

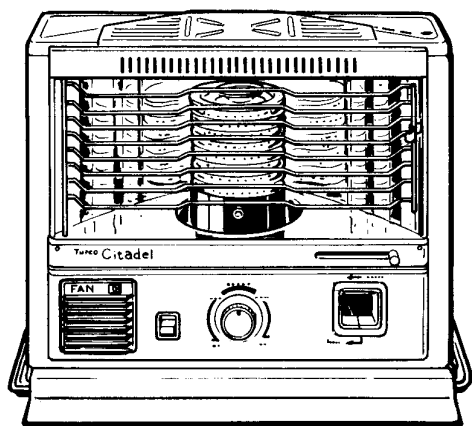
Turco

TOWN & COUNTRY PORTABLE KEROSENE* HEATER OPERATIONS & MAINTENANCE MANUAL WITH PARTS LIST

MODEL 4020

Citadel

“A Smart Way To Heat”



SPECIFICATIONS	
Name	Citadel
Model No.	4020
Type of Heater	Reflection With Fan
Heating Output	10500 BTU/hr. Approx.
Fuel Tank	Cartridge
Tank Capacity	1.32 gallon
Heating Time	Up to 18hr.
Fuel Consumption	0.08 gal/hr.
Electrical Rating	120Volts, 60Hz, 21Watts
Automatic Igniter	Standard
Safety Shut-off	Standard
Fuel Gauge	Standard
Level Indicator	Standard
Approx. Heating Area	375 sq.ft. --- (a)
Dimensions	
Height	18-5/16 inches
Width	24-1/4 inches
Depth	15-1/4 inches
Weight	26.6 lbs.

a) 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

- ※Your Turco kerosene* heater is designed and constructed for many years of safe efficient use. To assure safe and proper performance of your heater, please read this manual carefully. Retain manual for future reference.
- ※Turco kerosene* heater features an automatic igniter, removable tank cartridge, automatic safety shut off, fuel gauge and powerful electric fan.

Kerosene* See Page 3

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HOW TO UNPACK YOUR HEATER

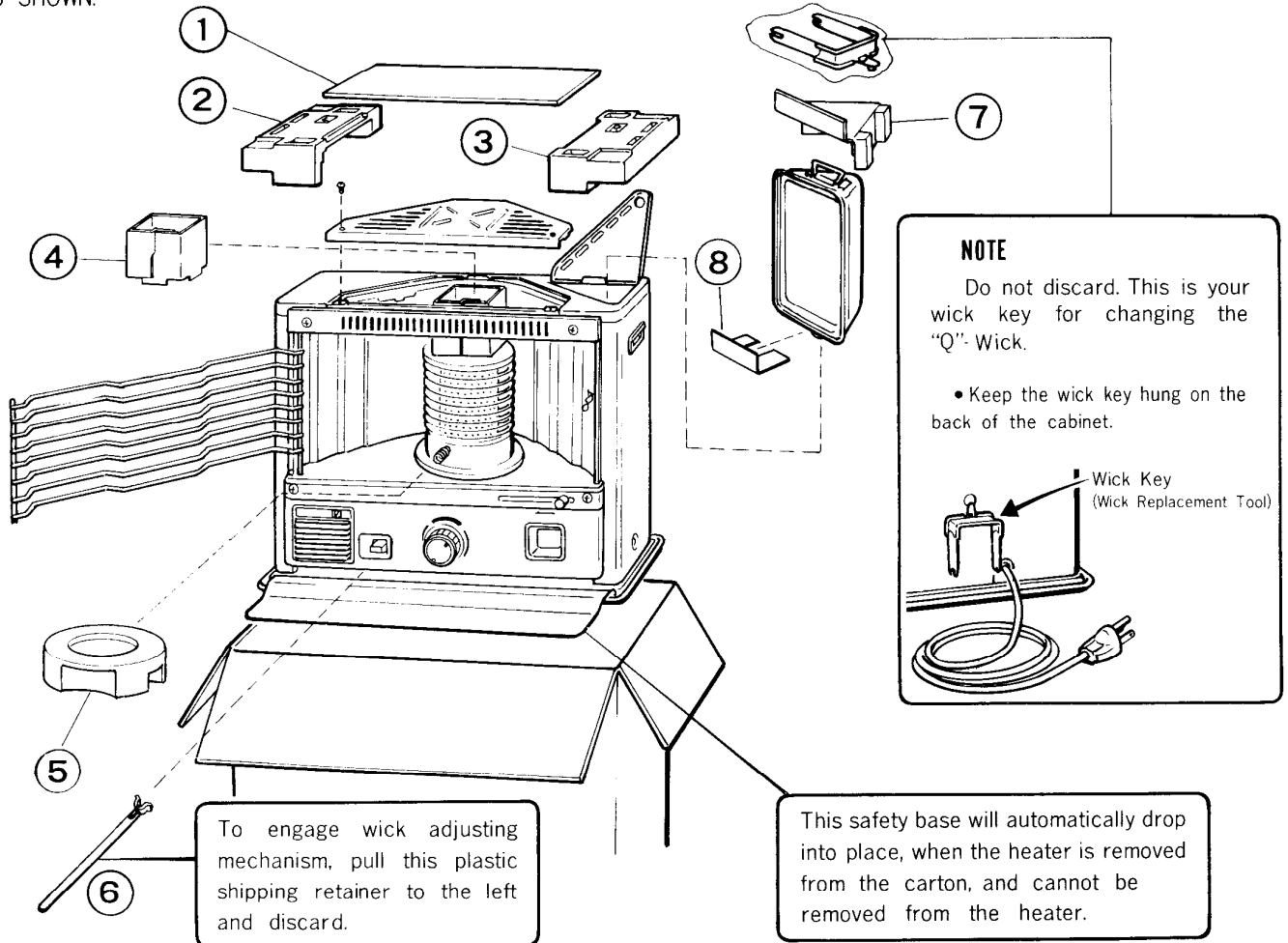
When unpacking your heater, take care not to destroy the carton or inner pack material. You will want to use this packaging to store your heater when not in use.

A. Remove ①, ② and ③ and remove your heater, using the handles on each side, from the carton.

B. Remove 2 screws from the top plate.

C. Remove ④, ⑤, ⑥, ⑦ and ⑧. Replace the chimney making sure it is properly seated, then replace the top plate and 2 screws.


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



Kerosene* See Page 3

KEROSENE HEATER FUEL GUIDE

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

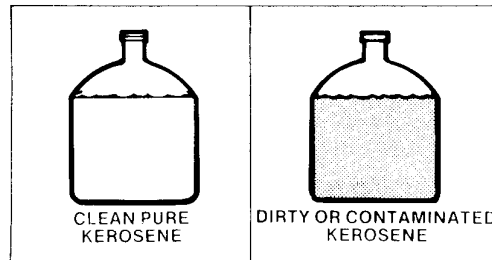
<p>WARNING</p> <p>BURN ONLY KEROSENE in this heater. The use of gasoline, white gas, Coleman fuel, or any other fuels can be extremely dangerous.</p> <p>Read all instructions and caution labels before using.</p>	<p>KEROSENE ONLY</p> 
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WARNING

* THE ONLY GRADE OF KEROSENE WHICH CAN SAFELY BE USED IN THIS HEATER IS:
Uncontaminated, Water Clear in Color, Grade ASTM: 1-K, Low Sulphur Kerosene. Free from Water or Dirt.

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.



PROPER STORAGE TO AVOID DETERIORATION.

- Store kerosene in a well-ventilated area, in a clean, tightly sealed metal container clearly marked "kerosene".
- Do not store in polyethylene container for periods longer than 3~4 weeks.
- Do not store in direct sunlight for long periods of time in transparent container.
- Do not store in hot areas for long periods of time.
- Deteriorated kerosene will appear yellow in color and smell sour.

CORRECTIVE ACTION:

Check the wick after burning a tank of fuel each time you purchase kerosene. If tar has deposited around the top of the wick, clean. Replace wick if necessary. Drain reservoir and fill with clean pure kerosene. If contaminated or deteriorated kerosene is used, tar will deposit on the wick in 1 to 30 days of use. This will cause odor and reduced heat output. Excessive tar build up may interfere with the function of the Instant Off switch.

HOW TO CLEAN THE WICK

Clean the wick as often as necessary to remove tar accumulation.

- a. Completely burn the fuel in the tank. Do not add fuel.
- b. Leave wick up until flame goes out naturally.
- c. Fill the tank with pure kerosene. Allow 20 minutes for wick to absorb kerosene before lighting.

CAUTION

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

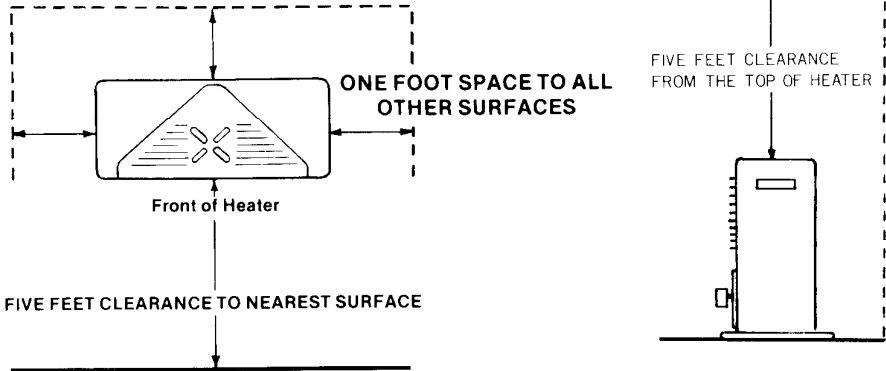
KEROSENE^{*} HEATER SAFETY GUIDE

BUILT IN SAFETY SHUT OFF

If your heater is tilted or bumped hard while lit it will automatically shut off.

IMPORTANT CAUTION

1. INSURE THAT MINIMUM CLEARANCES ARE AS SHOWN.



Position heater at least above clearances away from furniture, walls or other combustible materials such as drapes and clothing.

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

3. NEVER LEAVE HEATER UNATTENDED WHILE IN USE.

4. USE IN WELL VENTILATED AREA.

5. DO NOT TOUCH THE HEATER CABINET TOP OR FRONT.

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

SAFE OPERATION

1. Do not transport heater in any vehicle, or vessel, unless all kerosene^{*} has been removed to prevent accidental spillage of kerosene^{*}.
2. In a house of typical construction, that is, one which 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 if the heater is used in a room providing 120 cubic feet (3.40m³) of air space for each 1000 Btu per hour of heater rating, considering the maximum burner adjustment. If the room size is not sufficient to provide this (1) the door(s) to adjacent room(s) should be kept open, or (2) at least two free air openings should be provided, one near the top (ceiling) of the room and one near the bottom (floor) with each opening having a free area at least equivalent to 1 square inch per 1000 Btu per hour heater rating when the heater is in operation, or (3) additional air should be provided through windows. If the heater is operated in a confined space within a building having insufficient air because of tight construction, the air for combustion and ventilation should be obtained from the outside or from spaces freely communicating with the outside.

3. Heater must not be used in confined space, mobile home, recreational vehicle, tent, bedroom or sleeping area.
4. Use in areas free of flammable vapors such as gasoline, paint thinner or other flammable vapors.
5. Do not use in areas with a high dust concentration present in the air.
6. Do not place heater in high traffic areas such as doorways or hallways or in windy or drafty locations.
7. Do not place heater on table, chair, etc. or other location where there is a danger of being knocked down or tipped over.
8. Improper use can result in serious bodily injury, fire hazards, carbon monoxide poisoning or burns.
9. Never fill heater fuel tank in living space. Fill heater tank outdoors.
10. Never store kerosene^{*} in any container other than an approved safety can nor store kerosene^{*} in the living space.

11. Never operate the heater without the guards being in place.
12. Do not move, handle or fill tank while heater is burning or still hot.
13. Keep children away from heater.
14. Never leave heater burning while asleep or leaving room.
15. Do not place a pan of water on the top or attempt to cook on top of your heater. NEVER spill or pour water on the Glass Cylinder.

16. Check periodically for proper burning. If emergency occurs, extinguish by pushing down on the Instant Off switch.
17. Do not use your heater if it has been damaged or is burning irregularly.
18. Do not attempt to modify or repair the Shut-off System.
19. Accumulated dirt and kerosene* spills on the Cabinet create a potential fire hazard, clean off before lighting heater.
20. Always extinguish heater before sleeping.
21. Do not use as a clothes dryer.

NOTE:

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.

TROUBLE SHOOTING

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

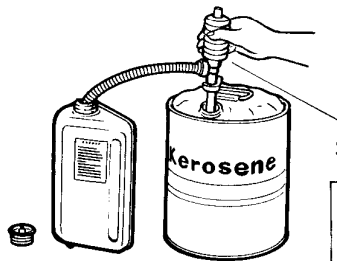
Possible Causes	Symptoms						Cure
	Wick won't ignite.	Slow to light.	Low heat output.	Smoke or odor.	Heavy movement of wick adjuster knob.	Dying flame.	
Out of kerosene.*	*			*		*	Check fuel gauge, add kerosene.*
Contaminated or deteriorated kerosene.*	*	*	*	*	*	*	Drain tank, replace wick, refill with clean kerosene.*
Water in kerosene.*	*	*	*	*	*	*	Drain tank, replace wick, refill with clean kerosene.*
Wick too high.				*			Adjust wick height.
Wick too low.	*		*	*		*	Adjust wick height.
Excess tar on wick.	*	*	*	*	*	*	Replace wick.
Chimney not seated properly.				*			Turn the chimney from side to side several times.
Ignition plug does not glow.	*						Replace ignition plug.
Batteries are dead or not installed properly.	*	*					Replace batteries or Install properly.
Defective "Q"-Wick replacement.					*		Check "Q"-Wick replacement. See page 8, 9.
Chimney is raised too long during lighting.				*			Release ignition knob immediately wick is lit.

Kerosene* See Page 3

HOW TO OPERATE YOUR HEATER

PREPARING YOUR HEATER FOR USE

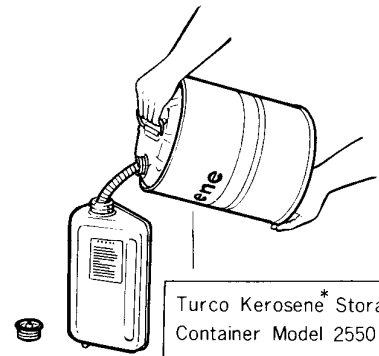
Remove and fill tank outside, making certain that the cap is properly installed and does not leak. Fill only to float gauge in neck of tank. Wipe away any spilled kerosene*. Wait 20 minutes for wick to absorb kerosene* to avoid damage to wick.



Siphon

Siphon is Available as optional Extra

Hand Operated Model 2530
Batt. Operated Model 2540



Turco Kerosene* Storage Container Model 2550

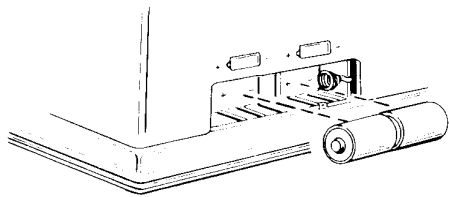
NOTE:

Tank must be set on solid level surface outdoors during filling. Do not tip over.

USE KEROSENE* ONLY. DO NOT USE GASOLINE OR ANY OTHER FUEL.

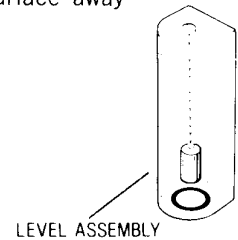
A

Install 2 "D" Size Batteries (Not provided)



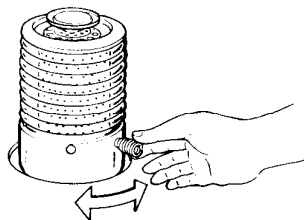
B

Place the heater on a level surface away from combustible materials.



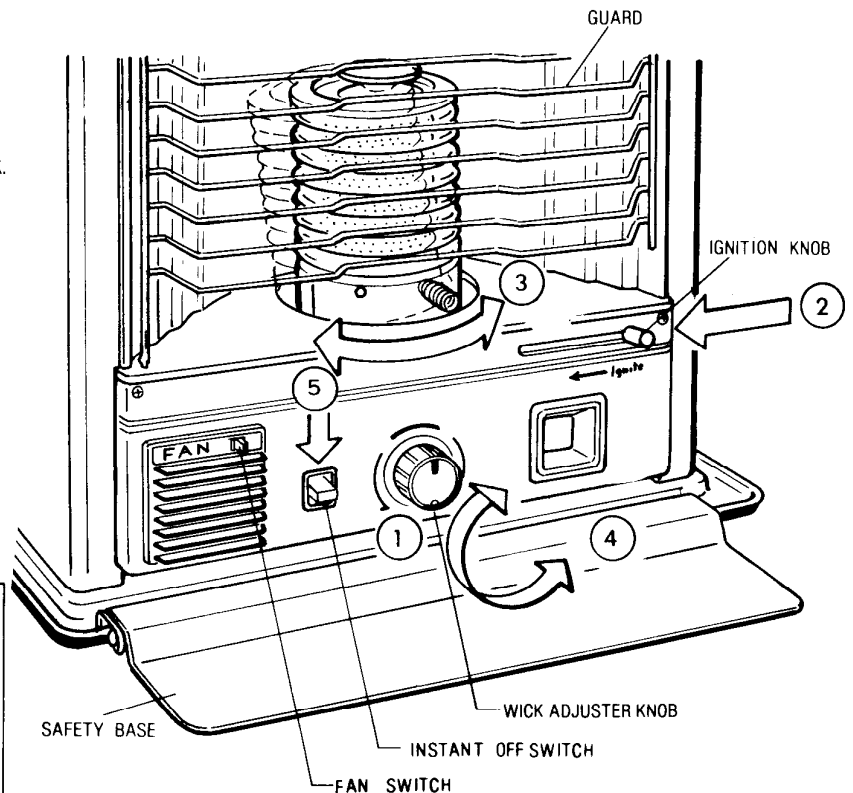
C

- 1 Turn the wick adjuster knob clockwise until it stops.
- 2 Push ignition knob to the left to ignite wick. The chimney will tip at this point. When wick is lit, return ignition knob.
- 3 Turn the chimney by the wire handle from side to side several times to make certain it is seated properly.



TO MINIMIZE ODOR WHEN LIGHTING

- Start the heater in less than full ON position. After lighting, turn to full ON position until the chimney is glowing cherry red then adjust down to eliminate excess flame or smoke.
- Never tilt the chimney to check the flame when starting since this releases excessive kerosene* contaminated air.



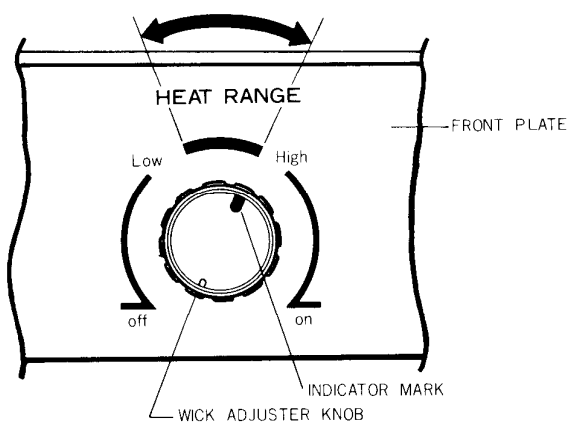
- ④ Within 3 minutes the flame will rise, in another minute the chimney will glow.

The chimney should be a clear bright red with blue flame seen above the chimney top as shown below.

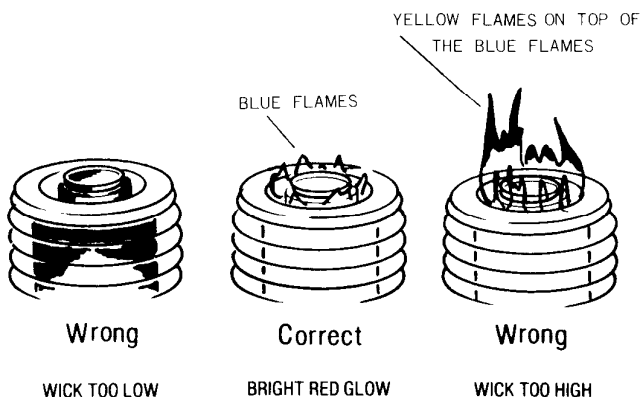
If yellow flames appear on top of the blue flames, lower wick (counter-clockwise in the HEAT RANGE) until the blue flames only remain above the chimney top.

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.

- * Always keep the indicator mark on the wick adjuster knob within the HEAT RANGE during use.



FLAME ADJUSTMENT



- ⑤ Turn off the heater with the wick adjuster knob. For instant shut off in emergency, push down on Instant Off switch.

CAUTION: OPERATION OF FAN

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

NOTE

- Smoke and odor may result if heater is operated with the wick set too low.
- The Instant Off switch may cause excessive kerosene* odor and smoke when used.
- When the indicator moves to center of empty gauge on the front plate, the flame goes out in about 30 minutes.

Empty Gauge



Empty

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.

NOTE: When storing your heater for the season always remove the dry cell batteries from the battery case.

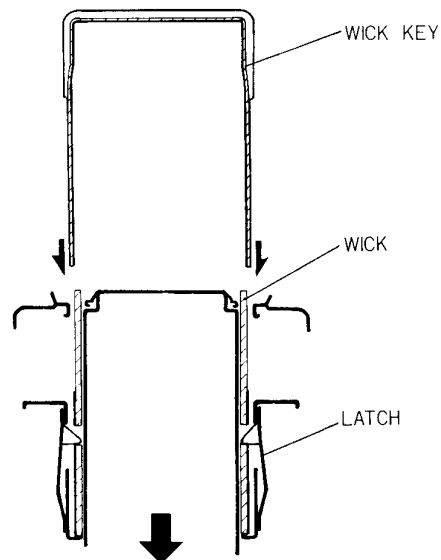
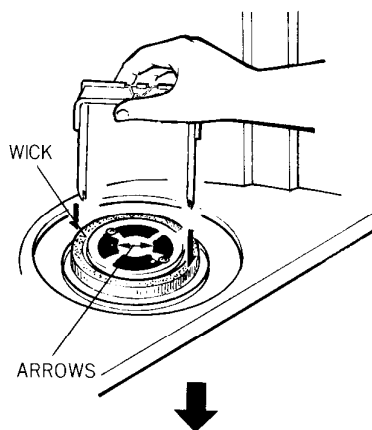
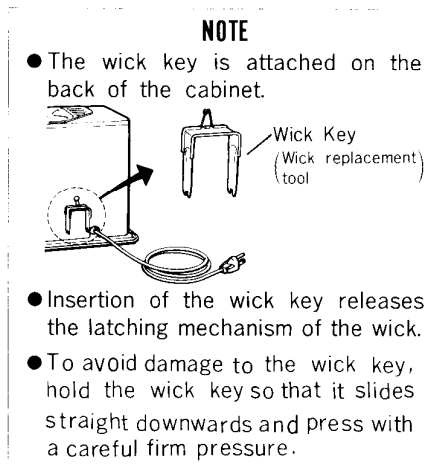
The wick of your heater needs replacing if, after repeated cleanings any of the following conditions exist: slow light – heavy movement of the wick adjuster knob – kerosene* odor while burning – low heat output – slow warm up – damaged wick.

CHANGING THE "Q"-WICK

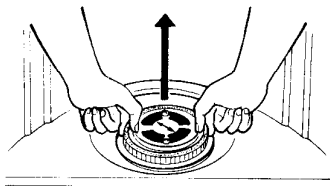
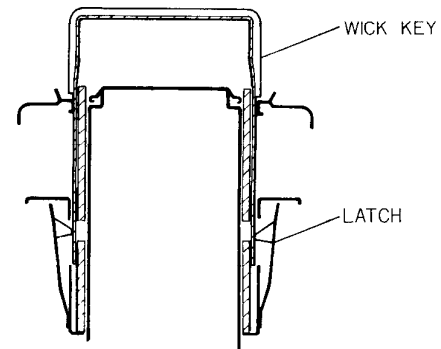
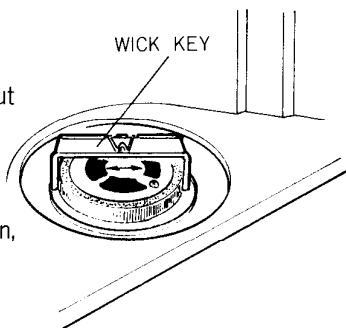
This allows you to replace the wick quickly and easily. When buying a "Q"-Wick—Part No. 2710600—specify accessory No. 2502 which contains this "Q"-Wick and assembly instructions.

* TO REMOVE OLD "Q"-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 the wick key with the arrows on the plate at the center of the wick. Insert the wick key over the outside of the old wick and press down until it stops as illustrated below.



4. Turn the wick adjuster knob counter-clockwise about 1/4 turn.
5. Remove the wick key.
6. To Remove the wick grasp by both hands, as shown, and pull straight up and out.



7. Turn the wick adjuster knob clockwise until it stops.

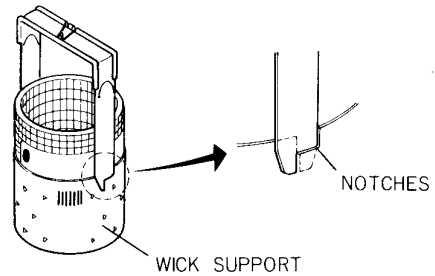
Kerosene* See Page 3

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

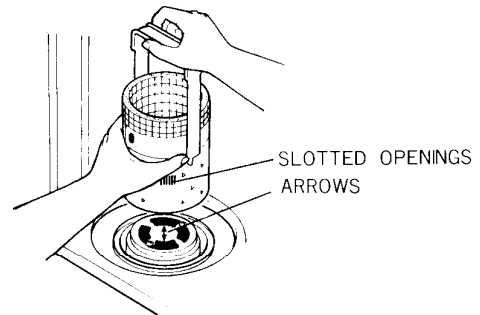
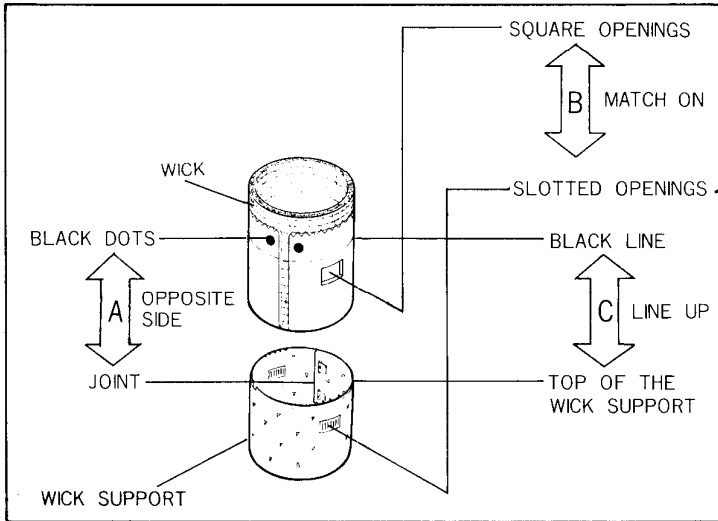
* TO INSTALL NEW "Q"-WICK

1. Peel the old wick out of the wick support CAREFULLY TO AVOID DAMAGING THE WICK SUPPORT.
2. Fold the new wick in half and place inside the wick support carefully following the instructions below.
 - A. Position the black dots on the wick on the opposite side of the wick support away from the joint. If the joint separates, reconnect the 3 tabs before proceeding.
 - B. Match the square openings of the wick with the slotted openings of the wick support.

3. Insert both ends of the wick key into the notches on the top of the wick support. See illustration.



4. Position the wick assembly in the wick opening with the black dots of the wick to the side of the heater and align the slotted openings of the wick support with the arrows on the center plate.

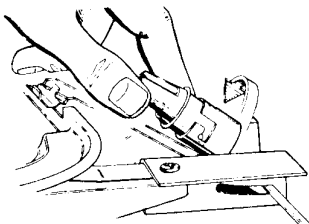


- C. Align the black line around the wick with the top of the wick support.
- D. Reach inside and carefully press the wick into the teeth inside the wick support. SMOOTH OUT ANY WRINKLES OR BULGES.

5. Hold the wick adjuster knob so that it does not move.
6. Insert the new wick by pushing down on the wick key until it stops.
7. Remove the wick key.
8. Check to see if the wick moves smoothly by turning wick adjuster knob in both directions. If operation is defective, grasp wick and pull up and out. Repeat installation from step 3. with particular attention to alignment of step 4.
9. Reassemble heater and allow 20 minutes for wick to absorb kerosene* before lighting.

NOTE LINE UP THE VERTICAL SLOTS IN SIDE, NOT NOTCH AT TOP OF WICK

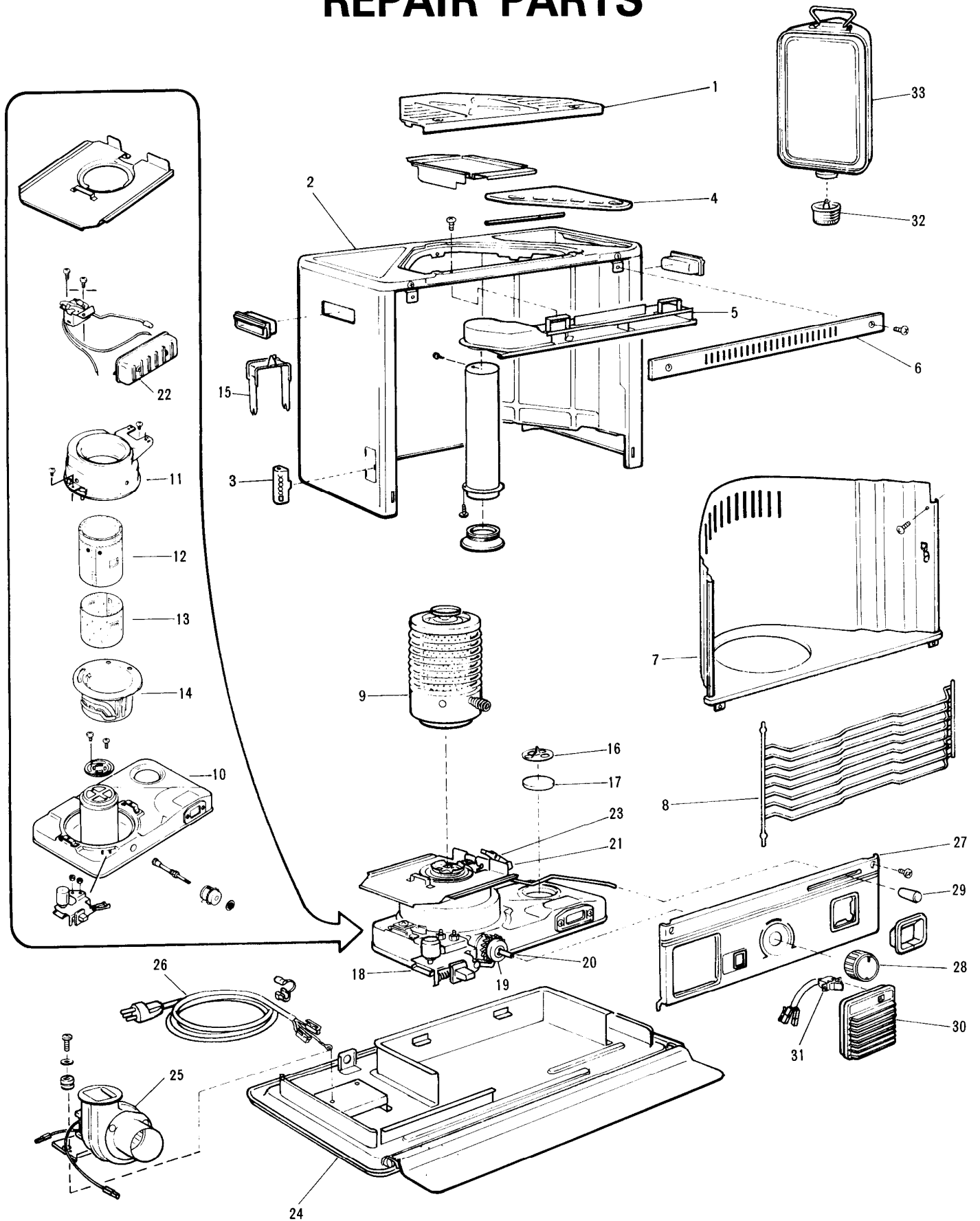
CHANGING THE IGNITION PLUG



If your batteries are good and there is only a slight glow or none at all, you should replace the ignition plug as follows.

1. Disconnect from Power Source.
2. Remove batteries from case.
3. Remove the guard and chimney.
4. Push the ignition knob to the left. To remove the ignition plug push in and turn counter-clockwise. Install new ignition plug and replace chimney and guard.

REPAIR PARTS



LIST OF MATERIAL

REPLACEMENT PARTS

KEY NO.	NAME	QTY.	PART NO.
1	Top Plate Assembly	1	2724000
	Shield Plate	1	
	3mm X 1/4" Ph. Pan. Hd. Mach. Scr.	2	
2	Cabinet Assembly	1	2724010
	Handle	2	
	4mm X 5/16" Ph. W. Pan. Hd. Scr.	2	
3	Level Assembly	1	2710140
4	Tank Cover	1	2724020
	Tank Cover Shaft	1	
5	Air Duct Assembly	1	2724030
	Duct Packing	1	
	4mm X 5/16" Ph. Pan. Hd. Scr.	3	
6	Heated Air Outlet	1	2724040
	3mm X 1/4" Ph. Pan. Hd. Scr.	2	
7	Reflector	1	2724050
	3mm X 1/4" T. Ph. Rd. Hd. S. M. S.	5	
8	Guard	1	2724060
9	Chimney Assembly	1	2724070
A	Outer Cylinder	1	---
B	Inner Cylinder	1	---
C	Glass Cylinder	1	2710280
	Speednut	2	
D	Chimney Housing	1	---
	Wire Handle	1	
	Glass Stopper	1	
	Flat Washer	2	
	Round Head Pin	2	
	4mm X 5/16" Rivet	1	
	Burner Control Semi Assembly	1	
10	Empty Indicator Assembly	1	2710290
	3mm X 1/4" Ph. Pan. Hd. Mach. Scr.	1	
	Empty Gauge Cap Assembly	1	
	4mm X 9/16" Ph. Rd. Hd. Mach. Scr.	2	
	4mm X 5/16" Ph. W. Pan. Hd. Scr.	2	
11	Snap Washer	1	2710300
	Burner Basket Assembly	1	
	4mm X 5/16" Ph. Pan. Hd. Scr.	2	
12	"Q" Wick	1	2710600
13	Wick Support	1	2710610

11.75

REPLACEMENT PARTS

KEY NO.	NAME	QTY.	PART NO.
14	Wick Holder	1	2710620
15	Wick Key (Wick Replacement Tool)	1	2710640
16	Oil Feeder	1	2710330
17	Oil Filter	1	2710340
18	Automatic Safety Shut-off	1	2724200
	Instant Off Switch	1	
	Hex Nut 4mm	2	
19	Spring Case Assembly	1	2710710
	Holder Cover	1	
	Return Pin	1	
	Holder Spring	1	
	Ratchet Gear Assembly	1	
20	Ratchet Spring Stopper	1	2710720
	Wick Adjuster Shaft Assembly	1	
21	Ignition Assembly	1	2710230
	4mm X 5/16" Ph. Pan. Hd. T. C. S.	2	
22	Battery Case	1	---
	3mm X 1/4" T. Ph. Rd. Hd. S. M. S.	2	
23	Ignition Plug	1	2710260
24	Base Assembly	1	2724080
	Safety Base	1	
25	Blower Motor Assembly	1	2724090
	A Motor	1	
26	B Silocco Fan	1	2724110
	Power Supply Cord	1	
	Cord Stopper	1	
27	Front Plate	1	2724130
	Indicator Trim	1	
	3mm X 1/4" Ph. Pan. Hd. Mach. Scr.	2	
28	Wick Adjuster Knob	1	2724140
	Ignition Knob	1	
29	Ignition Knob	1	2724150
	Air Inlet Grill	1	
30	Switch Label	1	2724160
	Fan Switch Assembly	1	
31	3mm X 1/4" T. Ph. Rd. Hd. S. M. S.	2	2724170
32	Tank Cap Assembly	1	2710040
33	Cartridge Tank Assembly	1	2710030

2.00

ORDER #
126858

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 Turco Customer Service for any assistance you require.

TOLL FREE CONTINENTAL U.S. (800) 851-8481
ILLINOIS RESIDENCE (618) 542-4781

REPLACEMENT PARTS;

If replacement parts are required in the future due to normal wear or undue abuse, contact: Customer Service Dept. --Turco Mfg. Co. -- 501 S. Line St., Du Quoin, Illinois 62832

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

LIMITED WARRANTY

Turco Manufacturing Company hereby warrants to the original retail purchaser of this Turco 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.

TURCO may require reasonable proof of date of purchase. THEREFORE 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, Turco 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
Customer Service Department
Turco Manufacturing Company
Du Quoin, Illinois 62832

TURCO may require you to return the part(s) claimed to be defective, for its inspection, freight or postage prepaid, to TURCO at the address listed.

TURCO 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.

TURCO MANUFACTURING COMPANY

DU QUOIN, ILLINOIS 62832



Turco

501 SOUTH LINE STREET, DU QUOIN, ILLINOIS 62832