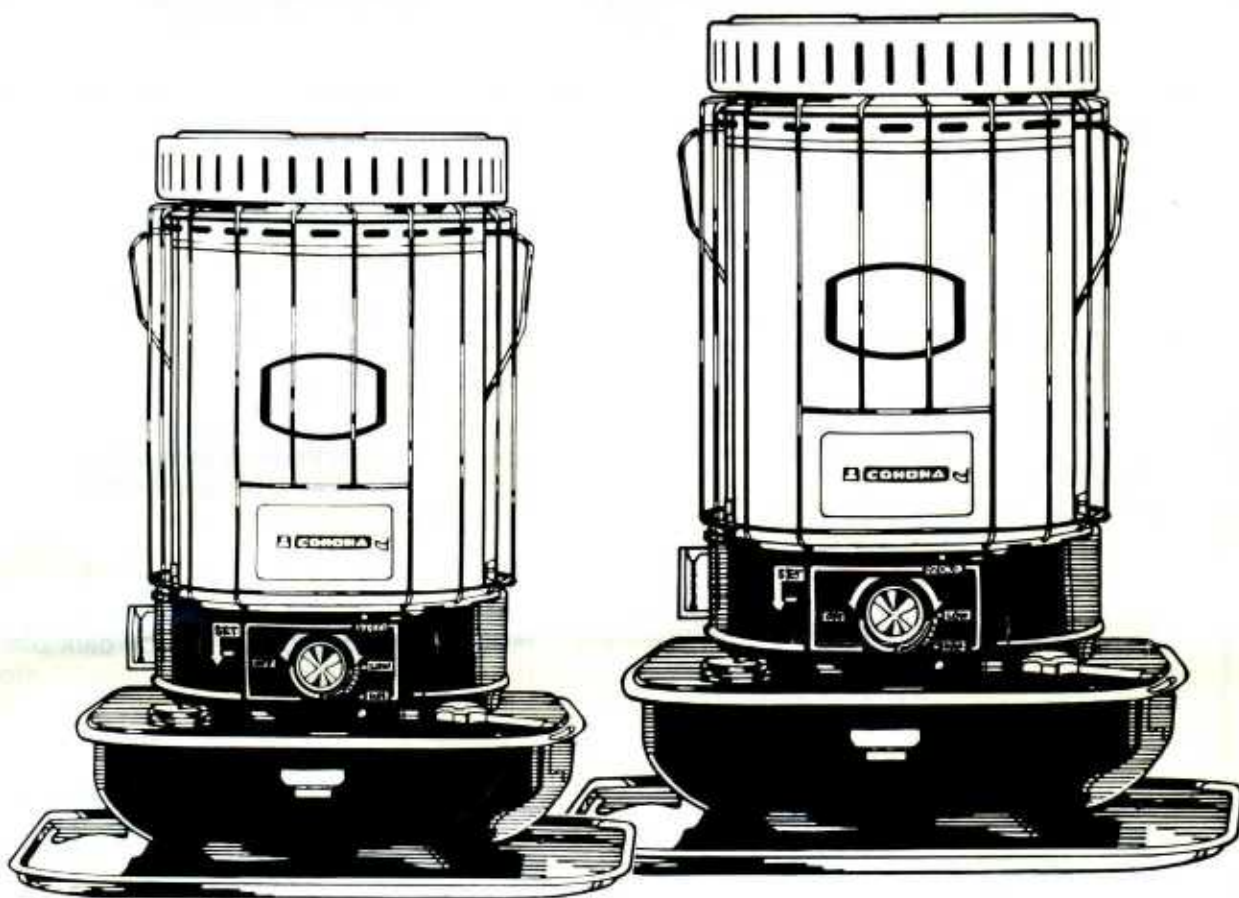


CORONA^{T.M.}

portable kerosene heater



17-DK® / 22-DK®



Operating Instructions

This manual contains complete instructions for assembly, operation and maintenance of the CORONA 17-DK® and 22-DK® Portable Kerosene Heaters.

Use this manual until you are familiar with the operation of your heater. Keep it handy for future reference as a guide to proper operation and maintenance of your heater.

Read **all** materials packed with your heater **before** you begin assembly or operation.

**This instruction manual is important to you.
Please read it thoroughly.**

In a short time this manual will show you how to assemble, operate and maintain your heater for best performance. It shows you simple things to check before you contact your Corona dealer...so you may save the cost of unnecessary service.

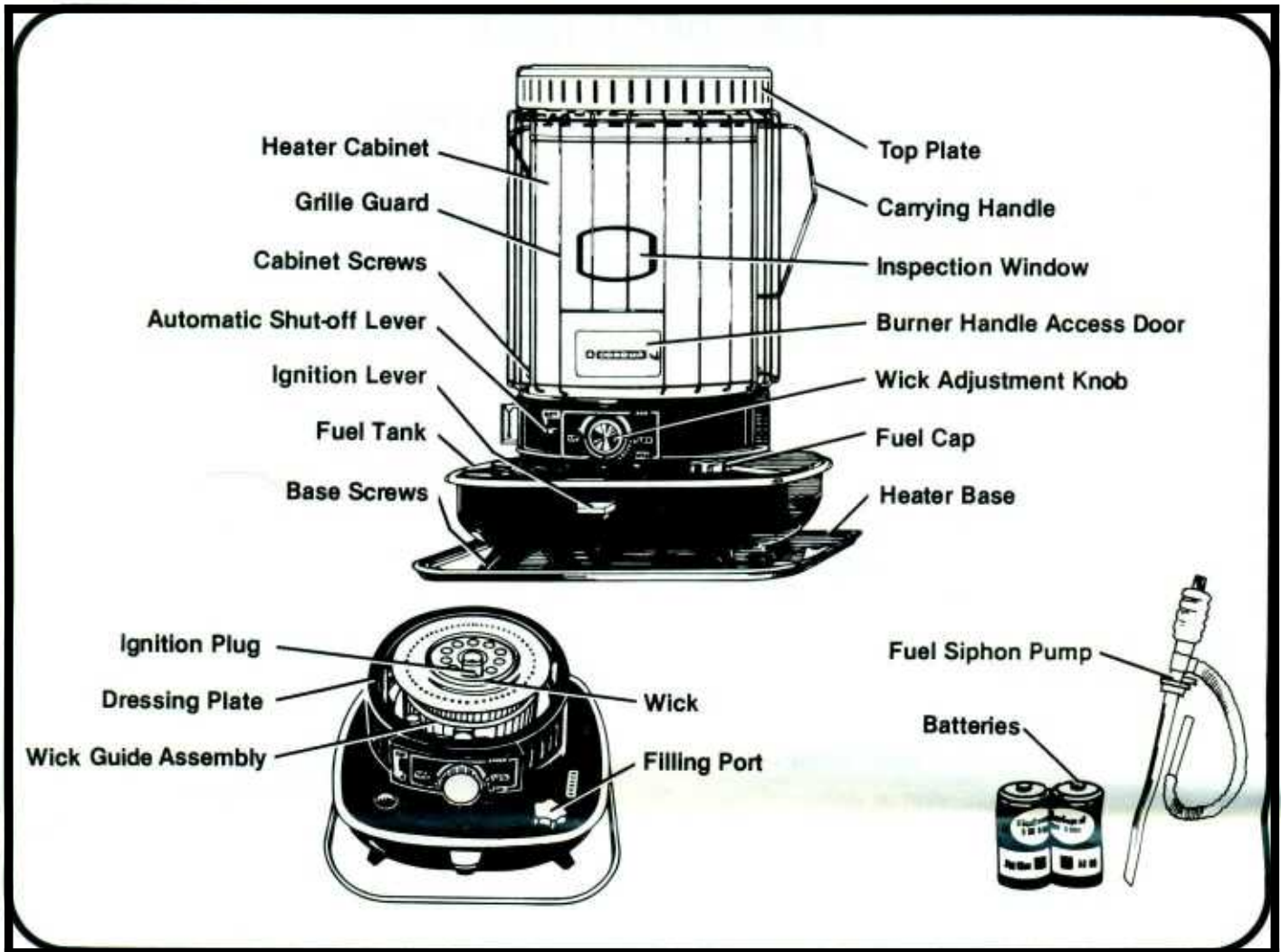
Before using your heater read these important words of caution:

1. **WARNING: RISK OF ASPHYXIATION:** Use the heater only in a well ventilated area. **NEVER** use the heater in a tightly enclosed area, like a bathroom or hallway.
2. Use **only** clean, water-clear kerosene in your heater. **NEVER** use gasoline, benzol, alcohol, No. 2 fuel oil, diesel oil, white gas or camping stove fuel in your heater. The use of any substance other than kerosene could result in an **EXPLOSION OR FIRE.**
3. **NEVER LEAVE HEATER UNATTENDED** or sleep while heater is in operation.
4. Keep your heater away from drafts to avoid uneven burning and poor performance.
5. Pick a location that's convenient but **DO NOT** place heater in a high traffic area where it could be bumped or jarred. Be sure heater is sitting on a level surface during operation and away from direct sunlight.
6. **WARNING: DO NOT TOUCH THE HEATER CABINET TOP** during operation. This surface becomes very **HOT**. Don't allow children or pets to play near the heater. Keep combustible materials away from the heater. **DO NOT** place combustibles, like laundry, near heater.
7. **NEVER ATTEMPT TO FILL THE FUEL TANK** while heater is in operation. When filling the tank, be certain to wipe away any kerosene spilled on exterior of the Heater Cabinet.
8. Use the Siphon Pump that came packed with your heater to fill the Fuel Tank. Always fill the Fuel Tank outdoors. Make certain the heater is turned "OFF" before filling Tank.
9. **DO NOT** move heater while it is in operation.
10. Store kerosene supply in an approved container, tightly capped, in a cool, dark place. **NEVER** store in direct sunlight. **NEVER** store kerosene in a glass container.
11. **DO NOT** place a pan of water on top of heater or attempt to cook on top.
12. **DO NOT** use your heater if it has been damaged or is burning irregularly.
13. **DO NOT** attempt to operate your heater until the Automatic Shut-off System has been set.
14. **DO NOT** attempt to modify or repair the Automatic Shut-off System.
15. Not recommended for use at elevations higher than 3,000 feet above sea level.

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Major Parts



GENERAL SPECIFICATIONS Corona Portable Kerosene Heaters Model 17-DK® and 22-DK®

Model	17-DK®
Heating Output:	17,600 BTU/hr.
Kerosene Capacity:	1.6 gallons
Burning Rate:	.53 qt/hr. (.1325 gals.)
Recommended Heating Area:	640 sq. ft.
Continuous Hours of Heating:	About 12
Ignition:	2.8 v. Ignition Plug: 2 "D" size dry cell batteries, 1.5 v each
Size:	22.2" h x 18.4" w x 18.4" d
Weight: (empty)	23.5 lbs.
Accessories:	2 "D" size dry cell batteries and refilling Siphon

Model	22-DK®
Heating Output:	22,600 BTU/hr.
Kerosene Capacity:	1.82 gallons
Burning Rate:	.68 qt/hr. (.17 gals.)
Recommended Heating Area:	800 sq. ft.
Continuous Hours of Heating:	About 11
Ignition:	2.8 v. Ignition Plug: 2 "D" size dry cell batteries, 1.5 v each
Size:	23.8" h x 18.4" w x 19" d
Weight: (empty)	26.4 lbs.
Accessories:	2 "D" size dry cell batteries and refilling Siphon

Assembling Your Corona Heater

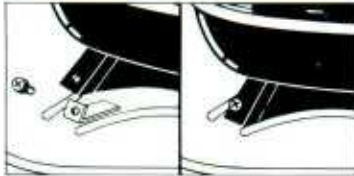
1. Read this entire Instruction Manual before you begin assembly and operation.

2. Lift packing material from top of carton. NOTE: Carton will contain: Batteries for ignition and pump, Top Plate, Base (in slot at side of carton), Siphon Pump for fueling, and the heater with Carrying Handle in place.

3. Remove the Base from its place in the side of the carton and place it on the floor. Front and back indications are clearly marked on the base.

4. Lift out heater and place it on the Base.

5. Lift plastic cover from heater and save it for later use.



6. Fasten heater to the Base using the two screws already in place on the Base. Use **fingers only** to tighten screws. Use of a screwdriver or pliers will

cause screws to crack or split.

NOTE: If screws are not in place on the heater base, look for them in the bottom of the carton among packing materials. They may have separated from the Heater Base during shipping.

7. The Burner is packed upside-down in the heater Cabinet. Be sure you have removed the *packing material* from the Burner.



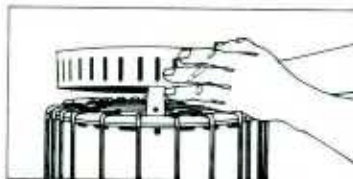
8. Place the Burner inside the heater Cabinet by turning it right-side-up and placing it on top of the metal ring which aligns it.

9. Align Burner Handle so that it can be reached through the Access Door.



10. Remove the Carrying Handle from the holes in the top of cabinet. Grasp both sides of Handle and pull away from the Cabinet.

11. Place the Top Plate on heater. Make certain the holes on the Fastening Tabs align with Carrying Handle holes in the Cabinet.



12. Replace the Carrying Handle. Your heater is now assembled. Return all packing material to carton and store in a dry place.

Setting the Automatic Shut-off System

Your Corona Heater **will not** operate unless you have set the Automatic Shut-off System. Follow the steps outlined below.



1. Press **DOWN** on the Automatic Shut-off lever. The System is now set and will allow your heater to operate.

2. Turn the Wick Adjustment Knob **CLOCKWISE**. You will notice a heavy clicking sound. This is normal. In subsequent use the Wick Adjustment Knob should turn freely and smoothly.



3. **If your heater's Automatic Shut-off System is ever activated you must repeat Steps 1 and 2 before your heater will operate.**

4. The Automatic Shut-off System is designed to be activated if the heater is jarred, bumped or vibrated excessively. Weak vibrations or a gentle incline will not set it off.

NOTE: If the Automatic Shut-off System is activated, it will produce some smoke and odor.



5. When you move your heater, use the Carrying Handle. Lift the heater completely off the floor. Carry the heater in a level position to avoid setting off

the Automatic Shut-off System.

6. **NEVER** move your heater while it is in operation.

7. **NEVER** attempt to disassemble or modify the Automatic Shut-off System.

8. Keep the Automatic Shut-off System clean and free of dust and kerosene spills.

Operating Your Heater

1. To be sure the Burner is properly positioned, grasp the Adjusting Handle through the Access Door as shown and **ROTATE** the Burner



LEFT and **RIGHT** two or three times. When the Burner is properly seated it will move with little resistance.



2. Place the two "D" cell Batteries which power the Automatic Igniter in the Battery Case located on the lower back of the heater Cabinet.

3. Install the Batteries as indicated by the (+) and (-) polarity markings as illustrated above.

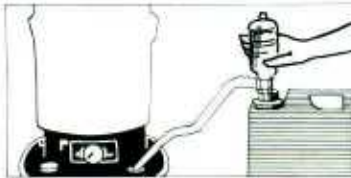
4. Snap Battery Case Cover into place over the Batteries.

Filling the Fuel Tank with Kerosene

WARNING: Risk of Explosion

- NEVER use any fuel other than clean, water-clear kerosene in your heater.
- NEVER refill the Fuel Tank while heater is operating or still hot.
- NEVER use heater in an area where flammable vapors or dust may be present.
- NEVER fill heater Fuel Tank in living space. ALWAYS fill Fuel Tank outdoors.
- NEVER store kerosene in any container other than an approved container, tightly capped, in a cool, dark place.
- NEVER store kerosene in direct sunlight.
- NEVER store kerosene in a glass container.
- NEVER store kerosene in the living space.
- NEVER operate heater without Fuel Cap in place.

1. Remove Fuel Cap from the Fuel Tank by turning COUNTER-CLOCKWISE.



2. Always use the Siphon Pump provided with your heater to transfer kerosene from the Storage Container to the Fuel Tank.

NOTE: Be sure you have tightened the Vacuum Release Knob on the Siphon Pump Bulb by turning it CLOCKWISE. After the Fuel Tank has been properly filled, turn the Vacuum Release Knob COUNTER-CLOCKWISE to drain the Siphon.



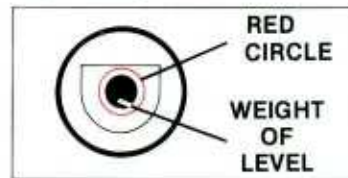
3. The Fuel Tank is properly filled when the needle on the fuel gauge is on "F". DO NOT OVERFILL the Fuel Tank.



4. Replace the Fuel Feeding cap and hand-tighten.

5. WAIT THIRTY MINUTES AFTER FILLING THE TANK BEFORE ATTEMPTING TO LIGHT YOUR HEATER. This time allows the Wick to absorb enough kerosene for satisfactory lighting and burning.

Lighting the Heater



1. Check the level indicator on the heater to confirm it is sitting level. If it is not level, the heater will not burn properly.

2. After waiting for NOT LESS than 30 minutes, raise the Wick to its full height by turning the Wick Adjustment Knob CLOCKWISE to the "HIGH" position until it comes to a firm stop.



3. Gently press the Ignition Lever DOWN. Hold the Lever in place until the flame appears. (Approximately 3 to 5 seconds). Then gently release the Ignition Lever.

NOTE: Pressing the Ignition Lever too hard will push the Ignition Plug too deeply into the Wick and will produce white smoke instead of a clean ignition. If this occurs, release the pressure on the Ignition Lever slightly. Holding the lever in place too long will produce smoke and odor. Be certain the Ignition Plug is fully retracted after lighting the heater.

4. After the Wick is lighted, check the alignment of the Burner by rotating it LEFT and RIGHT two or three times.

5. **DO NOT OPERATE THE IGNITER WHILE THE HEATER IS IN OPERATION. YOU WILL DAMAGE THE WICK AND THE IGNITION PLUG AND PRODUCE SMOKE AND ODOR.**

Adjusting the Wick During Operation

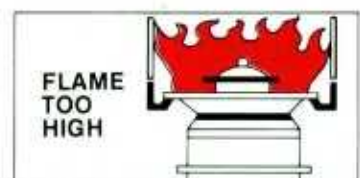
After the heater is lit, it will warm gradually until it reaches full heating power. This normally takes ten to fifteen minutes. You can control your heater's output by using the Wick Adjustment Knob to raise or lower the Wick.

1. Set the Wick Adjustment Knob within the indicated Operating Range.

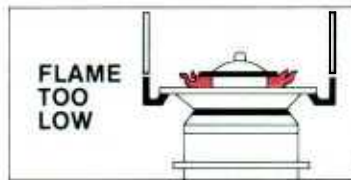
2. When your heater is properly adjusted, the flame will burn in an evenly balanced circle $\frac{3}{8}$ " to $\frac{1}{4}$ " over top of the Burner.



3. If the flame touches the wall of the heater, the Wick is adjusted too high. **NOTE:** Smoke and odor will be produced when flame is too high.



4. If the flame does not appear at the top of the Burner, the Wick is adjusted too low. Smoke and soot may result if heater is operated with the flame too low.



Turning your Heater off

1. Turn the Wick Adjustment Knob COUNTER-CLOCKWISE to "OFF". The heater will be completely out in approximately 3 to 4 minutes.

2. **Always turn your heater off when leaving the room and before retiring for the evening.**

3. **NEVER leave your heater burning overnight or while unattended.**

Caring for your Heater

For performance and safety, parts of your Corona Heater require simple, routine care. Major problems and potential danger can be avoided with a little preventive maintenance.

Cabinet

1. Keep the Heater Cabinet clean by wiping lightly with a damp cloth.

2. Always wipe away kerosene spills with a soft, dry cloth.

CAUTION: Risk of Fire.

Accumulated dirt and kerosene spills on the Heater Cabinet create a potential fire hazard.

Fuel Tank

1. Poor quality fuel or fuel containing water entering the Fuel Tank will cause poor performance (i.e. slow or no lighting, low heat output, irregular burning, or a bad odor.) Poor quality fuel or fuel contaminated with water will cause carbon and tar accumulation on the Wick, which will interfere with the heater's performance and result in corrosion of the interior of the Fuel Tank.



2. To remove poor quality or contaminated fuel you must pump the Fuel Tank dry. Follow these steps:

A. Insert the non-flexible tube on your Siphon Pump into the Fuel Tank, as shown until all fuel and water are removed. Tilt the unit to be certain no fuel remains in the Tank.

B. Clean the Wick following the procedure outlined in the "Cleaning the Wick" section, page 6. If cleaning the Wick does not restore it to good condition, follow the procedure outlined for Replacing the Wick, page 7.

C. Dispose of any fuel remaining in the Fuel Tank. Partially fill the Fuel Tank with clean, uncontaminated kerosene. Replace the Cap and slosh the fuel around in the Tank. Remove the kerosene you have used to clean the tank and dispose of it safely outdoors.

D. Fill the Fuel Tank with clean, water-clear kerosene. Follow the "Filling the Fuel Tank" procedures on page 5.

E. Wipe the heater Cabinet to remove any kerosene spills.

Cleaning the Wick

Cleaning the Wick regularly will keep it in good condition. Once or twice a week is recommended during seasons of heavy use. To clean the Wick follow the steps outlined below:

1. Move your heater outdoors. Leave the Burner in the Cabinet. Protect the heater from wind and drafts which could cause irregular burning.

2. Raise the Wick to "HIGH" by turning the Wick Adjustment Knob CLOCKWISE. Before lighting, be certain the Burner is properly positioned. Light the heater following the procedures outlined in the "Lighting the Heater" section, page 5.

3. Allow the heater to burn until the flame is completely out and all fuel has burned away.

4. Wait 15 minutes and re-light the heater. (This allows time for the Wick to absorb every bit of available fuel which may have remained in the lower portion of the Wick during the first burning operation.)

5. These procedures will normally remove any carbon or tar deposits that may have accumulated through normal use. Any remaining carbon deposits on the Wick can be crushed between your fingers or brushed away with an old toothbrush.

6. If this procedure does not remove all carbon and tar deposits, replace the Wick. See page 7.

Long Term Care

1. At the start of the heating season check the condition of the Wick and Ignition Plug. Always start the season with new Batteries. To determine whether or not the Wick and Ignition Plug need to be replaced, refer to the "Trouble shooting Guide" section, page 10.

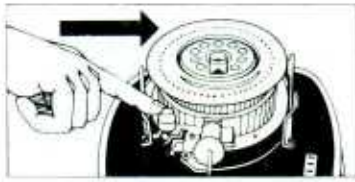
2. Proper storage of your heater takes just a few minutes and will prolong the life of your heater. The most convenient way to store and protect it from damage, is in the original shipping carton and packing material.

3. Move the heater outdoors and follow the procedures outlined in "Cleaning the Wick", page 6.

4. After the heater has cooled, remove the Cabinet (see below). Drain the Fuel Tank as shown on page 6. Clean off all kerosene or dust on the Wick Assembly and the Automatic Shut-off System, using a clean, dry cloth. Wipe clean all areas you can reach.

5. Clean the Cabinet interior and exterior with a damp cloth. Use a mild detergent solution if necessary. Wipe them dry with a soft cloth. Avoid scratching any surfaces of your heater.

6. Trip the Pendulum on the Automatic Shut-off System as shown to activate it.



7. Replace the Cabinet as outlined on page 9.

8. Remove the Batteries from the Battery Case and discard them. Replace the Batteries with new ones at the start of the next heating season.

9. Cover the Heater Cabinet with the plastic shipping cover provided and return the unit to the original shipping carton for storage. Place the heater in a safe, dry place.

Wick Replacement

If cleaning the Wick does not improve performance, you will need to replace the Wick. Refer to the "Checklist for Trouble Symptoms" section, page 10 which outlines conditions under which the Wick should be replaced.

1. Use **ONLY** a genuine Corona Replacement Wick. **DO NOT** attempt to substitute any other type of Wick device or a Wick designed for another brand or model heater. You could damage the heater and create a potential fire hazard.

2. The only tools needed to replace the Wick are:
- A Pair of Pliers
 - A Flat blade Screwdriver
 - A Plastic Bag with a Twist Tie
 - A pair of Scissors for Wick change



3. Lower Wick by turning Wick Adjustment Knob **COUNTER-CLOCK-WISE** to "OFF".

4. Use Pliers to loosen and remove cabinet screws on either side of the Heater Cabinet.

5. Use the Carrying Handle to lift the Cabinet straight up and away from the heater.



6. Gently pull the Wick Adjustment Knob off the heater.

7. Remove the Dressing Plate by lifting it from the back and tilting it forward to clear the Wick Adjustment Assembly.

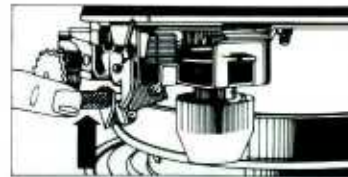


8. Trip the Pendulum on the Automatic Shut-Off System to activate it.

9. Remove the four wing nuts which hold the Wick Assembly to the heater and carefully lift the Wick Assembly from the heater.



10. Replace the Wick Adjustment Knob temporarily. Turn the Knob **CLOCKWISE** to raise the Wick and to reset the Automatic Shut-Off System.



11. Turn the Wick Assembly upside-down. Check the Automatic Shut-off Lever to make certain it is engaged as shown.

12. Place the white plastic strip, packed with the Wick, on the Wick Cover to protect your fingers.

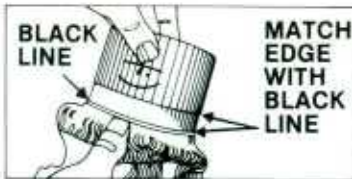
13. While still holding the Wick Assembly upside-down, grasp the Wick Cover firmly and **PULL** it off with a sharp tug.



14. Locate the three Pins which connect the Wick Sleeve to the Wick Assembly. Press in gently (toward the center) one at a time to disconnect them.

NOTE: A Flat Blade Screwdriver may aid you in this operation. As each Pin is pressed in, use the Screwdriver to gently move the Pin away from its Slot.

15. When all three Pins are disconnected, pull out the Wick Sleeve and old Wick together. Disengage the old Wick and discard it. **CAUTION:** The Retainer Teeth are sharp. Handle the Wick Sleeve with care to avoid injury. After you have removed the old Wick, use the Plastic Bag with the Twist Tie for proper disposal of the old Wick. **DO NOT DISPOSE OF THE WICK INDOORS.** Vapors could create a potential fire hazard.



16. Insert the new Wick into the Wick sleeve from the bottom. Be careful to match the Black Line on the orange tape **exactly** to the bottom of the Wick

sleeve. Make sure the Black Line matches all the way around the inside of the Wick sleeve. This will ensure that the new Wick will raise to the correct burning height of $\frac{3}{8}$ " (10mm).

17. Reach inside the Wick and press firmly on all sides to securely attach the Wick to the Retainer Teeth. Work carefully to avoid wrinkles or bulges.

NOTE: Remove the protective strips from the Wick Sleeve as the Wick is pressed into the Retainer Teeth.

18. With the Wick Assembly still upside down, position the Wick Sleeve making certain the connecting Pins are aligned to fit into the slanted grooves.



19. Press on each Pin and insert the Wick Sleeve into the Wick Assembly. Check carefully to see that each Pin has snapped into place.



20. Turn the Wick Assembly right side up.

21. Engage the Automatic Shut-off System by pressing **DOWN** on the Lever.

22. Turn the Wick Adjustment Knob **CLOCKWISE**. This will produce a slight click and a complete stop. Now turn the Wick Adjustment Knob to raise and lower the Wick several times to confirm smooth operation.

23. Turn the Wick Assembly upside down to replace the Wick Cover. Make certain the skirt of the Wick is completely within the cover at the top.



24. Align the four tabs on the Wick Cover with the four screw holes on the Bottom of the Assembly, as shown, and snap it into place. Be certain of firm contact at all points.



25. Replace the Wick Cover. Turn the Wick Adjustment Knob to the fully retracted position. Pull lightly on the skirt of the Wick to remove any slack. Tuck the skirt

of the Wick into the recessed area of the Wick Cover as shown. Press lightly to secure the skirt to the Retainer Teeth on the Wick Cover.

26. Replace the Wick Assembly on the heater with the Wick raised. Replace two diagonally opposite Wing Nuts first, then the remaining two. Tighten each of the four Wing Nuts gradually until the Wick Assembly is firmly in place.



27. While your heater is disassembled, check the Automatic Shut-off System.



28. Trip the Automatic Shut-off System by nudging the Brass Pendulum. Reset the System by pressing the Set Lever **DOWN**. Trip it again to make certain it

is operating correctly.

29. Turn the Wick Adjustment Knob to test its operation. Be certain the Wick operates smoothly as the Knob is turned **CLOCKWISE** and **COUNTER-CLOCKWISE**.

30. Test Ignition. Raise the Wick to its full height. The Ignition Plug should be within $\frac{3}{4}$ " to $\frac{5}{8}$ " (1mm to 2mm) of the Wick when the Lever is fully depressed.

31. Check the Ignition Plug before replacing the heater Cabinet. If replacement is required, use the following procedure.

Ignition Plug Replacement

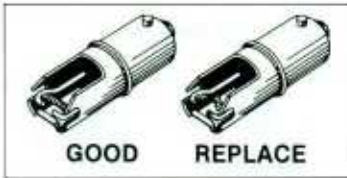
NOTE: If you are replacing the Ignition Plug during the Wick Replacement procedure, your heater Cabinet is already separated from the heater. If not, it will be necessary to remove the Cabinet by removing the set screws on either side, and lifting it off to gain access to the Ignition System.

Use **ONLY** a Genuine Corona Ignition Plug. They are available from your Corona Dealer. Check to be certain the problem is not the result of weak Batteries. The Ignition Plug may need to be replaced even though there is some glow in the Plug but the heater will not light. To replace the Ignition Plug:

1. **CAUTION:** Always remove the Batteries from the Battery Case. Do not attempt to remove the Ignition Plug with the Batteries in place. The Ignition Plug creates very intense heat and could cause a severe burn.

2. Press the Ignition Lever **DOWN**. Grasp the Ignition Plug, turn **COUNTER-CLOCKWISE** and remove it from the Plug Socket.





3. Check the Filament in the tip of the Ignition Plug. It may be possible to bend the Filament back into place if it is bent. Replace the Plug if the Filament appears

to be broken.

4. Place the new Ignition Plug in the Socket with the Ignition Guard facing DOWN. Grasp firmly and turn CLOCKWISE.

5. Replace the Batteries and test for satisfactory lighting.

Reassembling your heater

NOTE: If you are reassembling after replacing the Wick, begin with Step 1. If you have replaced only the Ignition Plug, and have not completely dismantled your heater, begin with Step 3.

1. Remove Wick Adjustment Knob which you had temporarily replaced to test Wick operation.

2. Replace the Dressing Plate making certain to align the Automatic Shut-off System Lever and the Wick Adjustment Rod, which holds the Knob, with the appropriate slots in the Dressing Plate. Begin by aligning them and gently snap the Dressing Plate in place over the Wick Assembly.

3. Replace the heater Cabinet. Make certain the Grille Guard prongs are inserted securely into the proper holes on the heater, and the Cabinet Front matches the front of the heater.

4. Fasten the Cabinet to the heater with the two screws.



5. Replace the Wick Adjustment Knob. To be certain it is properly positioned on the Wick Adjustment Shaft, raise the Wick to its full height. The black mark on the knob must line up with the word "HIGH" on the

control panel. If it does not, reverse the position of the knob on the shaft. Your heater is ready for refilling and operation.

CORONA^{T.M.}

Portable Kerosene Heater

Manufactured by Uchida Manufacturing Co., LTD.
Niigata, Japan



GLO-internationalTM
CORPORATION

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