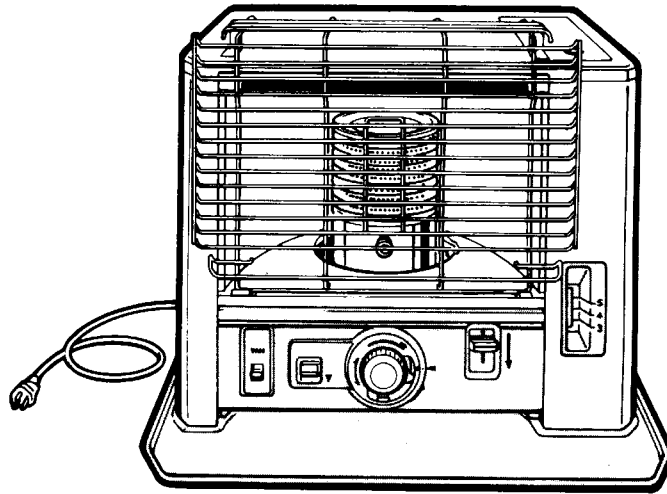




PORTABLE KEROSENE HEATER
MODEL THERMA-12F

Miles Stair's
Wick Shop
www.MilesStair.com
Quality Kerosene Items since 1999



SPECIFICATIONS

Model No.	THERMA-12F
Type of Heater	Reflection With Fan
Heating Output	12500 BTU/hr.
Fuel Tank	Cartridge
Tank Capacity	1.48 gallon
Heating Time	Up to 16 hr.
Fuel Consumption	0.093 gal/hr.
Electrical Rating	110/120V, 60Hz, 20W
Approx. Heating Area★★	446 sq. ft.
Dimensions	Height 21 $\frac{3}{4}$ inches
	Width 24 $\frac{1}{4}$ inches
	Depth 17 $\frac{1}{2}$ inches
	28.7 lbs.

★★ This is an average heating requirement, based on a rule of thumb figure of 28 B. T. U. per sq. ft. Climatic conditions and insulation, among other factors, will affect this figure.

Save These Instructions

IMPORTANT

READ AND UNDERSTAND INSTRUCTIONS BEFORE USING HEATER. RETAIN INSTRUCTIONS FOR FUTURE REFERENCE.

☆ Your Union kerosene heater is designed and constructed for many years of safe efficient use.

☆ Union kerosene heater features:

- ☆ Automatic ignition
- ☆ Removable tank cartridge
- ☆ Safety shut-off
- ☆ Two steps wick adjuster
- ☆ Fuel gauge
- ☆ Powerful electric fan
- ☆ Level indicator
- ☆ Siphon pump and Batteries included

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IMPORTANT CAUTION

1. WARNING:

a. RISK OF EXPLOSION

1. NEVER USE ANY FUEL OTHER THAN WATER-CLEAR NO. 1-K KEROSENE. NEVER USE GASOLINE.
2. NEVER REFILL THE CARTRIDGE TANK WHEN HEATER IS OPERATING OR STILL HOT.
3. NEVER USE HEATER IN AREAS WHERE FLAMMABLE VAPORS OR GASES MAY BE PRESENT.
4. NEVER FILL THE CARTRIDGE TANK IN LIVING SPACE. FILL THE TANK OUTDOORS.
5. NEVER STORE OR TRANSPORT IN OTHER THAN A METAL OR PLASTIC CONTAINER THAT IS (1) ACCEPTABLE FOR KEROSENE, (2) NONRED IN COLOR, AND (3) CLEARLY MARKED, "KEROSENE." NEVER STORE KEROSENE IN THE LIVING SPACE.

b. DUE TO HIGH SURFACE TEMPERATURE, KEEP CHILDREN, CLOTHING, AND FURNITURE AWAY.

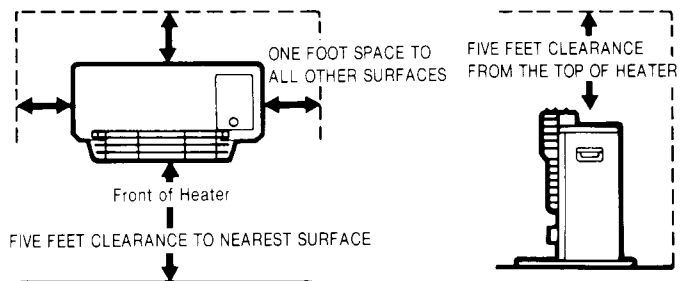
c. RISK OF INDOOR AIR POLLUTION—USE ONLY IN WELL-VENTILATED AREAS: USE OF THIS HEATER MAY POSSIBLY BE DANGEROUS TO PERSONS WITH RESPIRATORY OR CIRCULATORY DISORDERS. PEOPLE WITH BREATHING PROBLEMS SHOULD CONSULT A PHYSICIAN BEFORE USING THE HEATER.

d. DO NOT USE HEATER TO HEAT OR BOIL WATER OR USE AS A COOKING APPLIANCE.

2. CAUTION: RISK OF BURNS. DO NOT OPERATE THE HEATER WITHOUT THE GUARD COMPLETELY ATTACHED. DO NOT USE THIS HEATER UNLESS TRAY IS ASSEMBLED TO HEATER.

3. INSURE THAT MINIMUM CLEARANCES ARE AS SHOWN.

Position heater with at least the clearances at right from furniture, walls or other combustible materials such as drapes and clothing.



4. TO BE USED ONLY IN ACCORDANCE WITH STATE AND/OR LOCAL REGULATIONS, ORDINANCES, AND CODES.

5. NEVER LEAVE HEATER UNATTENDED WHILE IN USE.

6. HAVE A SMOKE DETECTOR AND FIRE EXTINGUISHER IN THE AREA OF USE.

7. In a house of typical construction, that is, one that is not of unusually tight construction due to heavy insulation and tight seals against air infiltration, an adequate supply of air for combustion and ventilation is provided through infiltration. However, if the heater is used in a small room where less than 200 cubic feet (5.7 m³) of air space is provided for each 1000 Btu per hour of heater rating (considering the maximum burner adjustment), the door(s) to adjacent room(s) should be kept open or the window to the outside should be opened at least 1 inch (25.4mm) to guard against potential buildup of indoor air pollution.

Do not use the heater in a bathroom or any other small room with the door closed.

8. Heater must not be used in confined space, mobile home, recreational vehicle, tent, bedroom or sleeping area.

9. Do not use additives with the kerosene in this heater. These may dangerously affect the operation of the heater.

NOTE


- BUILT IN SAFETY SHUT OFF : If your heater is tilted or bumped hard while lit it will automatically shut off.
- At high altitudes, some noise may be heard from the chimney, due to the effects of less dense air. This does not affect the operation of the heater.

KEROSENE HEATER FUEL GUIDE

PURE CLEAN KEROSENE

To assure that you derive maximum performance and satisfaction from your new Portable Heater, it is ESSENTIAL to USE ONLY PURE CLEAN KEROSENE.

* THE ONLY GRADE OF KEROSENE WHICH CAN SAFELY BE USED IN THIS HEATER IS:
Uncontaminated, Water-Clear No. 1-K Kerosene. Free from Water or Dirt.

WARNING	KEROSENE ONLY	IMPORTANT NOTICE
<p><u>BURN ONLY WATER-CLEAR NO. 1-K KEROSENE</u> in this heater. The use of gasoline, white gas, Coleman fuel, or any other fuels can be extremely dangerous. Read all instructions and caution labels before using.</p>		<p>IF GASOLINE IS USED BY MISTAKE, SMOKE AND FLAMES WILL BE EXCESSIVE. <u>IMMEDIATELY OPERATE THE MANUAL SHUT OFF</u> TO REDUCE THE FLAMES. IF HEATER DOES NOT EXTINGUISH, CALL YOUR LOCAL FIRE SERVICE FOR HELP.</p>

CAUTIONS

- Never use any other fuel such as gasoline, Coleman fuel, thinner, naphtha or alcohol as these are highly volatile and are DANGEROUS because of high risk of fire and explosion.
- Do not use substitutes such as diesel fuel or fuel oil, etc. as they may lead to the mechanism becoming inoperative and failing to function in case of an emergency.
- Do not use a container if it has contained any other type of fuel as contamination will lead to the same dangers as listed above.

DETERIORATED KEROSENE AND CONTAMINATED KEROSENE

1. DETERIORATED AND CONTAMINATED KEROSENE:

Deteriorated Kerosene

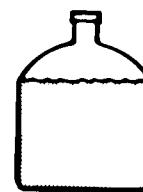
- Kerosene kept through the summer season.
- Kerosene stored for a long period in direct sunlight or in hot areas.
- Kerosene stored with the cap of the container left open.

Contaminated Kerosene

- Kerosene mixed with any other type of fuel such as gasoline, paint thinner, cooking oil, or machine oil.
- Kerosene mixed with water or dust.



CLEAN PURE KEROSENE



DETERIORATED OR CONTAMINATED KEROSENE

NOTE

Deteriorated kerosene will appear yellow in color and smell sour.



2. IF DETERIORATED OR CONTAMINATED KEROSENE IS USED:

- Tar will deposit on the wick in 1 to 30 days of use. This will cause the following troubles.
 - a. Heater is difficult to light.
 - b. Chimney glows slowly.
 - c. The wick adjuster knob is difficult to turn, or the wick is not lowered when extinguishing heater.
 - d. "Normal Flame" is not obtained even though the wick is turned up all the way.
 - e. Unpleasant odor is produced during use.
- Use of kerosene mixed with water results in low heat output and dying flame.
- Use of high volatile fuel such as gasoline or paint thinner may result in a fire.

3. CORRECTIVE ACTION IF DETERIORATED OR CONTAMINATED KEROSENE IS USED:

- Drain the deteriorated or contaminated fuel from the cartridge tank, and rinse the tank once or twice with pure kerosene.
- Clean the wick. (See page 9.)
- Replace the wick if wick cleaning does not improve wick performance. (See page 10.)

KEROSENE HEATER SAFETY GUIDE

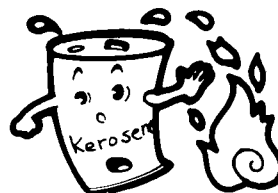
Improper use can result in serious bodily injury, fire hazards, carbon monoxide poisoning or burns.
Read the following carefully before using your heater.

FUEL

1. Use only Water-Clear No. 1-K kerosene in this heater. Never use deteriorated, dirty or contaminated kerosene, or gasoline.

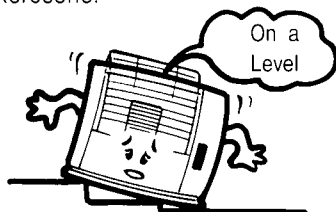


2. Store kerosene away from any heat sources, rainwater, or dust. Do not store kerosene in direct sunlight or in hot areas. Never store kerosene with gasoline.

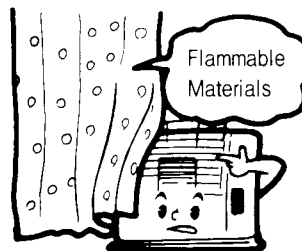


PLACE FOR USE

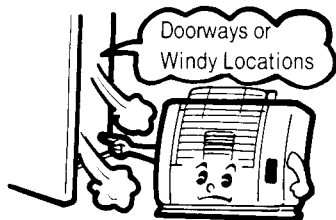
1. Place the heater on a level surface. Never use or transport in any vehicle, or vessel, unless all kerosene has been removed to prevent accidental spillage of kerosene.



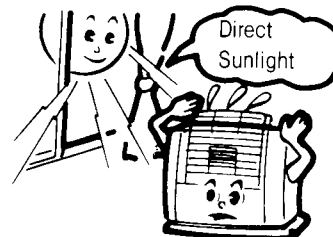
2. Do not use heater adjacent to any flammable materials, such as drapes and clothing. It may increase the risk of fire.



3. Do not place heater in high traffic areas such as doorways or hallways or in windy or drafty locations. Do not use in areas with a high dust concentration present in the air. Do not turn the air outlet of a vacuum cleaner towards the heater.



4. Do not use in temperatures above 85°F (30°C) or in direct sunlight. (It may cause abnormal combustion or produce soot.)



5. Do not place heater on table, chair, etc. or other location where there is a danger of being knocked down or tipped over.

REFUELING

1. Never refill the cartridge tank when heater is operating or still hot. Never refill the cartridge tank in the living space. Fill the tank outdoors.

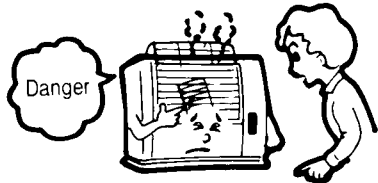


2. After filling the tank, wipe away any spilled kerosene near the oil inlet and close the tank cap tightly. Turn the cartridge tank upside down and make certain that the cap is properly installed and does not leak.

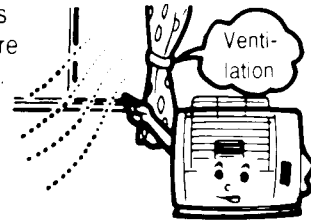


USAGE

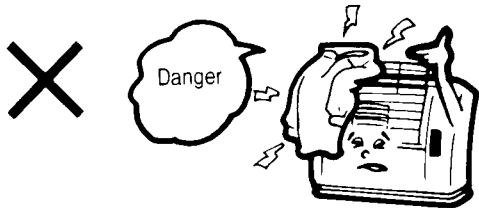
1. Check periodically for proper burning.
If the wick is raised too high or chimney is not seated properly, abnormal combustion may occur.



2. While in use, provide adequate ventilation to supply fresh air (once or twice an hour).
Never use heater in areas where flammable gases are produced or accumulated.



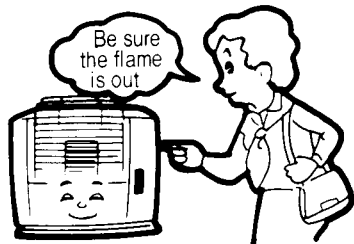
3. Do not use as a clothes dryer.
It may fall onto the heater and cause a fire.



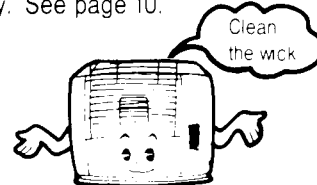
4. Do not move or handle while heater is burning or still hot.



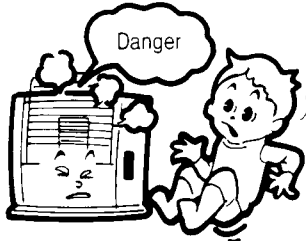
5. Always extinguish heater before sleeping or leaving room, or it may cause a fire or produce carbon monoxide.



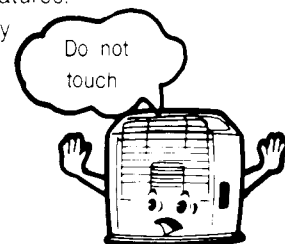
6. If the wick adjuster knob is difficult to turn and the wick is not lowered, due to excess tar on the wick caused by the use of deteriorated or contaminated kerosene, remove the cartridge tank and leave wick up until flame goes out naturally. See page 10.



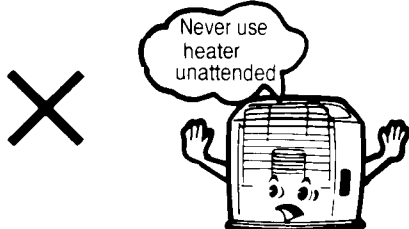
7. Do not let children operate or refuel heater.
Do not operate without adult supervision.



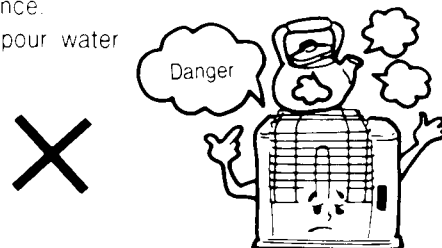
8. Do not touch the heater guard.
Due to high surface temperatures, keep children and pets away from heater.



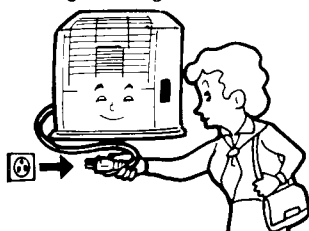
9. Never use heater in unattended areas.
(It may cause a fire or produce carbon monoxide.)



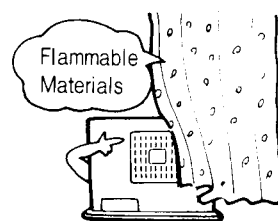
10. Do not use heater to heat or boil water or use as a cooking appliance.
Never spill or pour water on the heater.



11. Disconnect from Power Source before moving or servicing, or during a long absence.



12. Do not block the fan guard with any flammable materials such as drapes and clothing. It is very dangerous.



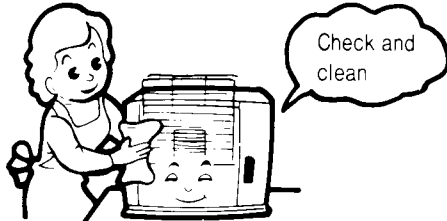
HOW TO COPE WITH THE UNEXPECTED ACCIDENT

If abnormal combustion or an unexpected accident occurs, push down the Manual Shut Off at once.
If the heater does not extinguish or if there are flames outside of the heater, call your local fire service for help.



DAILY CHECK AND CARE

1. Always check and clean the heater.
Accumulated dirt and kerosene spills on the cabinet or tray create a potential fire hazard, clean off before lighting heater.



2. Do not use your heater if it has been damaged or is burning irregularly.



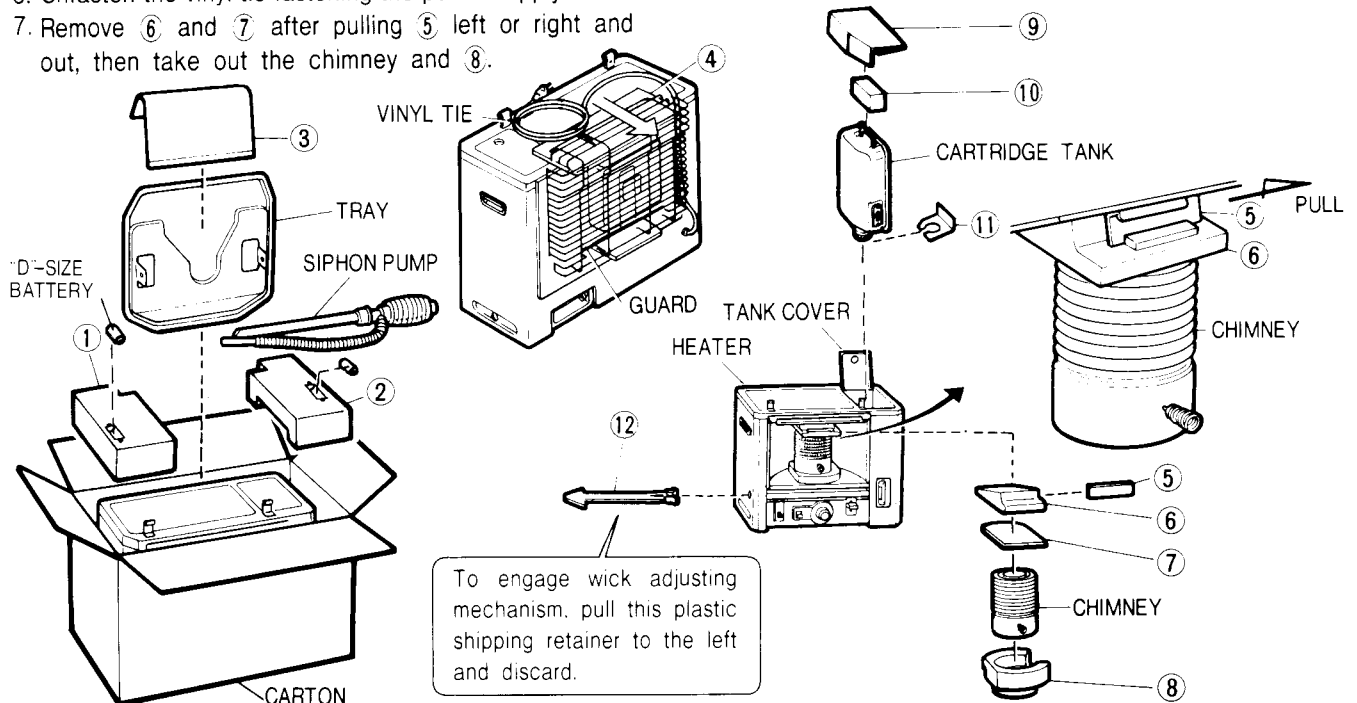
HOW TO UNPACK AND ASSEMBLE YOUR HEATER

UNPACKING

When unpacking your heater, take care not to destroy the carton or inner packing material. You will want to use this packaging to store your heater when not in use.

1. Remove ① and 2 "D"-size batteries.
2. Remove the siphon pump.
3. Take out the tray and disconnect ③.
4. Take out the heater, using the handles on each side, from the carton.
5. Lift the guard and 4 together and pull in the direction of the arrow as shown. Then remove the guard and disconnect 4.
6. Unfasten the vinyl tie fastening the power supply cord.
7. Remove ⑥ and ⑦ after pulling ⑤ left or right out, then take out the chimney and ⑧.
8. Replace the chimney only, making sure it is seated properly. (See Page 8, LIGHTING ③.)
9. Open the tank cover and remove ⑨ and ⑩.
10. Remove the cartridge tank and remove ⑪.
11. Replace the cartridge tank.
12. Pull left ⑫.

BE SURE TO REMOVE ALL PACKING MATERIALS (CARD BOARD, STYROFOAM PACKINGS) FROM YOUR HEATER AS SHOWN.

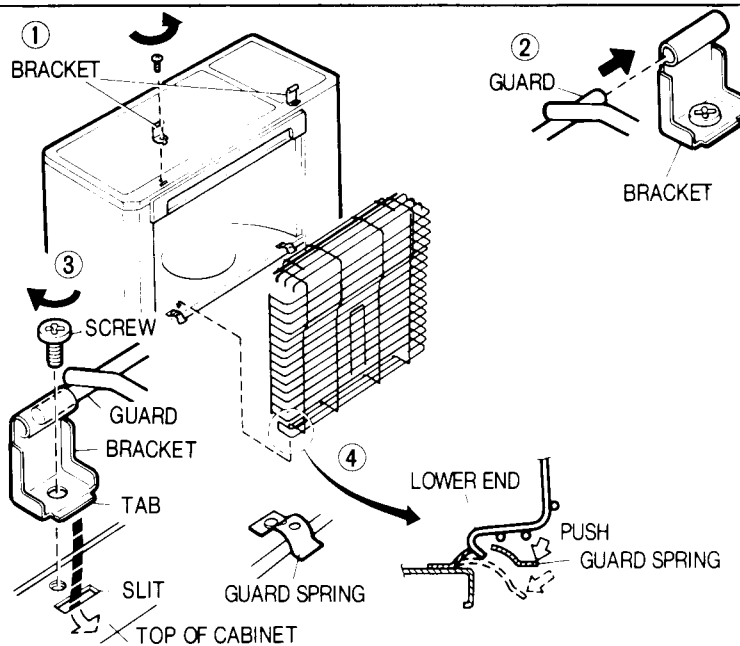


ASSEMBLING

GUARD

1. Remove one of two brackets. See ILL. ①.
2. Insert the guard into the bracket, as shown in ILL. ②.
3. Assemble the other bracket onto the guard and insert the tab of the bracket into slit of the top of cabinet, then assemble screw, as shown in ILL. ③.
4. Insert the two lower ends of the guard into the two holes of the guard springs. See ILL. ④.

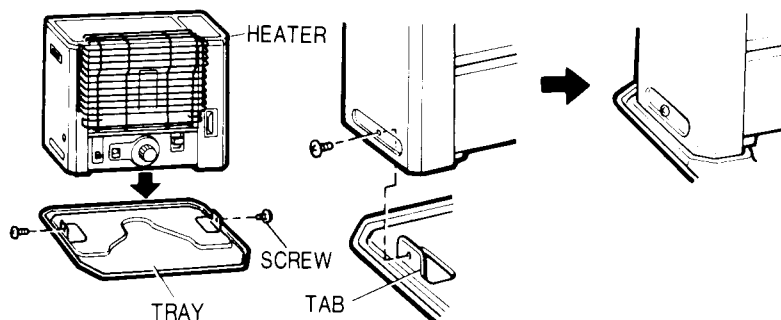
CAUTION: Risk of burns. Do not operate the heater without the guard completely attached.



TRAY

1. Remove the two screws from the sides of the tray.
2. Place the tray on the floor.
3. Place the heater on the tray by inserting two tabs of the tray to the inside of the heater.
4. Secure the heater to tray with two screws.

CAUTION: Do not use this heater unless tray is assembled to heater. It may cause abnormal combustion.



HOW TO OPERATE YOUR HEATER

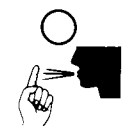
REFUELING

Always extinguish heater before refueling.

Use only kerosene (Water-Clear No. 1-K Kerosene). Do not use gasoline or any other fuel.

HOW TO DISTINGUISH KEROSENE FROM GASOLINE.

- Put some fuel on your fingertip, and blow on it.



Kerosene is still wet.



Gasoline dries immediately.

NOTE

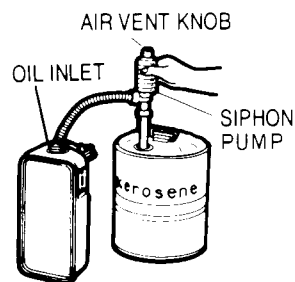
- Tank must be set on solid level surface outdoors during filling.
- Turn the cartridge tank upside down and make certain that the cap does not leak.
- Wipe up any spilled kerosene.

1. Remove the cartridge tank from the heater and unfasten the tank cap. Refill the tank with a siphon pump.

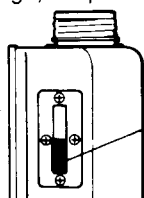
NOTE

The knob at the top of the siphon pump controls an air vent. Before siphoning, close the vent by turning the knob clockwise.

To avoid over filling the tank, watch the fuel gauge carefully. Stop the flow of kerosene by turning the air vent knob counter-clockwise.

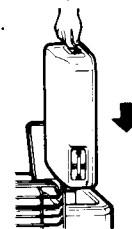


2. When the fuel level rises up to the center of the fuel gauge, stop refilling.



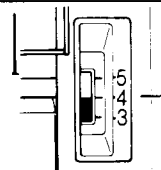
FUEL GAUGE
Adequate Amount
of Kerosene
(Approx. 1.2 Gallon)

3. Close the tank cap tightly and replace the tank into the heater properly.



NOTE

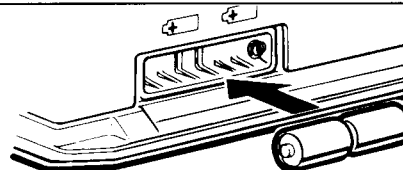
- When the indicator moves to center of the fuel gauge on the front of cabinet, the flame goes out in about 4 hours.
- Refill the tank as described on pages 7 and 8.



About
4 hours

PREPARATION BEFORE LIGHTING

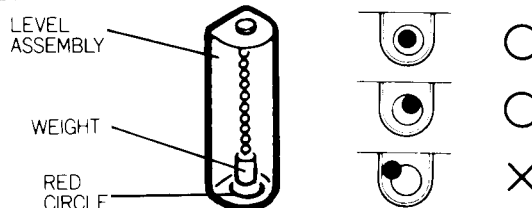
1. Install 2 "D"-size batteries provided with your heater.
(See page 6 How to unpack and assemble your heater.)



2. Check the level assembly on the right side of heater as shown.

Use the heater in a place where the weight can be seen within the red circle.

(If the heater is tilted, Safety Shut Off does not function properly.)



LIGHTING

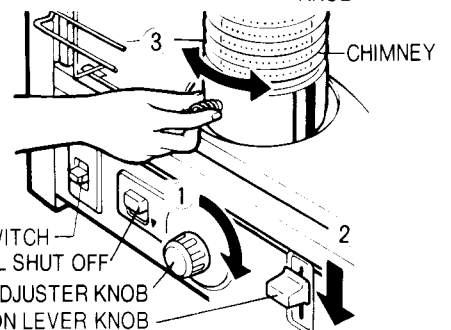
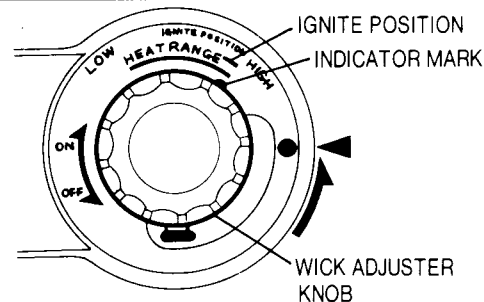
NOTE: After initial fueling, allow 20 minutes for wick to absorb kerosene before lighting.

- 1 Turn the wick adjuster knob clockwise until it stops. The indicator mark on the wick adjuster knob will come to the "IGNITE POSITION" as illustrated.
- 2 Push down the ignition lever knob slowly until it stops, the chimney will tilt for lighting. When wick is lit, return the ignition lever knob immediately.
- 3 Turn the chimney by the wire handle from side to side a few times to make certain it is seated properly.

CAUTION: Be sure the wire handle moves easily left and right. This means the chimney is properly seated. A tilted chimney can cause smoke and damage to the heater. Never tilt the chimney to check the flame after lighting since this releases excessive kerosene contaminated air.

NOTE: If the ignition lever knob is pushed down too hard, the ignition plug will strike the wick and the wick will not ignite. Return the ignition lever knob slightly while looking at the ignition plug, and wick will light easier.

In the initial use, a slight odor may be noticed from the new chimney due to evaporation of machine oil. This odor will disappear after 3 or 4 hours of use.



CAUTION: OPERATION OF FAN

- 1) Use ONLY with grounded electrical power outlet.
- 2) Use ONLY with 110/120Volts, 60Hz electricity.
- 3) After lighting heater, wait 5 minutes and check <NORMAL FLAME>. Switch FAN "ON." Heater is now circulating hot air.
- 4) Do not block fan guard or air outlet. It is very dangerous.
- 5) When extinguishing heater, first switch FAN "OFF."

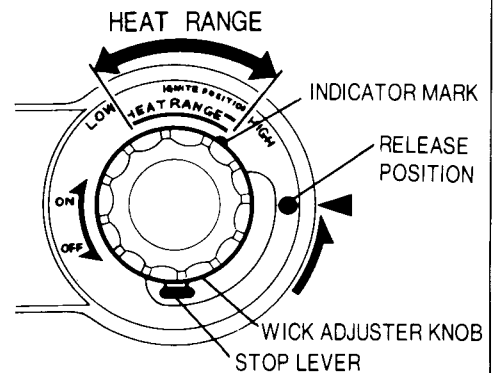
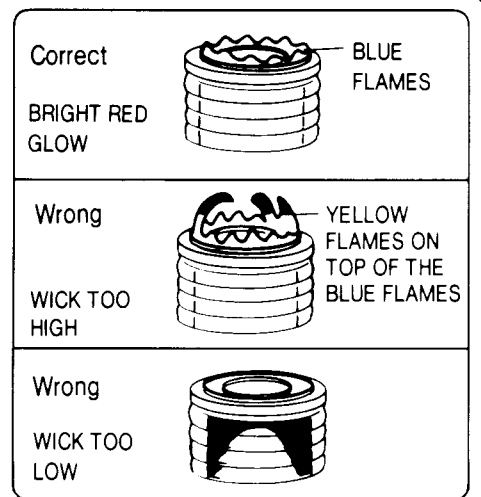
FLAME ADJUSTMENT

- ① Within 3 minutes the flame will rise, in another minute the chimney will glow. The chimney should be a clear bright red with blue flame seen above the chimney top.
- ② If yellow flames appear on top of the blue flames, turn the chimney by the wire handle from side to side 2 or 3 times without touching the hot guard, to ensure that the chimney is seated properly. If the yellow flame still extends, lower wick (counter-clockwise in the HEAT RANGE) until the blue flames only remain above the chimney top.
- ③ If the chimney has a blackish cast and no blue flame appears above the chimney top, raise the wick by turning adjustment clockwise in the HEAT RANGE.

WARNING

ALWAYS KEEP THE INDICATOR MARK ON THE WICK ADJUSTER KNOB WITHIN THE HEAT RANGE DURING USE. DO NOT OPERATE HEATER WITH WICK BELOW THE WICK STOP. SUCH OPERATION DECREASES COMBUSTION EFFICIENCY, CREATES ODOR, DECREASES WICK LIFE.

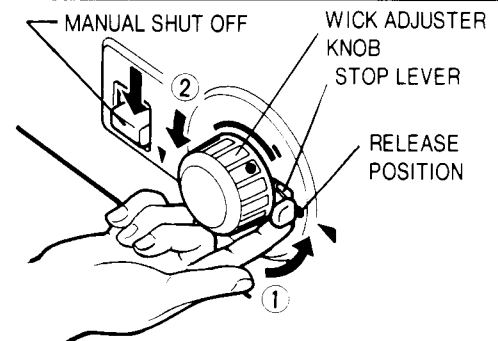
- The wick adjuster knob is designed not to be turned below the low wick stop of the "HEAT RANGE" unless the stop lever is set to "Release Position" as shown at right. Do not turn the knob forcibly counter-clockwise below the wick stop or damage to the heater may result.
- If room temperature becomes too hot, either turn off the heater for a while or increase air ventilation.



EXTINGUISHING

- ① Turn the stop lever to "Release Position."
- ② Turn the wick adjuster knob counter-clockwise to a firm stop. The flame will go out in a short time. Always check that the flame is completely out.
- For instant extinguishing of the flame, push down the Manual Shut Off.

NOTE: Wait 15 minutes after extinguishing before relighting. USE OF MANUAL SHUT OFF MAY CAUSE MOMENTARY FLAME AND KEROSENE ODOR.



MAINTENANCE

- You may clean the cabinet exterior and reflector with a soft damp cloth, use a mild detergent solution or mild abrasive household cleaner if necessary, and wipe dry with soft dry cloth.
- Replace the batteries if the filament of ignition plug does not glow sufficiently.

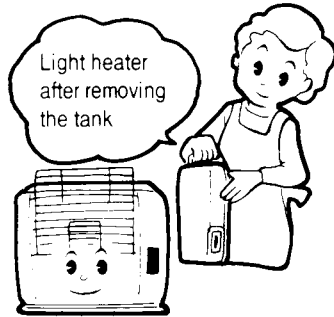
CLEANING THE WICK (BURNING DRY)

Clean the wick to remove tar or carbon deposits around the top of the wick, if any of the following conditions exist:

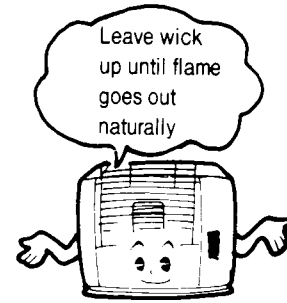
- a. Heater is difficult to light.
- b. Chimney glows slowly.
- c. The wick adjuster knob is difficult to turn, or the wick is not lowered when extinguishing heater.
- d. "Normal Flame" is not obtained even though the wick is turned up all the way.
- e. Unpleasant odor is produced during use.

HOW TO CLEAN THE WICK

1. Remove the cartridge tank from the heater and light the heater. See "CAUTION" below.



2. Leave wick up until flame goes out naturally. (About 1 hour)



3. Fill the tank with pure kerosene. Allow 20 minutes for wick to absorb kerosene before lighting.

CAUTION

- Turn the wick adjuster knob to "HIGH" position.
- Do not lift up the chimney while cleaning the wick.
- Cleaning wick by burning all fuel should be done outdoors since some smoke or odor may occur in the final stage.

After repeated cleanings, the wick of your heater needs replacing if any of the following exist:

- The top of the wick is hard.
- The wick is unevenly worn.
- Wick cleaning does not improve wick performance.

See the instructions below.

CHANGING THE SPECIAL WICK

This allows you to replace the wick quickly and easily.

USE ONLY "UNION" REPLACEMENT WICK.....PART NO. 12F030

CAUTION: Do not attempt to substitute any other wick.

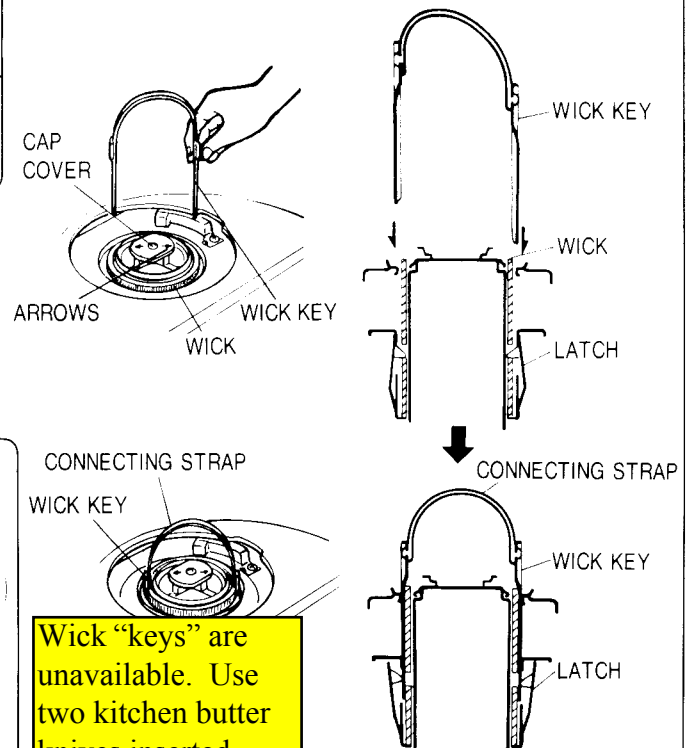
Do not trim the wick and make sure when fitting a new wick that it is properly located.

★ TO REMOVE OLD SPECIAL WICK

1. After heater has cooled, disconnect from Power Source. Open the guard and remove the chimney assembly.

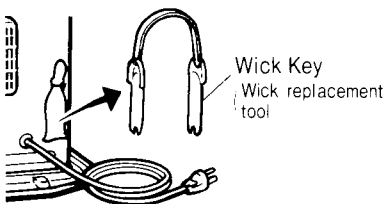
2. Raise the wick by turning the wick adjuster knob clockwise until it stops.

3. Align one of the wick key legs with one of the arrows on the cap cover, insert it over the outside of the wick and press down until it stops as illustrated right. Then insert the other leg of the wick key opposite the other arrows and press down.



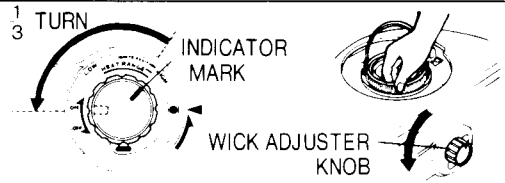
NOTE

- The wick key is attached on the back of the cabinet.
- Insertion of the wick key releases the latching mechanism of the wick.
- To avoid damage to the wick key, hold the wick key so that it slides straight downwards and press with a careful firm pressure.

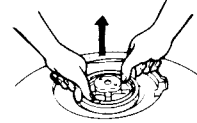


Wick "keys" are unavailable. Use two kitchen butter knives inserted vertically to unlatch the wick.

4. Turn the stop lever to "Release Position." Grasp the top of the wick and turn the wick adjuster knob counter-clockwise until the indicator mark becomes horizontal (about $\frac{1}{3}$ turn) as illustrated. Remove the wick key completely by pulling up the connecting strap.



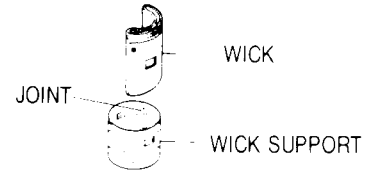
5. Grasp the wick with both hands as illustrated, and pull the wick straight up and out.



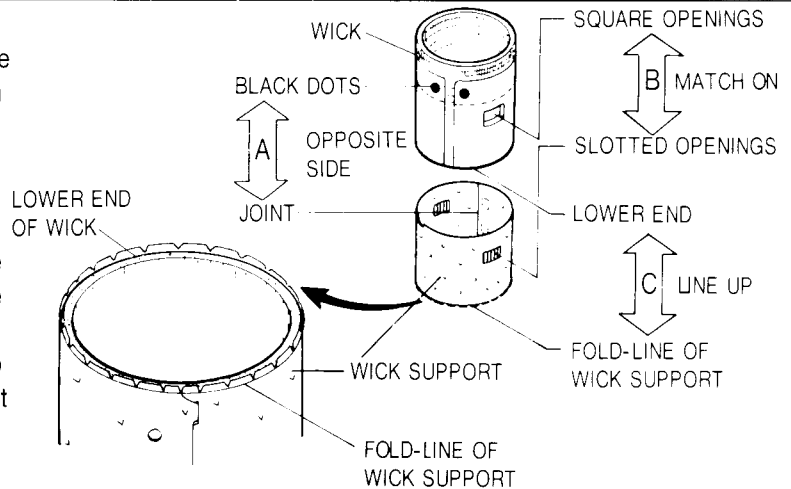
★ TO INSTALL NEW SPECIAL WICK

1. Peel the old wick out of the wick support CAREFULLY TO AVOID DAMAGING THE WICK SUPPORT.

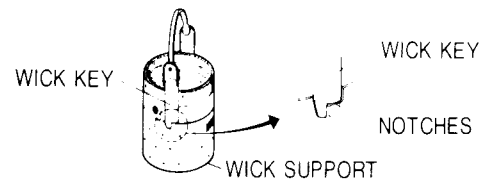
Fold the new wick in half and put it into the wick support, as illustrated. If the joint of the wick support separates, reconnect the 3 tabs before proceeding.



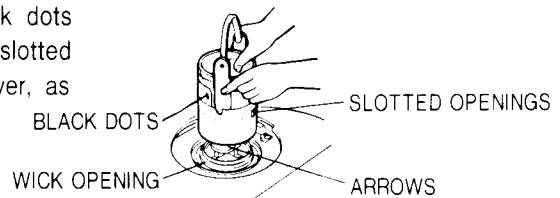
2. Set the new wick in the wick support as follows:
- Position the black dots on the wick on the opposite side of the wick support away from the joint.
 - Match the square openings of the wick with the slotted openings of the wick support.
 - Turn the wick support upside down. Align the lower end of wick with the fold-line $\frac{1}{16}$ in. (2 mm) away from the bottom of the wick support.
 - Reach inside and carefully press the wick into the teeth inside the wick support tightly. If not the wick will not move smoothly. SMOOTH OUT ANY WRINKLES OR BULGES.



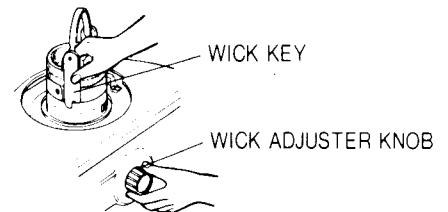
3. Insert both ends of the wick key into the notches on the top of the wick support. See illustrations. Turn the wick adjuster knob clockwise until it stops.



4. Position the wick assembly in the wick opening with the black dots of the wick towards the side of the heater and align the slotted openings of the wick support with the arrows on the cap cover, as illustrated.



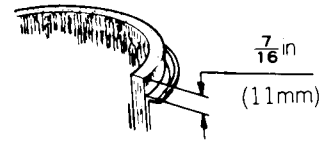
5. Push down wick assembly using both legs of wick key at least half way. Then push down completely using one leg of wick key holding the wick adjuster knob in the "High" position so that it does not move.



6. Remove the wick key completely. Check to see if the wick moves smoothly as follows: Turn the wick adjuster knob counter-clockwise until it stops. Then turn it clockwise until it stops and push down on the Manual Shut Off Button. Repeat the cycle 2 or 3 times.

Wick "keys" are unavailable. Use two kitchen butter knives inserted vertically to unlatch the wick.

7. Check to see if wick height is correct by turning the wick adjuster knob clockwise until it stops.
 The maximum wick height should be approx. $\frac{7}{16}$ in. (11mm) uniformly around its circumference from the top of the wick to the top of the burner basket assembly. See illustration.



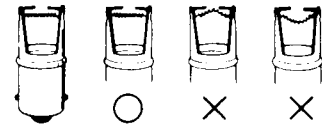
8. If the wick does not move smoothly or the wick height is incorrect, remove the wick assembly again, then repeat installation from Step 1 through Step 6 with particular attention to alignment of Step 4.

9. Reassemble heater.
 Allow 20 minutes for wick to absorb kerosene before lighting.

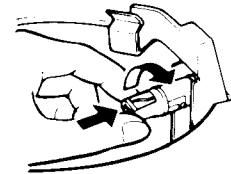
CHANGING THE IGNITION PLUG

USE ONLY "UNION" REPLACEMENT IGNITION PLUG PART NO. 100027

If your batteries are good and there is only a slight glow or none at all, check the filament of ignition plug.
 if the filament is slightly bent, repair it.
 If it is broken, you should replace the ignition plug as follows:

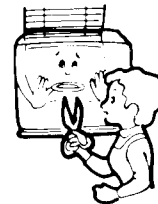


1. Remove batteries from case.
2. Open the guard and remove the chimney.
3. Push down the ignition lever knob.
 To remove the ignition plug push in and turn counter-clockwise.
 Install new ignition plug and replace the chimney and guard.



CAUTION: Never do any of the following.

1. Do not operate heater unless all parts are completely assembled.
2. Do not attempt to modify or repair the Safety Shut Off System.
3. Do not trim or pull the wick.
4. Do not unfasten the screw of the fuel gauge on the cartridge tank or disassemble the fuel gauge.



HOW TO STORE YOUR HEATER FOR THE SEASON

1. Completely drain the fuel from the cartridge tank.
 Burn the heater and leave the wick up until the flame goes out naturally.
 (See page 10 for details on how to clean the wick.)
2. After heater has cooled, disconnect from Power Source.
3. Always remove the dry cell batteries from the battery case.
4. Pack your heater in reverse order to the unpacking.
5. Store your heater in a dry place.



TROUBLE SHOOTING

Here are common symptoms which may appear during operation of your heater.
Most are easily corrected, as shown below.

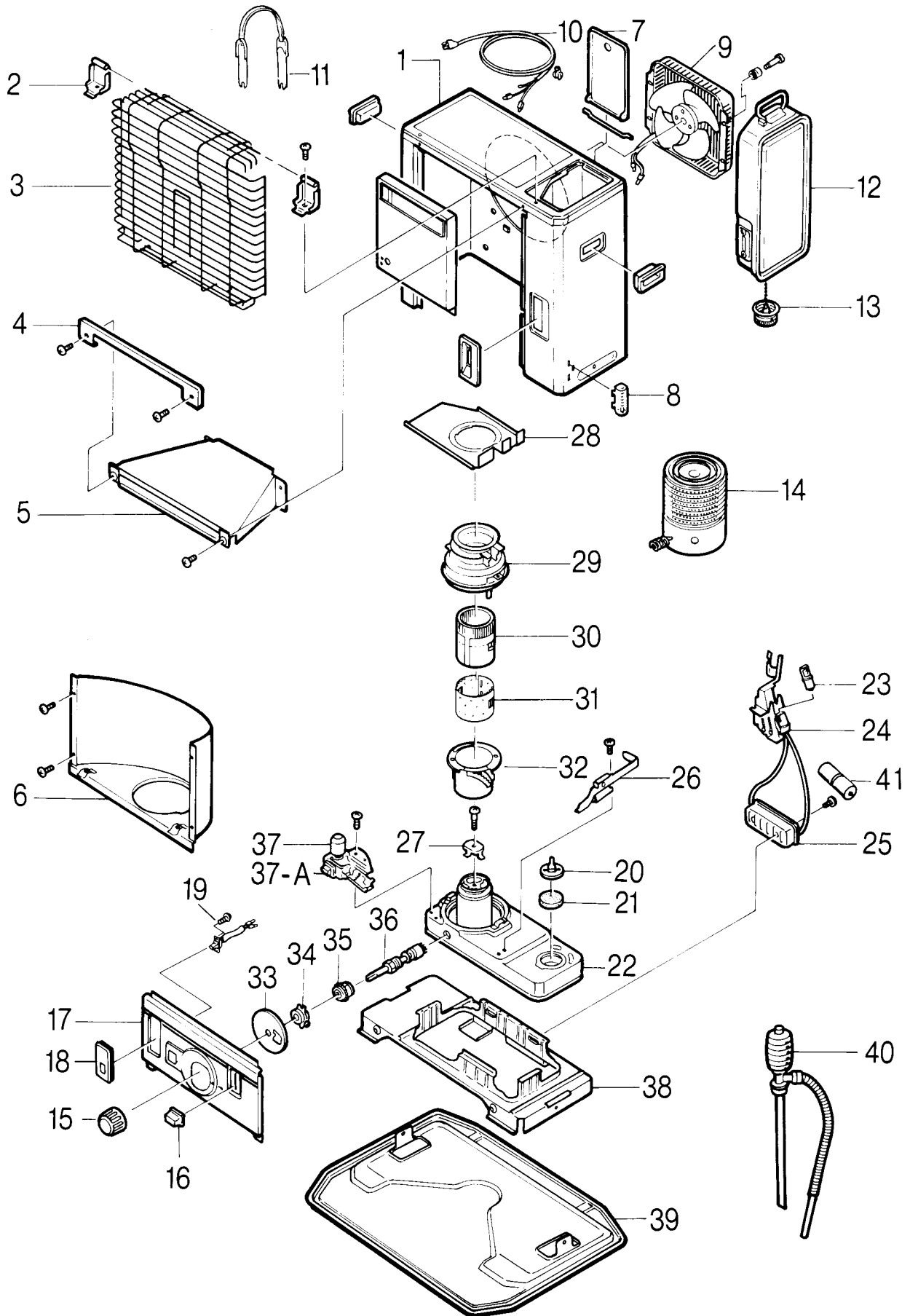
Symptoms Possible Causes		At lighting			In operating			At extinguishing			Odor.	Cure	Page
		Wick won't ignite.	Chimney glows slowly.	Flame remains small.	Dying flame.	Yellow flame, soot or smoke.	Chimney does not glow.	Flame is unadjustable.	Heavy movement of wick adjuster knob.	Wick is not lowered.			
Fuel	Out of kerosene.	★	★	★	★		☆				☆	Check fuel gauge, add kerosene.	7,8
	Contaminated or deteriorated kerosene.	☆	★	☆	★	☆	★		☆	☆	☆	Drain tank, replace wick, refill with clean kerosene.	3,10
	Gasoline is used.					☆		☆			☆	Drain tank, replace wick, refill with clean kerosene.	3,10
	Water in kerosene.	★	★	★	★		★	☆	☆	☆	☆	Drain tank, replace wick, refill with clean kerosene.	3,10
Wick	Wick too high.					☆						Adjust wick height.	9
	Wick too low.	☆	☆	★			★				☆		
	Excess tar on wick.	★	★	★	★		★		★	★	★	Clean the wick. Replace wick.	9,10
	Defective special wick replacement.			☆		☆	☆	☆	★	☆		Check special wick replacement.	10-12
Chimney not seated properly.						★		☆			☆	Turn the chimney from side to side a few times.	8
Ignition plug	Ignition plug is broken or damaged.	★										Replace ignition plug.	12
	Inadequate clearance between the wick and plug.	★										Repair the modified filament. Replace ignition plug.	12
Batteries	Batteries are not installed properly.	★										Install batteries properly.	8
	Batteries are dead.	★										Replace batteries.	8
Chimney is raised too long during lighting.											★	Release ignition lever knob immediately after wick is lit.	8
Stop lever is not set to "Release Position."									★			Set the stop lever to "Release Position."	9

☆ : COLUMNS APPLICABLE

★ : COLUMNS HAVE AN IMPORTANT EFFECT

NOTE: While using your heater or after extinguishing it, there is some noise which is made by kerosene flowing from cartridge tank to the lower tank. This sound is normal.

REPAIR PARTS



LIST OF MATERIAL

REPLACEMENT PARTS

KEY NO.	NAME	QTY.	PART NO.
1	Cabinet Assembly	1	12F001
	Handle	2	
	Indicator Trim	1	
	4mm X 5/16" Ph. Pan. Hd. T. C. S.	4	
2	Guard Fixing Metal	2	100002
	3mm X 1/4" Ph. Pan. Hd. T. C. S.	2	
3	Guard	1	120003
4	Frame Trim	1	120004
	3mm X 1/4" Ph. Pan. Hd. T. C. S.	2	
5	Top Shield Assembly	1	12F005
	4mm X 5/16" Ph. Pan. Hd. T. C. S.	2	
6	Reflector Assembly	1	120006
	3mm X 1/4" T. Ph. Rd. Hd. S. M. S.	5	
	A Vertical Reflector	1	
	B Lower Reflector	1	
7	Tank Cover	1	12F007
	Tank Cover Shaft	1	
8	Level Assembly	1	100008
9	Fan Motor Assembly	1	12F009
	A Motor	1	12F109
	B Fan	1	12F209
10	Power Supply Cord	1	12F010
	Cord Stopper	1	
11	Wick Key (Wick Replacement Tool)	1	12F011
12	Cartridge Tank Assembly	1	120031
13	Tank Cap Assembly	1	100032
14	Chimney Assembly	1	120009
	A Outer Cylinder	1	—
	B Inner Cylinder	1	—
	C Glass Cylinder	1	120109
		Speed Nut	
	D Chimney Housing	1	—
Wire Handle		1	
E Round Head Pin	2	—	
15	Wick Adjuster Knob	1	100023
16	Ignition Lever Knob	1	100024
17	Control Panel	1	12F017
	4mm X 5/16" Ph. Pan. Hd. T. C. S.	2	
18	Switch Base	1	12F018
	Switch Label	1	
19	Fan Switch Assembly	1	12F019
	3mm X 1/4" T. Ph. Rd. S. M. S.	2	

REPLACEMENT PARTS

KEY NO.	NAME	QTY.	PART NO.
20	Oil Feeder	1	100011
21	Oil Filter	1	100012
22	Lower Tank	1	100010
	Wick Guide Cap	1	
22	4mm X 5/16" Ph. Pan. Hd. T. C. S.	2	100010
23	Ignition Plug	1	100027
24	Ignition Assembly	1	100026
	4mm X 5/16" Ph. Pan. Hd. T. C. S.	2	
25	Battery Case	1	—
	3mm X 1/4" T. Ph. Rd. Hd. S. M. S.	2	
26	Ignition Lever Assembly	1	100013
	4mm X 5/16" Sealer Painted Scr.	2	
27	Cap Cover	1	12F027
	Cap Cover Scr.	1	
28	Shield Plate	1	100014
29	Burner Basket	1	100015
	4mm X 5/16" Ph. Pan. Hd. T. C. S.	2	
30	Wick	1	12F030
31	Wick Support	1	12F031
32	Wick Holder	1	12F032
33	Shaft Cover	1	100022
34	Wick Stop Cam Assembly	1	100021
	A Wick Stop Cam	1	
	B Cam Pin	1	
	C Release Lever Assembly	1	
	D Lever Spring	1	
34	E Spring Cover	1	100021
35	Spring Case Assembly	1	100020
	A Holder Cover	1	
	B Return Pin	1	
	C Holder Spring	1	
	D Ratchet Gear Assembly	1	
35	E Ratchet Spring Stopper	1	100020
36	Wick Adjuster Shaft Assembly	1	100019
37	Safety Shut Off	1	100025
	4mm X 5/16" Sealer Painted Scr.	2	
37	A Manual Shut Off Button	1	100125
38	Cabinet Base	1	12F038
39	Tray	1	12F039
	4mm X 5/16" Ph. Pan. Hd. T. C. S.	2	
40	Siphon Pump	1	100034
41	"D"-Size Battery	2	100035
42	Carton	1	12F042
43	Manual	1	12F043

FACTORY ASSISTANCE

Extreme care has been taken at the factory to assure that this heater is of the Highest Quality. If, however, you find a shortage or encounter other problems at the time of assembly, do not return the item to the store where you purchased it, call Union Customer Service for any assistance you require.

TOLL FREE CONTINENTAL U.S. (800) 992-3267
TEXAS STATE (214) 385-7588

REPLACEMENT PARTS;

If replacement parts are required in the future due to normal wear or undue abuse, contact;

Customer Service Dept.
Union of America, Inc.
1127 West North Carrier Parkway,
Grand Prairie, Texas 75050

Always specify Model No., Name of Part, Part No. and Description.

LIMITED WARRANTY

Union of America, Inc. hereby warrants to the original retail purchaser of this Union Kerosene Heater, subject to the conditions listed below:

- (1) for a period of one (1) year from date of purchase, the unit shall be free from defects in material and workmanship;
- (2) except such normal wear and tear items, such as, but not limited to, wicks, batteries, ignition plug and siphons.

UNION REQUIRES proof of date of purchase. YOU SHOULD RETAIN YOUR SALES SLIP OR INVOICE.

This limited warranty shall be limited to the repair or replacement of parts which prove defective under normal use and service and which our examination shall disclose, to our satisfaction, to be defective. If our inspection confirms the defect and the claim, Union will repair or replace such part without charge and ship it to you freight or postage prepaid.

If you wish to obtain performance of any obligation under this limited warranty, you should write to:

Union of America, Inc.
1127 West North Carrier Parkway,
Grand Prairie, Texas 75050

UNION REQUIRES you to return the part(s) claimed to be defective, for its inspection, freight or postage prepaid, together with your sales slip or invoice, to Union at the address listed.

UNION does not authorize any person or representative to assume for it any other obligation or liability in connection with the sale or use of this product. This limited warranty is in lieu of all other express warranties.

IN THE EVENT OF A BREACH OR REPUDIATION OF ANY EXPRESS OR IMPLIED WARRANTY, YOU, THE PURCHASER, SHALL NOT BE ENTITLED TO ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXCEPT THAT DAMAGES FOR PERSONAL INJURIES SHALL NOT BE PRECLUDED.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of consequential or incidental damages, so the above limitations or exclusions may not apply to you.

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

UNION OF AMERICA, INC.
GRAND PRAIRIE, TEXAS 75050

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