have accumulated in nozzle area. Reassemble **Nozzle** to **Burner Head**, torque 80-110 inch-pounds.

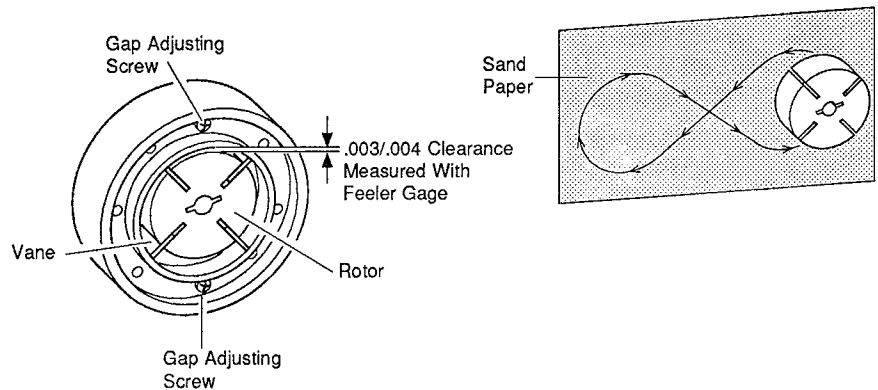


### VII. PUMP ROTOR

Remove **Filter End Cover** as shown in diagram. Remove six (6) screws using a 5/16" nutdriver. Remove the **Pump Plate**. Check for debris in pump. Check gap on **Rotor** and adjust to .003"/.004" Remove **Rotor** and lightly sand using a fine grade of sandpaper and moving rotor in a "figure 8" rotation. Reinstall **Rotor, Vanes, Pump Plate and Filter End Cover**. Adjust Pump Pressure (See Service Procedure V).



**NOTE:** Rotate Rotor one full turn to insure the gap is .003/.004 at tightest position.

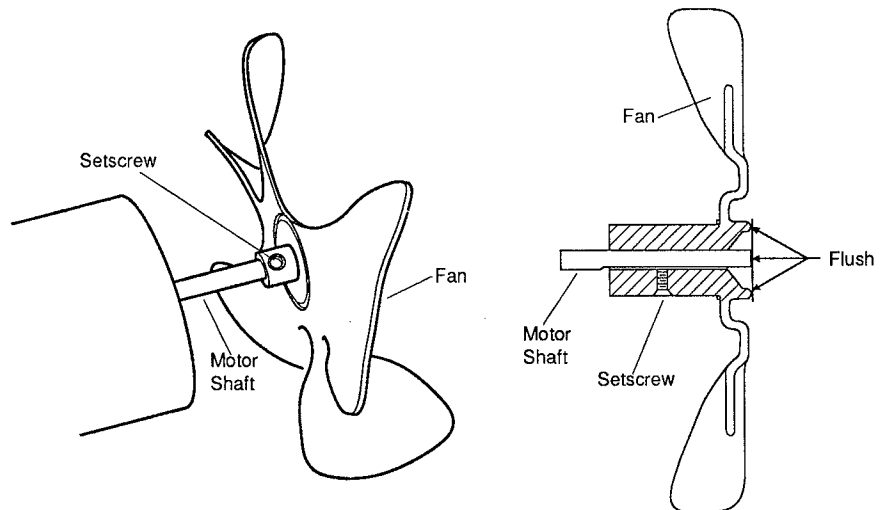


### VIII. FAN BLADES

#### CAUTION

WHEN REMOVING MOTOR FROM THE HEATER, ALWAYS REMOVE THE FAN FIRST. THE WEIGHT OF THE MOTOR RESTING ON THE FAN COULD DAMAGE THE FAN PITCH.

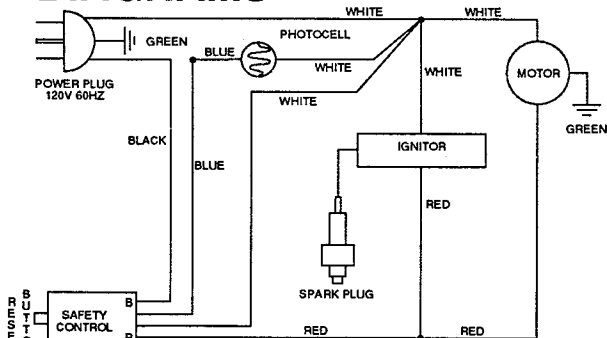
Remove **Upper Shell** to access the **Fan**. Using a 1/8" Allen wrench loosen the **Setscrew** which holds the **Fan** to the **Motor Shaft**. Slip **Fan** off **Motor Shaft**. To clean fan, use a soft cloth moistened with kerosene or solvent, then dry thoroughly. When replacing the fan on the motor shaft, place the **Fan Hub** flush with the end of the **Motor Shaft** as shown. Place **Set-screw** on flat of shaft and torque setscrew 40-50 inch-pounds.



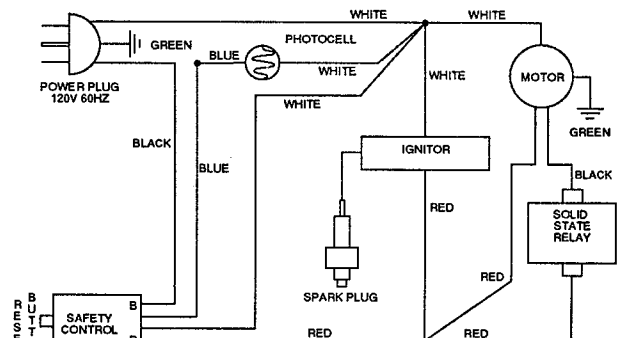
# SPECIFICATIONS

Model Number	583.356002	583.356012	583.356022	583.356031	583.356042
Output Rating (BTU/Hr)	30,000	50,000	70,000	100,000	150,000
Fuel	Use Only Kerosene or No. 1 Fuel Oil				
Fuel Tank Capacity (U.S. Gal)	3.0	4.0	5.0	9.0	13.5
Fuel Consumption (Gal Per Hr)	.23	.37	.52	.74	1.10
Electric Requirements	120 V/60 HZ (Same All Models)				
Amperage (Normal Run)	2.4	2.5	2.7	5.0	4.5
Hot Air Output (CFM)	168	166	253	481	648

## WIRING DIAGRAMS



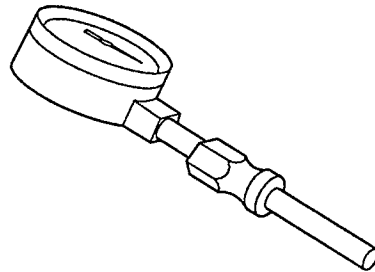
30/50,000 BTU/HR Models



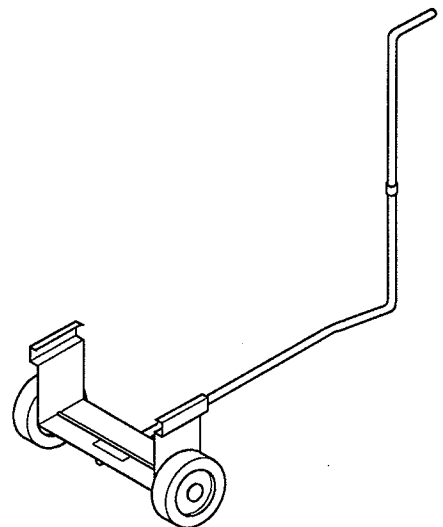
70/100/150,000 BTU/HR Models

## ACCESSORIES

These accessories for your heater are available at your local Sears store.



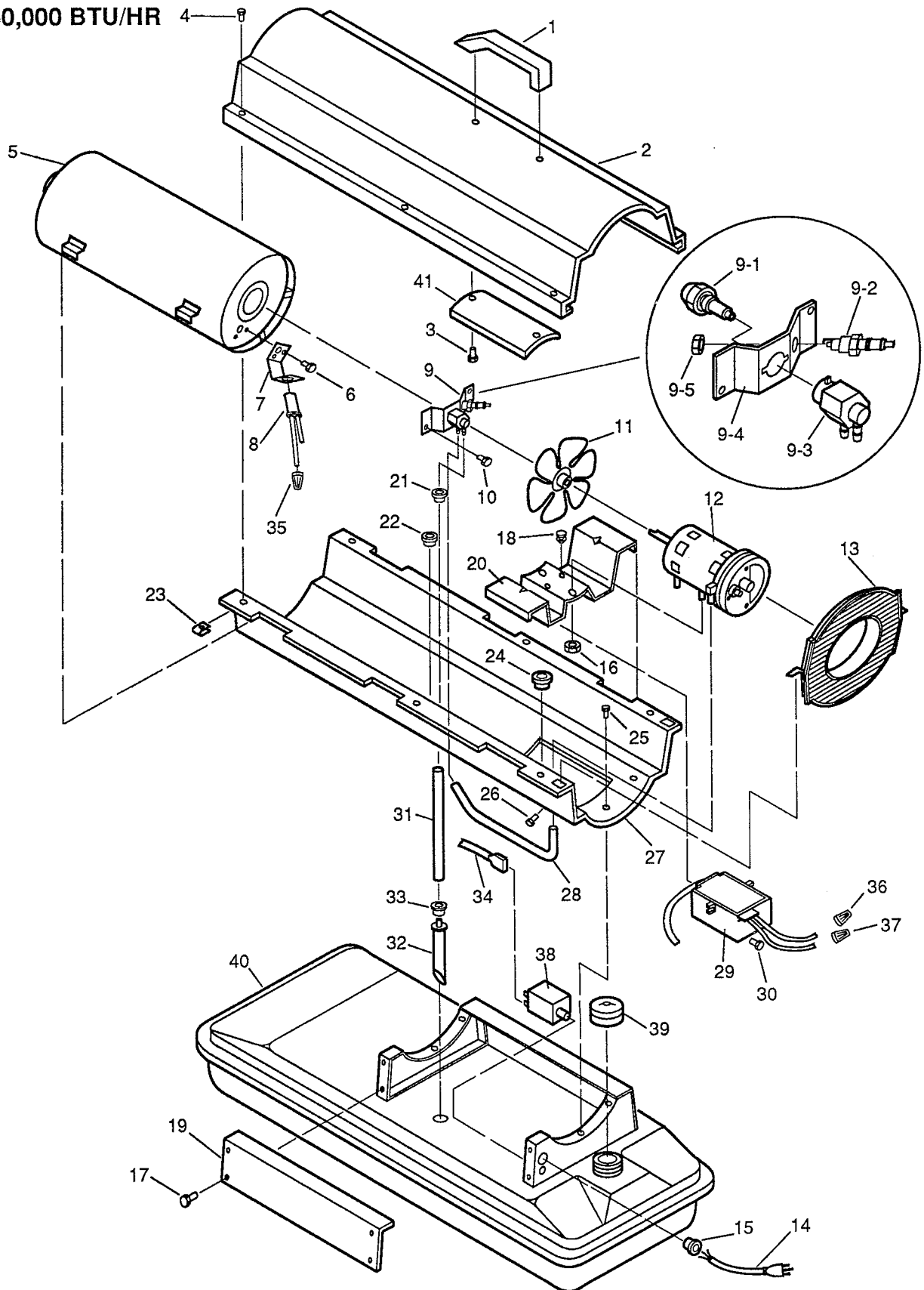
**AIR GAUGE KIT - 583.35802**  
For all models. Special tool to check air pressure.



**STANDARD WHEELS AND HANDLE KIT - 583.35800**  
Makes heater even more portable and convenient. Easy to assemble.  
For 30/50/70,000 BTU/HR Model.

# REPAIR PARTS

Sears Portable Heater  
Model 583.356002  
30,000 BTU/HR



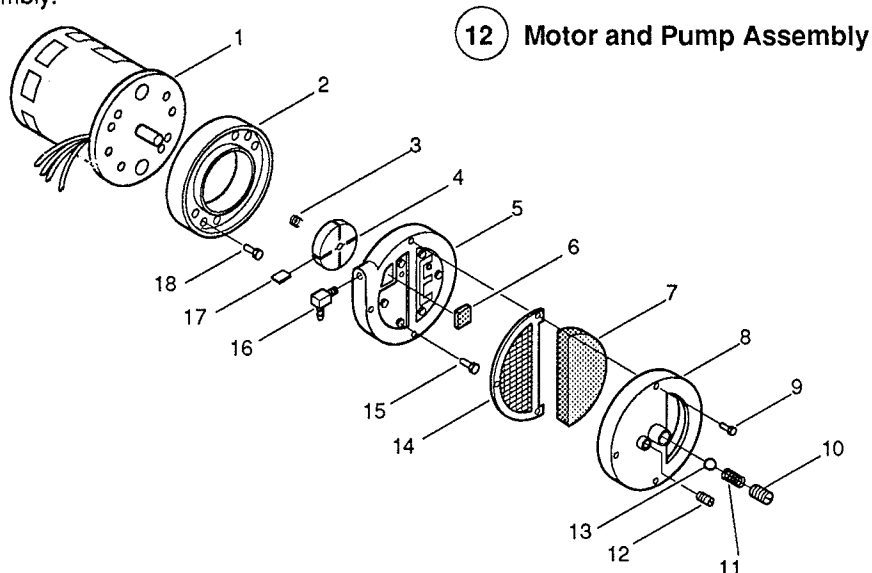
# REPAIR PARTS

Sears Portable Heater  
Model 583.356002

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51104-01	Handle	1	12-18	FHFP3-2C	Screw, #10-32 x 1/4"	2
2	079445-01BF	Upper Shell	1	13	M51105-01	Fan Guard	1
3	M11084-29	Handle Screw	2	14	098219-06	Power Cord	1
4	M15823-27	Screw, #10-16 x 1/2"	6	15	M11143-1	Strain Relief Bushing	1
5	M50785-02	Combustion Chamber	1	16	NTC-4C	Hex Lock Nut	2
6	M10908-2	Screw, #6-32 x 3/8"	2	17	M11084-26	Screw, #10-16 x 3/8"	2
7	M16660	Photocell Bracket	1	18	M50631	Rubber Bumper	2
8	M16656-4	Photocell	1	19	079513-01BH	Side Cover	1
9	***	Burner Strap Assembly	1	20	098138-01	Motor Bracket	1
9-1	M29681	Nozzle	1	21	M30865-02	Bushing	1
9-2	M29835-2	Spark Plug	1	22	M25907	Bushing	1
9-3	079980-01	Nozzle Adapter	1	23	M11271-8	Clip Nut	6
9-4	097124-01	Bracket	1	24	M50104-02	Bushing (wires)	1
9-5	M29824	Nut, 14mm	1	25	M11084-26	Screw, #10-16 x 3/8"	6
10	M11084-26	Screw, #10-16 x 3/8"	2	26	M15823-37	Grounding Screw, #8-18 x 1/4"	1
11	M30884	Fan	1	27	079446-01BF	Lower Shell	1
12	***	Motor and Pump Assembly	1	28	M29652-04	Airline	1
12-1	097073-01	Motor	1	29	098073-01	Ignitor Kit	1
12-2	079975-01	Pump Body	1	30	M11084-29	Screw, #10-16 x 3/4"	2
12-3	M22009	Insert	1	31	M29652-05	Fuel Line	1
12-4	M22456-1	Rotor	1	32	M50876-04	Fuel Filter	1
12-5	M29608	End Pump Cover	1	33	M10990-3	Bushing	1
12-6	M29632	Lint Filter	1	34	**	Wire Assembly (red, 6")	1
12-7	M29633	Intake Filter	1	35	**	Wire Connector (Blue wires)	1
12-8	M29609	Filter End Cover	1	36	**	Wire Connector (Red Wires)	1
12-9	M12461-31	Screw, #10-32 x 1"	3	37	**	Wire Connector (White Wires)	1
12-10	M27694	Adjusting Screw	1	38	M50671-01	Safety Control	1
12-11	M10993-1	Pressure Relief Spring	1	39	097702-01	Fuel Cap	1
12-12	M22997	Plug	1	40	097137-26	Fuel Tank	1
12-13	M8940	Steel Ball 1/4" dia.	1	41	M51108-01	Heat-Shell Shield	1
12-14	M29612-01	Output Filter	1	PARTS AVAILABLE - NOT SHOWN			
12-15	M12461-31	Screw, #10-32 x 1"	6		098447-01	Tradename Decal	
12-16	M50016	Elbow, 90°, Barb Fitting	1		098415-01	Owner's manual	
12-17	M8643	Blade	4				

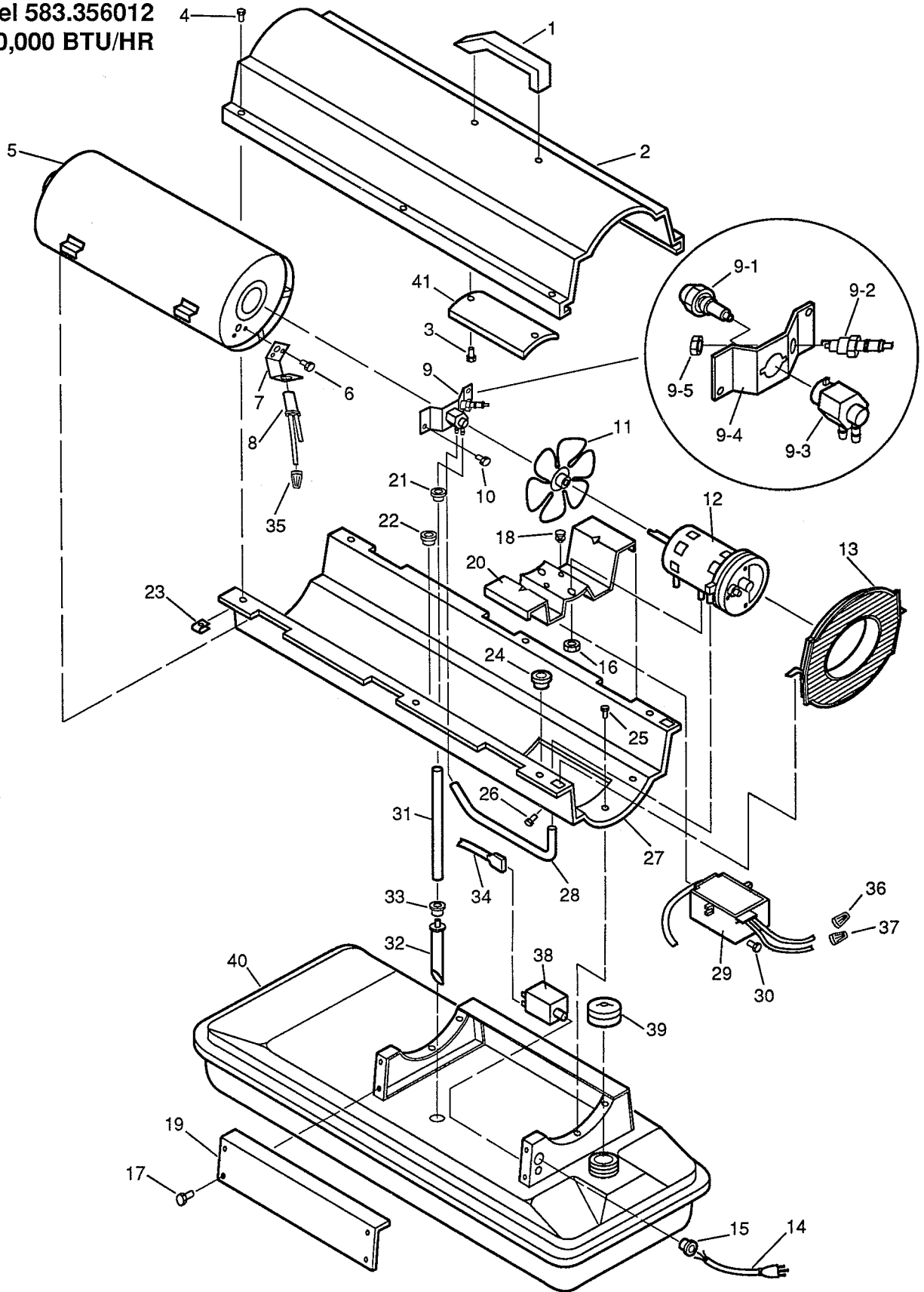
\*\* Available at your local hardware store.

\*\*\* Not available as an assembly.



# REPAIR PARTS

Sears Portable Heater  
Model 583.356012  
50,000 BTU/HR



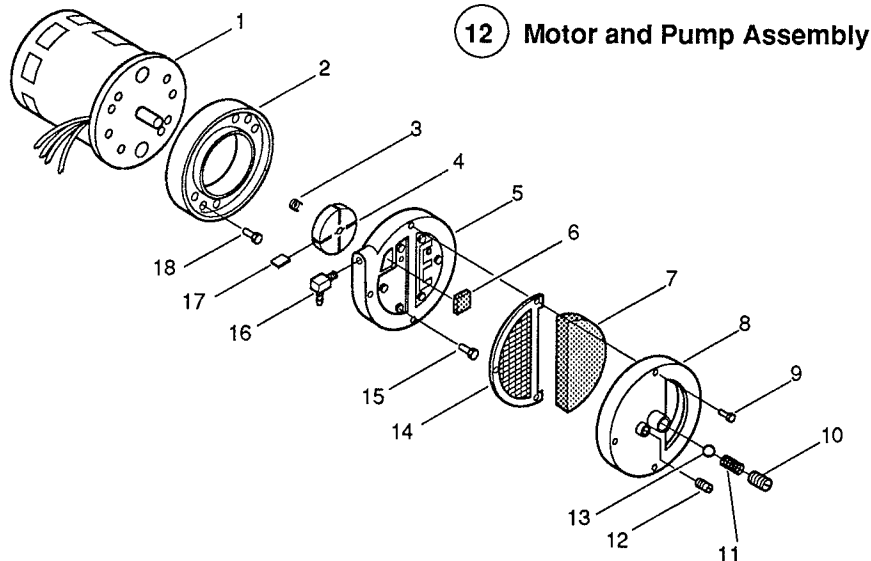
# REPAIR PARTS

## Sears Portable Heater Model 583.356012

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51104-01	Handle	1	12-18	FHPF3-2C	Screw, #10-32 x 1/4"	2
2	079445-01BF	Upper Shell	1	13	M51105-01	Fan Guard	1
3	M11084-29	Handle Screw	2	14	098219-06	Power Cord	1
4	M15823-27	Screw, #10-16 x 1/2"	6	15	M11143-1	Strain Relief Bushing	1
5	M50785-04	Combustion Chamber	1	16	NTC-4C	Hex Lock Nut	2
6	M10908-2	Screw, #6-32 x 3/8"	2	17	M11084-26	Screw, #10-16 x 3/8"	2
7	M16660	Photocell Bracket	1	18	M50631	Rubber Bumper	2
8	M16656-4	Photocell	1	19	079513-01BH	Side Cover	1
9	***	Burner Strap Assembly	1	20	098138-01	Motor Bracket	1
9-1	M50597	Nozzle	1	21	M30865-02	Bushing	1
9-2	M29835-2	Spark Plug	1	22	M25907	Bushing	1
9-3	079980-01	Nozzle Adapter	1	23	M11271-8	Clip Nut	6
9-4	097125-01	Bracket	1	24	M50104-02	Bushing (wires)	1
9-5	M29824	Nut, 14mm	1	25	M11084-26	Screw, #10-16 x 3/8"	6
10	M11084-26	Screw, #10-16 x 3/8"	2	26	M15823-37	Grounding Screw, #8-18 x 1/4"	1
11	M30884	Fan	1	27	079446-01BF	Lower Shell	1
12	***	Motor and Pump Assembly	1	28	M29652-04	Airline	1
12-1	097073-01	Motor	1	29	098073-01	Ignitor Kit	1
12-2	079975-01	Pump Body	1	30	M11084-29	Screw, #10-16 x 3/4"	2
12-3	M22009	Insert	1	31	079973-01	Fuel Line	1
12-4	M22456-1	Rotor	1	32	M50876-02	Fuel Filter	1
12-5	M29608	End Pump Cover	1	33	M10990-3	Bushing	1
12-6	M29632	Lint Filter	1	34	**	Wire Assembly (red, 6")	1
12-7	M29633	Intake Filter	1	35	**	Wire Connector (Blue wires)	1
12-8	M29609	Filter End Cover	1	36	**	Wire Connector (Red Wires)	1
12-9	M12461-31	Screw, #10-32 x 1"	3	37	**	Wire Connector (White Wires)	1
12-10	M27694	Adjusting Screw	1	38	M50671-01	Safety Control	1
12-11	M10993-1	Pressure Relief Spring	1	39	097702-01	Fuel Cap	1
12-12	M22997	Plug	1	40	097137-27	Fuel Tank	1
12-13	M8940	Steel Ball 1/4" dia.	1	41	M51108-01	Heat-Shell Shield	1
12-14	M29612-01	Output Filter	1	PARTS AVAILABLE - NOT SHOWN			
12-15	M12461-31	Screw, #10-32 x 1"	6		098477-02	Tradename Decal	
12-16	M50016	Elbow, 90°, Barb Fitting	1		098415-01	Owner's Manual	
12-17	M8643	Blade	4				

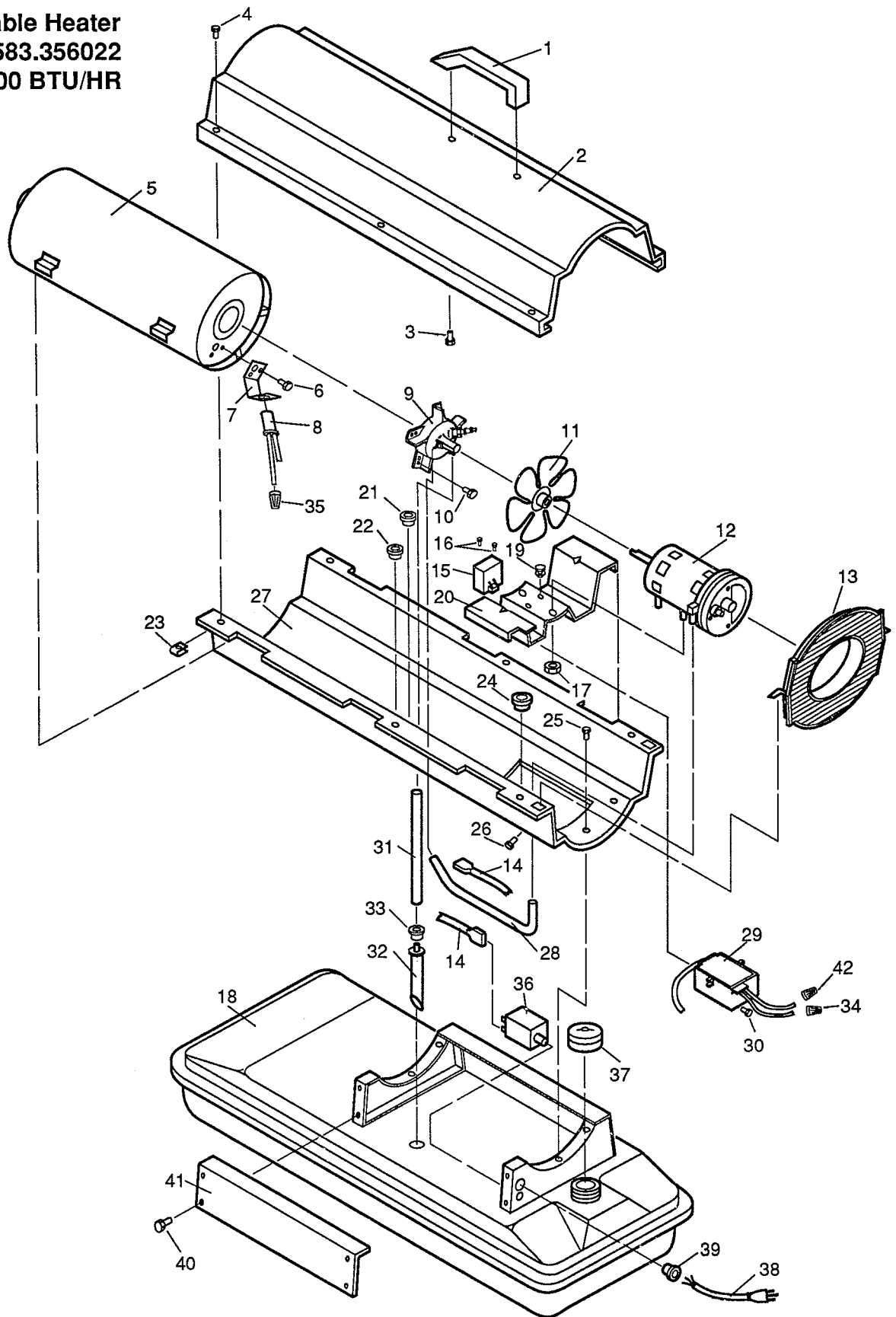
\*\* Available at your local hardware store.

\*\*\* Not available as an assembly.



# REPAIR PARTS

Sears Portable Heater  
Model 583.356022  
70,000 BTU/HR





# REPAIR PARTS

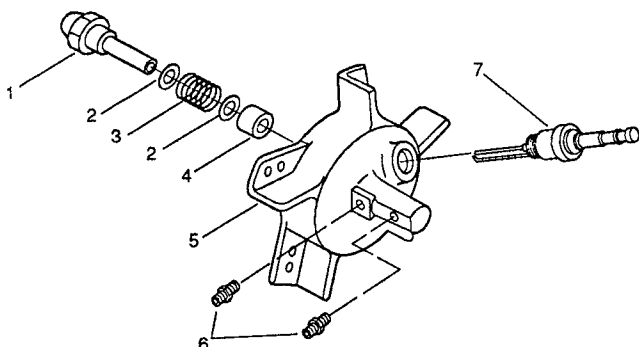
Sears Portable Heater  
Model 583.356022

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51104-01	Handle	1	12-17	M8643	Blade	4
2	079445-01BF	Upper Shell	1	12-18	FHPF3-2C	Screw, #10-32 x 1/4"	2
3	M11084-29	Handle Screw	2	13	M51105-01	Fan Guard	1
4	M15823-27	Screw, #10-16 x 1/2"	6	14	**	Wire Assembly (red, 6")	2
5	M50785-05	Combustion Chamber	1	15	097061-01	Solid State Relay	1
6	M10908-2	Screw, #6-32 x 3/8"	2	16	M15823-39	Screw, #8-18 x 1/2"	2
7	M16660	Photocell Bracket	1	17	NTC-4C	Hex Jam Nut	2
8	M16656-4	Photocell	1	18	097137-28	Fuel Tank	1
9	***	Burner Head Assembly	1	19	M50631	Rubber Bumper	2
9-1	M50880-01	Nozzle	1	20	098138-01	Motor Bracket	1
9-2	M10659-1	Nozzle Seal Washer	2	21	M30865-02	Bushing	1
9-3	M10809-1	Nozzle Seal Spring	1	22	M25907	Bushing	1
9-4	M8882	Nozzle Seal	1	23	M11271-8	Clip Nut	6
9-5	M51098-02	Burner Head Body	1	24	M50104-02	Bushing	1
9-6	M50820-01	Barb Fitting	2	25	M11084-26	Screw, #10-16 x 3/8"	6
9-7	M10962-2	Spark Plug	1	26	M15823-37	Grounding Screw, #8-18 x 1/4"	1
10	M11084-27	Screw, #10-16 x 1/2"	3	27	079446-01BF	Lower Shell	1
11	097033-01	Fan	1	28	M29652-04	Airline	1
12	***	Motor and Pump Assembly	1	29	098073-01	Ignitor Kit	1
12-1	097308-01	Motor	1	30	M11084-29	Screw, #10-16 x 3/4"	2
12-2	079975-01	Pump Body	1	31	079973-01	Fuel Line	1
12-3	M22009	Insert	1	32	M50876-05	Fuel Filter	1
12-4	M22456-1	Rotor	1	33	M10990-3	Bushing	1
12-5	M29608	End Pump Cover	1	34	**	Wire Connector (blue wires)	2
12-6	M29632	Lint Filter	1	35	**	Wire Connector (red wires)	1
12-7	M29633	Intake Filter	1	36	M50671-01	Safety Control	1
12-8	M29609	Filter End Cover	1	37	097702-01	Fuel Cap	1
12-9	M12461-31	Screw, #10-32 x 1"	3	38	098219-06	Power Cord	1
12-10	M27694	Adjusting Screw	1	39	M11143-1	Strain Relief Bushing	1
12-11	M10993-1	Pressure Relief Spring	1	40	M11084-26	Screw, #10-16 x 3/8"	2
12-12	M22997	Plug	1	41	079513-01BH	Side Cover	1
12-13	M8940	Steel Ball, 1/4" dia.	1	42	**	Wire Connector (white wires)	1
12-14	M29612-01	Output Filter	1	PARTS AVAILABLE - NOT SHOWN			
12-15	M12461-31	Screw, #10-32 x 1"	6		098477-03	Tradename Decal	
12-16	M50016	Elbow, 90°, Barb Fitting	1		098415-01	Owner's Manual	

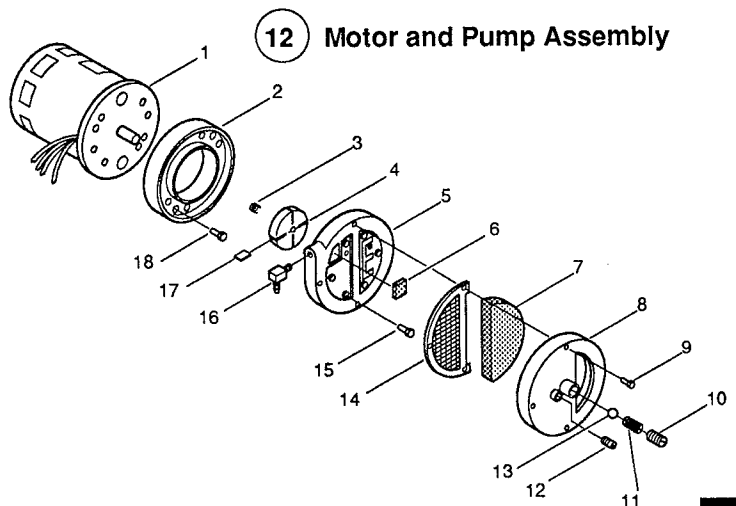
\*\* Available at your local hardware store.

\*\*\* Not available as an assembly.

**9 Burner Head Assembly**

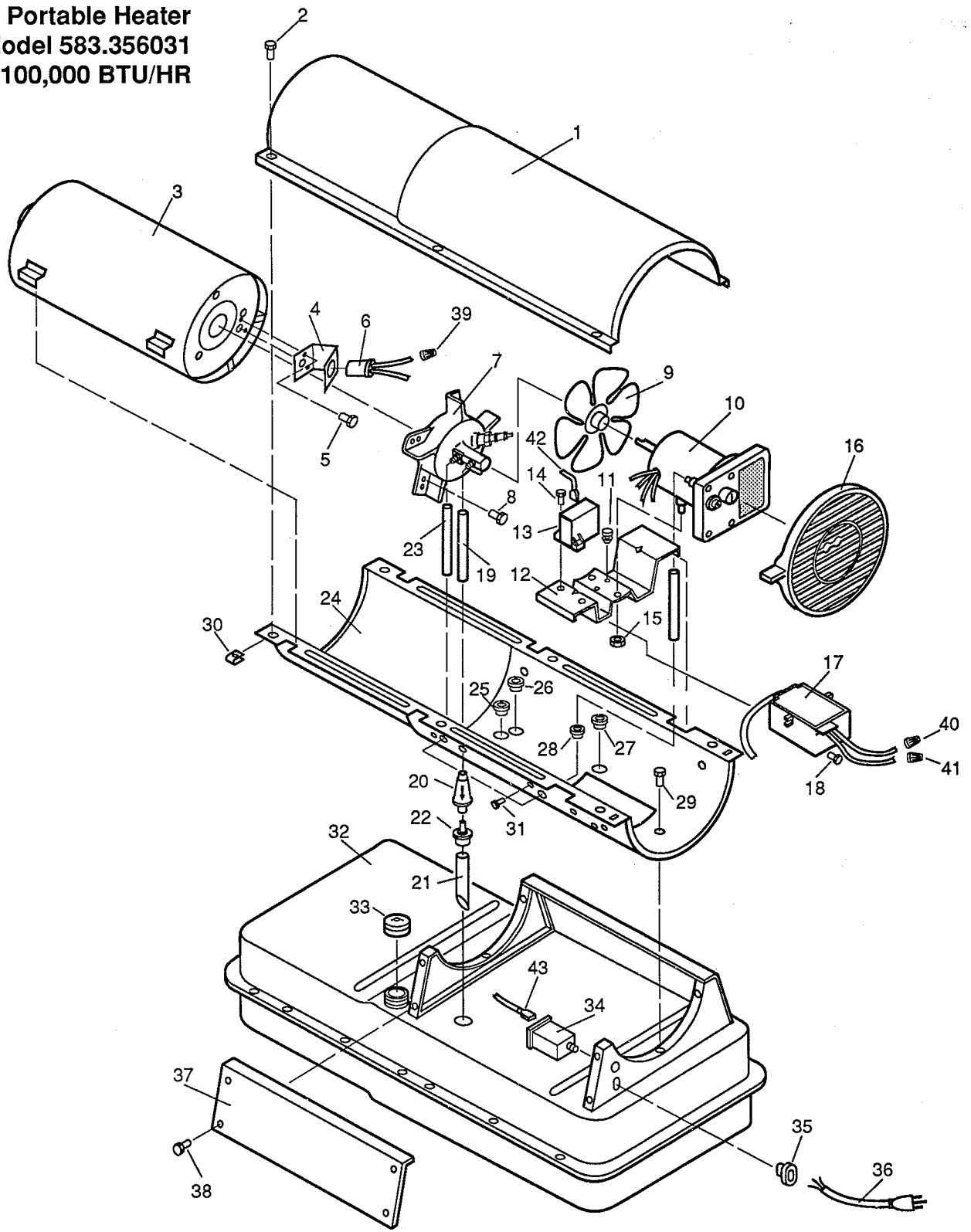


**12 Motor and Pump Assembly**



# REPAIR PARTS

Sears Portable Heater  
Model 583.356031  
100,000 BTU/HR



# REPAIR PARTS

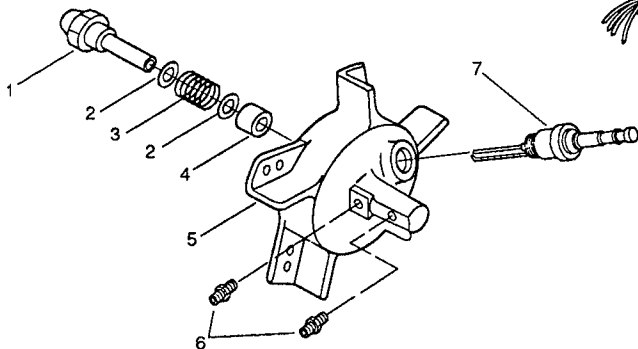
## Sears Portable Heater Model 583.356031

KEY NO.	PART NO.	DESCRIPTION	QTY.	KEY NO.	PART NO.	DESCRIPTION	QTY.
1	079424-02BF	Upper Shell	1	11	M50631	Rubber Bumper	2
2	M15823-27	Screw, #10-16 x 1/2"	6	12	098138-02	Motor Mount Bracket	1
3	079961-01	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	2
6	M16656-4	Photocell	1	16	M51114-01	Fan Guard	1
7	***	Burner Head Assembly	1	17	098073-01	Ignitor Kit	1
7-1	M51120-01	Nozzle	1	18	M11084-29	Screw, #10-16 x 3/4"	2
7-2	M10659-1	Nozzle Seal Washer	2	19	M51345-01	Rubber Tubing	1
7-3	M10809-1	Nozzle Seal Spring	1	20	M51150-01	Fuel Filter	1
7-4	M8882	Nozzle Seal	1	21	M51151-01	Fuel Line	1
7-5	M50924-03	Burner Head Body	1	22	M10990-3	Bushing	1
7-6	M50820-02	Barb Fitting	2	23	M50814-06	Airline	1
7-7	M10962-2	Spark Plug	1	24	079423-02BF	Lower Shell	1
8	M11084-27	Screw, #10-16 x 1/2"	3	25	M30865-02	Bushing	1
9	M51153-01	Fan	1	26	M30865-02	Bushing	1
10	***	Motor and Pump Assembly	1	27	M30865-02	Bushing	1
10-1	097300-01	Motor	1	28	M50104-02	Bushing	1
10-2	079975-01	Pump Body	1	29	M11084-27	Screw, #10-16 x 1/2"	6
10-3	FHPF3-2C	Screw, #10-32 x 1/4"	2	30	M11271-8	Clip Nut	6
10-4	M22009	Insert	1	31	M15823-37	Grounding Screw, #8-18 x 1/4"	1
10-5	M22456-1	Rotor	1	32	097137-05	Fuel Tank	1
10-6	M50545	End Pump Cover	1	33	097702-01	Fuel Cap	1
10-7	M12179	Intake Filter	1	34	M50671-01	Safety Control	1
10-8	M16545	Filter End Cover	1	35	M11143-1	Stain Relief Bushing	1
10-9	M8940	Steel Ball 1/4" dia.	1	36	098219-07	Power Cord	1
10-10	M10993-1	Pressure Relief Spring	1	37	079558-01BH	Side Cover	1
10-11	M27694	Adjusting Screw	1	38	M11084-27	Screw, #10-16 x 1/2"	4
10-12	M22997	Plug	1	39	**	Wire Connector (blue wires)	1
10-13	M12461-31	Screw, #10-32 x 1"	4	40	**	Wire Connector (red wires)	1
10-14	M12244-1	Output Filter	1	41	**	Wire Connector (white wires)	1
10-15	M12461-31	Screw, #10-32 x 1"	6	42	**	Wire Assembly (red 6")	1
10-16	M11637	Lint Filter	1	43	**	Wire Assembly (red 14 1/2")	1
10-17	M50820-02	Barb Hose Fitting	1	PARTS AVAILABLE - NOT SHOWN			
10-18	M8643	Blade	4		098477-04	Tradename Decal	
					098415-01	Owner's Manual	

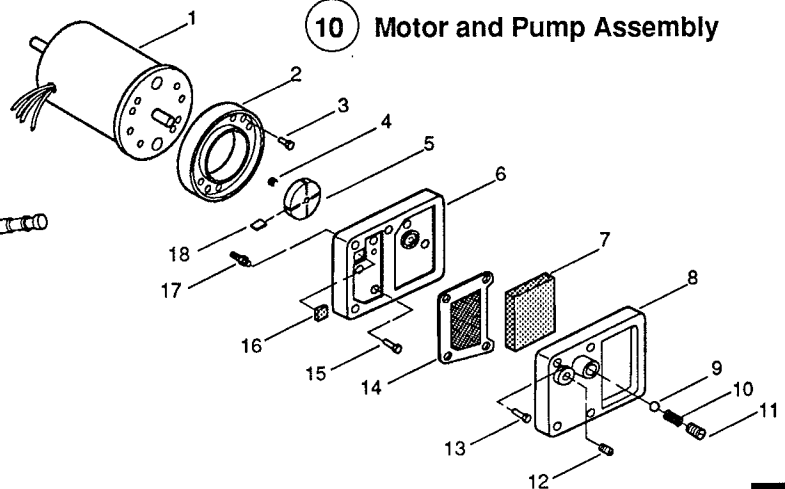
\*\* Available at your local hardware store.

\*\*\* Not available as an assembly.

**7 Burner Head Assembly**

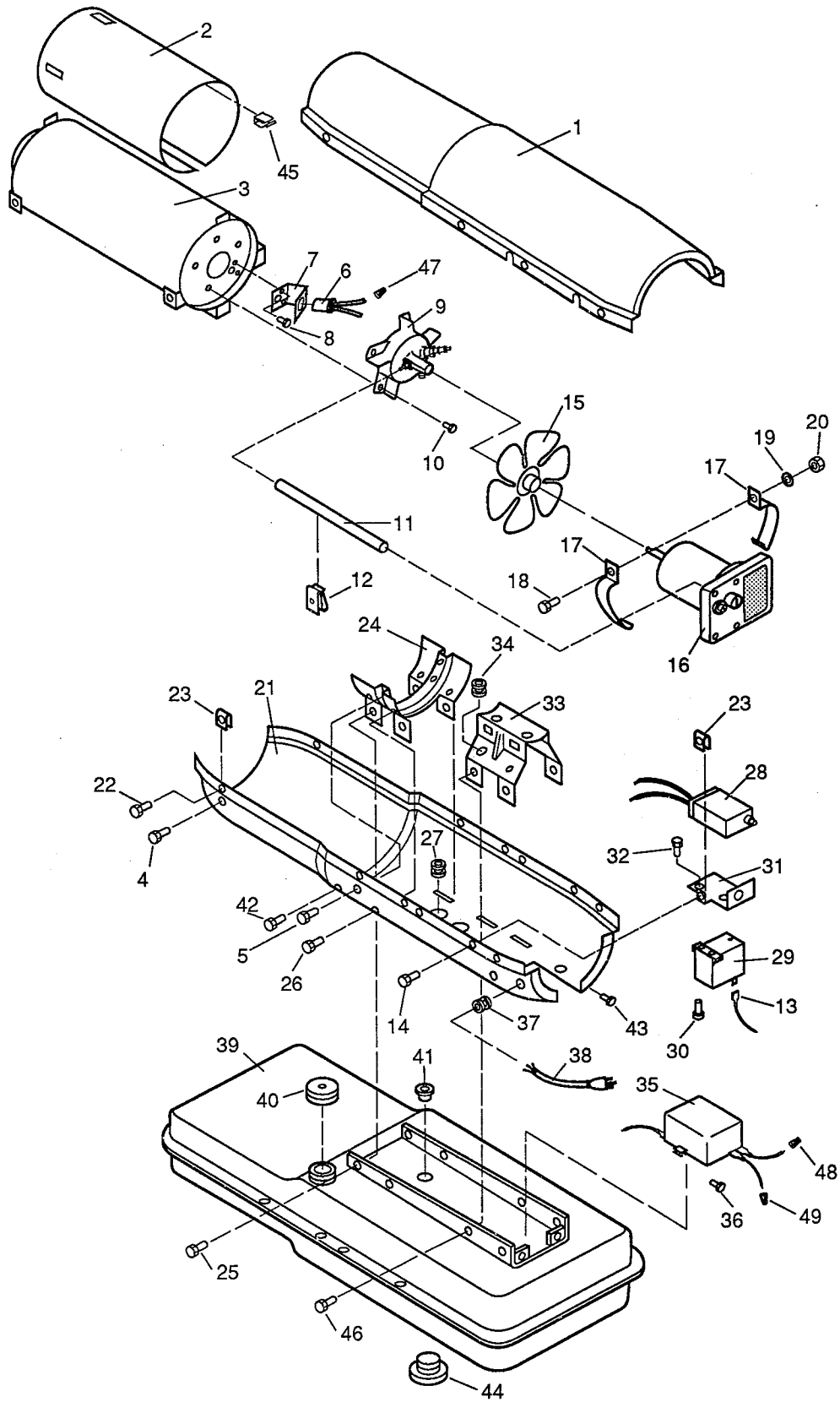


**10 Motor and Pump Assembly**



# REPAIR PARTS

Sears Portable Heater  
Model 583.356042  
150,000 BTU/HR



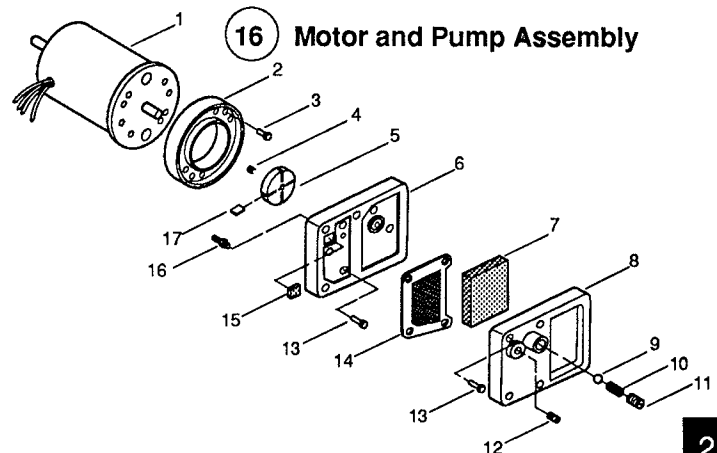
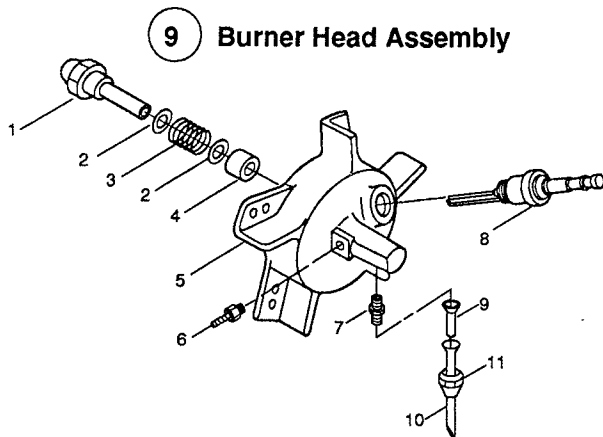
# REPAIR PARTS

## Sears Portable Heater Model 583.356042

KEY NO.	PART NO.	DESCRIPTION	QTY.	KEY NO.	PART NO.	DESCRIPTION	QTY.
1	079424-03BF	Upper Shell	1	16-14	M12244-1	Output Filter	1
2	098068-01	Heat Deflector	1	16-15	M11637	Lint Filter	1
3	M16887-6	Combustion Chamber	1	16-16	M50820-02	Barb Hose Fitting	1
4	M11084-29	Screw, #10-16 x 3/4"	2	16-17	M8643	Blade	4
5	M11084-29	Screw, #10-16 x 3/4"	2	17	M16661	Motor Clamp	4
6	M16656-4	Photocell	1	18	M51043-01	Bolt, 1/4-20 x 1 1/2"	2
7	M16660	Photocell Bracket	1	19	WLM-4C	Lockwasher, 1/4	2
8	M10908-2	Screw, #6-32 x 3/8"	2	20	NPC-4C	Hex Nut, 1/4-20	2
9	***	Burner Head Assembly	1	21	079423-03BF	Lower Shell	1
9-1	M18022	Nozzle	1	22	M11084-27	Screw, #10-16 x 1/2"	6
9-2	M10659-1	Nozzle Seal Washer	2	23	M11271-8	Clip Nut	7
9-3	M10809-1	Nozzle Seal Spring	1	24	M12828	Shell Support Bracket	1
9-4	M8882	Nozzle Seal	1	25	M11084-27	Screw, #10-16 x 1/2"	4
9-5	M50924-01	Burner Head Body	1	26	M11084-29	Screw, #10-16 x 3/4"	2
9-6	M50820-02	Barb Fitting	1	27	M50104-03	Bushing	2
9-7	079685-01	Male Connector	1	28	M50671-01	Safety Control	1
9-8	M10962-2	Spark Plug	1	29	097061-01	Solid State Relay	1
9-9	M19630	Fuel Filter	1	30	M15823-39	Screw, #8-18 x 1/2"	2
9-10	M16790-12	Fuel Line	1	31	097060-01	Bracket, Solid State Relay	1
9-11	M50660-05	Flared Nut	1	32	M11084-27	Screw, #10-16 x 1/2"	1
10	M11084-27	Screw, #10-16 x 1/2"	3	33	M16645	Motor Support Bracket	1
11	M50814-03	Airline	1	34	M30865-04	Bushing	1
12	M50873-01	Airline Clip	2	35	098073-01	Ignitor Kit	1
13	**	Wire Assembly (red, 6")	1	36	M11084-29	Screw, #10-16 x 3/4"	2
14	M11084-27	Screw, #10-16 x 1/2"	1	37	M11143-1	Strain Relief Bushing	1
15	M17058	Fan	1	38	098219-07	Power Cord	1
16	***	Motor and Pump Assembly	1	39	097137-06	Fuel Tank	1
16-1	097307-01	Motor	1	40	097702-01	Fuel Cap	1
16-2	079975-01	Pump Body	1	41	M10990-3	Bushing	1
16-3	FHPF3-2C	Screw, #10-32 x 1/4"	2	42	M11084-27	Screw, #10-16 x 1/2"	2
16-4	M22009	Insert	1	43	M11084-27	Screw, #10-16 x 1/2"	2
16-5	M22456-1	Rotor	1	44	M27417	Drain Plug	1
16-6	M50545	End Pump Cover	1	45	M50873-01	Clip	7
16-7	M12179	Intake Filter	1	46	M11084-27	Screw, #10-16 x 1/2"	4
16-8	M16545	Filter End Cover	1	47	**	Wire Connector (blue wire)	1
16-9	M8940	Steel Ball 1/4" dia.	1	48	**	Wire Connector (red wire)	1
16-10	M10993-1	Pressure Relief Spring	1	49	**	Wire Connector (white wire)	1
16-11	M27694	Adjusting Screw	1	PARTS AVAILABLE - NOT SHOWN			
16-12	M22997	Plug	1		098477-05	Tradename Decal	
16-13	M12461-31	Screw, #10-32 x 1"	10		098415-01	Owner's Manual	

\*\* Available at your local hardware store.

\*\*\* Not available as an assembly.









**OWNER'S  
MANUAL**

**HOW TO ORDER  
REPAIR PARTS**

**MODEL  
NUMBERS:  
583.356002  
583.356012  
583.356022  
583.356031  
583.356042**

**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."

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**Sears, Roebuck and Co., Chicago, IL 60684**

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Printed in U.S.A.

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Rev. B  
8A