## **CRAFTSMAN®**

# OWNER'S MANUAL ELECTRIC SOLDERING GUN

MODEL NUMBERS 113.540440 113.540460 113.540450 113.540470

Model number may be found on the soldering gun.

You should record the model number in a safe place for future use.

#### **Craftsman One Year Full Warranty**

If this Craftsman product fails due to a defect in material or workmanship within one year from the date of purchase, return it to any Sears store or other Craftsman outlet in the United States for free replacement.

This warranty applies for only 90 days from the date of purchase if this product is ever used for commercial or rental purposes.

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

Sears, Roebuck and Co., Hoffman Estates, IL 60179

### SAFETY INSTRUCTIONS TO OPERATOR

▲ WARNING: Read and understand this owner's manual before using soldering gun. Unsafe operation and improper maintenance can cause burns to body or eyes, electric shock, health issues, damage to the tool, fire, or explosion.

▲ WARNING: Solder containing lead must never be used for plumbing applications. This soldering gun is not intended for plumbing connections and, if used for this application, will likely result in poor quality plumbing joints.

▲ WARNING: Some Craftsman Soldering Guns are provided with solder. This solder may contain metals or chemicals that may be toxic if inhaled. Do not inhale dust, smoke, or fumes when operating.

▲ WARNING: To avoid injury, do not use tips containing copper with following soldering guns: 54044, 54045, 54046 and 54047. Use only Craftsman tips specified.

## SAFETY INSTRUCTIONS TO OPERATION AND MAINTENANCE

- 1. This appliance has a polarized plug (one blade is wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Do not modify the plug in any way.
- 2. Arrange a secure resting place on your worktable where the tip will never contact a flammable surface, your body, or the power cord. With a peak temperature of about 1000°F, the tip may remain hot for several minutes after you release the trigger switch.
- 3. To reduce the risk of burns, remove excess hot molten solder from the tip by wiping with a damp cloth, damp sponge, or solder brush made for that purpose. Never swing the gun.

- To protect eyes from splatter, wear safety goggles meeting requirements of ANSI Z87.1 (shown on safety goggle package).
- **5.** To reduce the risk of destroying the tool, observe the 20% "On" time duty cycle rating of a soldering gun. This rating means a maximum of 1 minute of "On" time over 5 minutes total time. Never tie down the trigger switch.
- **6.** To reduce the risk of respiratory, eye, or skin irritation, keep your head out of the soldering fumes.
- 7. To reduce the risk of electrical shock, fire, injury, or explosion, work only in surroundings that are dry, and are free from flammable materials including vapors and liquids.
- 8. After use, unplug the power cord and let tip cool down. Store soldering gun in a dry secure place, out of the reach of children.

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

Part No. SP4906-8 Printed in Taiwan 08/09

## Assembly

- 1. Soldering Gun comes complete with solder tip(s).
- Loosen screws located on the front of the soldering tool using a #2 Phillips screwdriver.
- 3. Insert solder tip into openings and tighten down the screws.

## Operation -

#### **Using Soldering Gun**

- Screws holding tip must always be snug for soldering gun to function properly. Use a #2 Phillips screwdriver to tighten screws when necessary. To avoid stripping screws, be careful not to over-tighten.
- Clean the surfaces to be soldered together to insure a good bond. Use a wire brush or sandpaper to remove paint, varnish, or rust. To remove oil or grease, use alcohol.

▲ WARNING: To reduce the risk of fire, burns, or toxic vapors, do not use solvents other than alcohol for oil or grease removal.

3. Select the proper solder type. Rosin core solder is recommended for work on electrical items such as PC boards, radio and TV kits, model railroads, etc. The rosin, or flux, as it is sometimes called, helps clean the soldering joint as the solder is being melted and helps in the bonding process.

Another type of solder is ACID core solder. Do not use acid core solder when soldering electrical connections. Damage to electrical components may result. Acid core solder is recommended when soldering some types of steel plates together, but not for electrical connections.

- 4. For best results, tin the tip of the soldering gun with a coating of rosin core solder. This is done by cleaning the tip with steel wool, then pulling the trigger to heat the tip and then applying a light coating of new solder to the tip. Excess solder may be removed with a solder brush, damp sponge or damp cloth.
- 5. When soldering, hold soldering gun tip to the two surfaces (the "joint") to be soldered at the same time. Pull trigger to apply heat to the joint. It takes approximately 12 seconds for the tip to reach soldering temperature. Apply solder to the joint, NOT to the TIP, but close to the tip. When the surfaces are sufficiently heated, the solder will flow into the joint. Do not apply too much solder to the joint. Use just enough to give strength and a good appearance.
- Release trigger of gun and set soldering gun in a safe position to cool.

IMPORTANT: Remember to use your soldering gun with a 20% duty cycle. Never use it continuously for more than one minute without letting it cool for 4 minutes. Never tie down the trigger expecting the tip to remain at peak temperature for soldering. This will damage the tip and the remainder of the soldering gun.

## Maintenance

**Taking Care of Your Soldering Gun** 

▲ WARNING: To avoid burns or electrical shock, always unplug the soldering gun and allow to cool before servicing.

Keep tip screws snug. Periodically inspect the tip screws for looseness and tighten when necessary. However, to avoid stripping screws, do not over-tighten.

Keep the soldering tip clean. Use steel wool or very fine sandpaper to clean.

Tin tip before using. Refer to Step 4 of Operation.

#### **Changing Tip**

- 1. Remove tip after loosening both screws holding tip.
- Insert new tip and tighten screws. To avoid stripping screws, do not over tighten.

**NOTE:** Soldering gun is not serviceable except to replace tips. Some models are provided with a light. If the light burns out, replace it with a 2.25V bulb (G.E. type 222X or equivalent). The use of non-recommended tips may result in improper tip temperatures and damage to the gun.

Replacement Tips Available through Sears Service Center

▲ WARNING: To reduce the risk of injury or damage to soldering gun, do not use tips containing copper with the following soldering guns: 54044, 54045, 54046 and 54047. Use only the specified Craftsman tips.

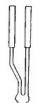
#### 54024

Containing one each of the tips at right, fits soldering guns:

54044

54045





General Purpose Tip

Tile Cutting

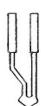
#### 54026

Containing one each of the tips at right, fits soldering guns:

54046

54047





## Troubleshooting '

Trouble	Probable Cause	Action
Tip does not heat although unit is plugged in and trigger is depressed.		Unplug gun from power receptacle
	1. Tip screws are loose.	1. Tighten tip screws.
	2. Tip cracked or broken.	2. Replace with new tip.
	3. Tip is dirty.	Clean tip with steel wool or fine sandpaper.