

Miles Stair's Wick Shop

Quality & Service Since 1997

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INSTALLING WICKS IN CENTER DRAFT LAMPS

Many center draft lamp wicks are provided full length without "tails" because of the great variation in the depth of founts. Remove the burner/gallery and measure the height of the draft tube with a thin stick like a bamboo skewer. That length plus 1" is the proper wick length. Four 2" "tails" should be cut in the bottom of the wick to a height of 1 1/2" or 2" above the bottom of the wick so the "tails" can flare out when the wick is completely lowered for extinguishing the lamp.



There were literally hundreds of patents issued for wick raising assemblies for center draft lamps. B & H lamps made after the mid-1890's (such as the Rayo) use a Penfield patent clamp which closes to grab the wick securely. Raising the clamp to the top engages a wedge which forces the clamps apart...the wick can then be carefully inserted between the draft tube and the clamps, then the knob turned to lower the wick, which disengages the wedge and grabs the wick. Adjust the height of the wick after you know it will raise and lower properly. Note: Do not force the clamps apart in B&H lamps - they are cast iron, they rust may break! Use a flat blade screwdriver to wedge the clamps apart.



Other types of wick raising systems used sharp pins/barbs to hold the wick securely for raising and lowering. Some lamps had the points/barbs next to the center draft tube, points outward, while others had an arm on each side of the draft tube with the sharp points toward the tube. There were many other wick sleeve attachment systems, of course.

In many lamps, slipping a wick past the sharp points can be a challenge without a wick guide. With an inexpensive razor knife and an empty plastic jug of Mineral Spirits, making a wick guide is simplicity itself.

If the lamp has the sharp wick-holding points against the pillar and pointed outward, slip the wick guide around the pillar, slip the wick over the wick guide, position the wick at the right height, and simply pull out the wick guide while holding the wick down.

If the lamp has the sharp wick-holding points on arms so the points are pointed inward toward the air tube, slip the wick guide between the arms and the central air pillar, slide the wick between the wick guide and the tube, position for height, and then pull out the wick guide while holding the wick in place below the wick guide with needle nose pliers.

Depending on the lamp, the wick may need to be trimmed or cut to fit a particular notch or cutout. Veritas was famous for that style cutout. In this case, it really helps to have an original, though used, wick to use as a template. Lacking a template, look closely at the wick sleeve to see how the wick must fit around a plate or other attachment system.



Rochester lamps used a corrugated metal band to secure the wick. The band was placed below the lift rod attachment. In some cases that is not sufficient to hold the wick steady so a thin copper wire can be used to secure the wick just above the left rod attachment. If your lamp is missing the corrugated metal band, a couple of twists of thin copper wire will adequately secure the wick to the wick sleeve.



➤ **Original Rochester wick**



Many lamps used a wick sleeve with barbs top and bottom to hold the wick. Fold the wick and insert it into the wick sleeve so when completely retracted the wick is just above the top of the sleeve. Inserting a dowel through the tails of the wick will expand the wick uniformly inside the sleeve. #0 size wicks use a 1/2" dowel, a 3/4" dowel for #1 size and a 1" dowel for #2 size lamps. Cut "tails" in the wick up to the base of the wick sleeve.

BEFORE THE FIRST LIGHTING

The new wick must be level on top to avoid flame spikes. You simply cannot trim the wicks perfectly even with scissors. Set the lowest section of the wick 1/16" higher than the wick tubes. Put a couple of eyedroppers full of kerosene on the top of the wick, put in the flame spreader, light the wick and put on the chimney. After the kerosene burns off the cotton wick itself will burn down level with the wick tubes. Rub the charred wick down with a finger, cloth or stick in a circular motion around the wick tube to get the charred wick even. Be consistent; rub the same direction (clockwise or counterclockwise) every time. This wicks often require several "dry burns." Make sure the chimney does not touch the shade at the top or the shade may crack from the heat!

CORRECT WICK THICKNESS

The wick should fit the wick gap correctly with little excess space. Too thin a wick can allow the flame to burn down the wick and into the font area. In the 1880's, some glass font center draft lamps were known to have fractured in the font area resulting in a dangerous situation. In general, wicks for B&H (Rayo) and Miller lamps were thinner than wicks for P&A (Royal) lamps. A wick which is too thin cannot support proper capillary action, and as the fuel is consumed too fast to be replaced, the top of the wick can become too dry and actually burn down beside the wick tube. Vent holes should be kept free and clear to prevent the buildup of fumes.

Circular wick, center draft lamps should be burned at near maximum light output to properly heat the flame spreader to burn up all fumes. If used turned down to minimum light output, they *will* produce an aroma when burning, but not when properly adjusted for maximum light output.

When not in use for a long time, empty the font of fuel and burn the wick "dry." Even 1K clear kerosene will precipitate a paraffin deposit which will harden any wick, ruining the capillary action necessary for proper burning. Fuel evaporated while in storage leaves a varnish which often glues everything together.

Never refuel a lamp when it is burning. That is why Kosmos lamps do not have a separate fill cap. Fires can happen to the nicest people - even “vintage” lamp people!	Never fill a lamp all the way to the top. Leave at least ½" of empty space to enable the fuel to expand as it warms up. The heat from a burning lamp also heats the fuel causing that expansion.	Clean spilled fuel from the lamp. Fuel residue will tarnish the finish over time. Nickel plate will peel off and brass will tarnish, ruining a pretty lamp! It is wise to periodically polish a lamp.
Start a lamp burning at a low setting! Let it warm up the chimney, fount and fuel before raising the wick for a higher flame.	Never leave a lamp burning unattended for at least 10 minutes after lighting or until the flame has stabilized. As the lamp warms up, so does the fuel, and thinner fuel is more volatile and has greater capillary ability. You may have to lower the wick several times as the lamp and fuel get warm before the flame will be stable.	
DO NOT try for a high or full curl flame until the lamp - including the fuel - is thoroughly warmed up. A tall flame mandates full capillary action of the wick, and that is attained with warmer, thinner fuel. Trying to get a full curl flame with cold fuel will result in the flame becoming too high and sooting as the fuel becomes hot. <u>Do not try for a prolonged full curl flame unless you are using my borosilicate chimneys! The heat produced can easily crack a standard glass chimney.</u>		

These special lamp wicks are made especially for me by Hattersley in England. Borosilicate chimneys for virtually all center draft lamps at www.MilesStair.com.

If you have a lamp for which wicks are not commercially available, I can make wicks to fit if provided with the draft tube dimensions. Send details to

info@wickshop.com

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