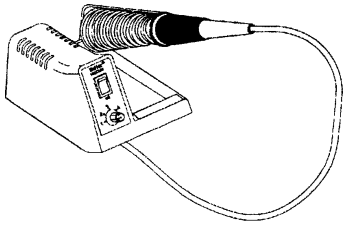
MODEL WLC200 SOLDERING STATION

PRODUCT DESCRIPTION



The Weller® WLC200 Soldering Station offers adjustable tip temperature by varying the heater wattage. By turning the knob on the power base the wattage can be varied from a minimum of 5 watts to a maximum of 80 watts.

The WLC200 comes with a built in iron stand, a tip cleaning sponge, a flat blade set screw, an Allen set screw, and is supplied with a MTG21 1/4" chisel tip.

The WLC200 is U.L. Listed.

OPERATING INSTRUCTIONS

Carefully unpack the unit. Install the iron stand into the slot provided and insert the iron. Wet the sponge with distilled water. The use of tap water may contaminate the soldering tip and solder joints due to minerals and chlorine.

Plug the line cord into a 120 volt AC receptacle. Turn the unit ON and set the power control knob to “5”. Wait 3 minutes. Turn the power control to a lower setting. Remove the iron from the stand and tin the tip with solder, thoroughly coating the working surface. The WLC200 is now ready for soldering.

STAINED GLASS SOLDERING IRON INSTRUCTIONS

The Weller® WLC200 soldering station bonds even the most intricate seams together.

Allow about three minutes for warm up using the “5” position, then adjust the iron to a lower setting. On a piece of scrap lead practice soldering to determine the correct pressure, speed and angle required. Clean the joint surfaces thoroughly. Make sure that all came joints, or copper foil joints, are butted together as closely as possible before soldering. Stained glass soldering fluxes are usually organic and water-soluble. They are extremely acidic and will greatly reduce tip life. To extend tip life always wipe the tip clean after soldering and re-tin the tip with solder. Do not allow this type of flux to remain on the tip while the iron is sitting at idle. Clean each joint after soldering with a specific cleaner or with a general cleansing agent.

ALWAYS WORK IN A WELL-VENTILATED AREA WHEN SOLDERING.

DECORATIVE SOLDERING TECHNIQUES

Stippled Effect

First run a smooth even lead. Keep iron on the same setting as you normally use for beading.

Re-flux the seam and using the side of the smallest soldering tip you have, start tapping the seam. Don’t over work one area. Move up and down the seam, tapping as you go. If the solder starts to peak up, re-flux. If the dots you are making on the seam are to large, try to tap faster or turn down the heat just a little.

WARNING: This product, when used for soldering and similar applications, produces chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Solder Balls

Turn your soldering iron down to mid-range. You want to be able to take solder from the spool and hold it on the tip of your iron for a count of 5 or more. Re-flux the seam. If your solder runs off the tip top quickly, turn the heat down. The smaller your soldering tip the smaller balls you can create. Try to take off an even amount of solder each time. Lower the tip down towards the seam. Once the solder ball on the tip makes contact with the seam (about 1 second) quickly lift the iron directly up and away from the ball. If the ball rolls off to the side of the seam, try coming down more directly onto the seam (a 90° angle). If your solder ball is pointed or frosted looking, re-flux the ball and quickly touch the ball with the edge of your soldering tip. The ball should round out quickly. You can use this same technique to enlarge a small solder ball, just add more solder, re-flux and re-heat the original ball. To space the balls more evenly, use a ruler and mark off the distance between each ball.

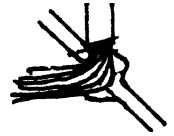
Solder Beads or Pearls

These are created just like the balls except you leave your iron on the seam, just a little longer. The extra heat will make the balls lengthen and form more bead shaped decorations.

Sponged Surfaces

Run a smooth high seam. Re-flux and re-heat a small 1/4" section of the seam. While that area is still hot, push a damp sponge directly onto the seam. Keep you iron heat on the regular setting for bead work.

Tree Bark



Run a smooth really high seam. Re-flux and re-heat a small 1/4" of the seam, if needed add more solder at this time. Push the side of a damp flux brush directly down onto the hot molten solder. Do not use a brushing stroke. Use a hot setting on your iron.

Bamboo

Run a smooth really high seam. Re-flux and using the flat part of your soldering tip, wipe it quickly and firmly across the seam. Clean your tip off on a wet sponge and repeat that process every 1/2" down the seam. Use a hot setting on your iron.

Jewel Prongs

You may want to add jewels or decorations to your decorative work without having to foil them first. Instead you can create prongs just like a jeweler. Do not use flux on the item being set. You will need to flux sparingly on the surface where you are attaching the prongs. Using a cool setting on your iron, keep the solder in contact with the smallest edge on your soldering tip and pull slowly and gently up and over the edge of the jewel or item. This takes practice. You may have better luck if you elevate the area so that you are soldering in a more horizontal position.

TIPS

If you want to combine one or more of these techniques together, be sure you wait until one layer is completely cooled before you try to apply more hot solder. Use 60/40 solder or solders with a 62+ tin content.

You may want to work with two or more irons when you are doing your decorative techniques. Then you won’t have to wait for irons to heat up or cool off before changing techniques.

Irons controlled with a rheostat are easier to control and better to use for decorative soldering work. It is also helpful if you have an iron like the Weller® WLC200 that accepts several different sized soldering tips.

SAFETY PRECAUTIONS

Your Weller® WLC200 soldering station complies with all applicable safety regulations in the USA and is U.L. Listed. Nevertheless, like all electrical appliances, it must be handled with care. Remember the soldering tip and heater can reach very high temperatures. Keep the tool out of reach of children.

Follow these simple safety rules at all times:

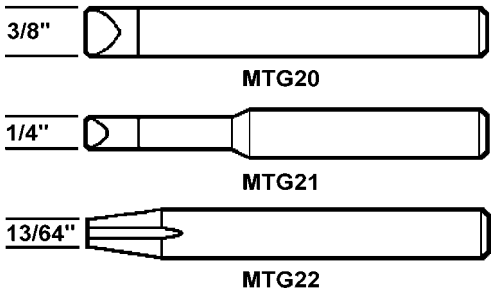
1. Keep the soldering iron well away from all flammable material.
2. To avoid burns always assume that the tip is hot.
3. Do not allow the hot soldering tip to touch the electrical power cord or iron cord. The cord insulation will melt or burn, creating a shock hazard.
4. Never attempt to use, or even plug in the unit if the iron cord or power cord is burned.
5. When moving the unit from one location to another carry the unit by the power baseand handle. Do not carry the unit by the handle cord or power cord.
6. Do not dip the tool in any liquid or use where if bumped it could fall into any container of liquid.
7. Always wear safety glasses or goggles when soldering as the rapid heating may cause popping and sputtering of the flux and solder.
8. Before changing the tip make sure the station is unplugged and the heater and tip are cool to the touch.
9. To clean the hot tip wipe it across the damp sponge. A sponge is provided with the station. Use distilled water to dampen the sponge.
10. Many materials used in soldering give off unpleasant or possibly toxic fumes when hot **ALWAYS** work in a well ventilated area when soldering.
11. After you unplug the station, allow the tip and heater to completely cool down to room temperature, and store the unit in a safe place.
12. Never plug in or attempt to use the unit if there is any sign of damage to the iron handle or power base. Return to Weller® for repair.
13. Remove the tip and set screw from the soldering iron periodically to prevent the tip or screw from seizing in the iron.

SELECTION OF WELLER® MTG SERIES TIPS

Weller® tips are solid copper, plated with iron, nickel and chromium. The chromium is eliminated from the working area and the tips are pre-tinned with tin/lead solder. The nickel and chromium protect the shank from corrosion and solder creep. The Weller® WLC200 uses the MTG series tips.

Use only original Weller® soldering tips, parts and accessories for this product.

MTG SERIES TIPS



CARE OF WELLER® SOLDERING TIPS

1. Keep tip tinned; wipe only before using.
2. Acid type fluxes used in stained glass work greatly reduce tip life.
3. Remove tip and clean with suitable cleaner for flux used. The frequency of cleaning will depend on the type of work and usage. Tips in constant use should be removed and cleaned at least once a week.
4. Don't try to clean tip with abrasive materials and never file tip; to do so will greatly reduce tip life. Tip wettability is affected by contact with organic materials such as plastic resins, silicone grease and other chemicals. If the tip becomes unwettable it may be cleaned with a Weller® Polishing Bar Part Number WPB1. Do not overdo this or the iron plating will be removed and the tip will be ruined. Re-tin tip immediately to prevent oxidation.
5. Don't remove excess solder from heated tip before storing. The excess solder will prevent oxidation of the wettable surface when the tip is reheated.

REPLACEMENT AND OPTIONAL PARTS FOR WLC200

Soldering Tips	See Tip chart for part number
WCC104	Replacement Tip Cleaning Sponge
WPB1	Weller® Polishing Bar

OTHER QUALITY WELLER® SOLDERING PRODUCTS

SPG80	Stained Glass Soldering Iron
WLC100	40 Watt Iron and Station with Adjustable Power Control

NO USER SERVICEABLE PARTS INSIDE - IF UNIT DOES NOT FUNCTION RETURN TO WELLER® FOR REPAIR