

# Heavy Duty Soldering Gun Kit

Stock Number W2019A

## OWNER'S MANUAL



**FOR YOUR SAFETY,**  
please read these instructions carefully and retain them for future use.

## SPECIFICATIONS

**Electrical:** ..... 120 V AC, 60 Hz, .07A

**Line Cord:**..... 55 in. 2 Prong

Specifications are subject to change without notice

## IMPORTANT SAFETY INFORMATION

### WARNING!

**READ, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS AND WARNINGS BEFORE OPERATING THIS TOOL. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE AND WILL VOID WARRANTY.**

1. Keep work area clean. Cluttered areas invite injuries.
2. Observe work area conditions. Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids. Do not bring combustible materials near the tools.
3. Keep children away. Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. Store idle equipment. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children and other untrained persons. Switch off all unused electrical tools when stored. Tools are dangerous in the hands of untrained users.
5. Use the right tool for the job. Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. Don't use a tool whose performance is not adequate for your work. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
6. Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. If the tools should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.
7. Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will 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 to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
8. Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators. There is an increased risk of electric shock if your body is grounded. Do not work on electrically live parts. The grip of antistatic designed soldering tools is conductive. Do not point the Soldering Gun, or turn yourself toward another person while soldering.

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9. When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These extension cords are rated for outdoor use, and reduce the risk of electric shock.
10. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
11. Do not abuse the Power Cord. Never use the Power Cord to carry the tools or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately. Damaged Power Cords increase the risk of electric shock.
12. Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
13. Do not overload your soldering tool. Use the soldering tool only with the specified voltage or specified pressure range.
14. Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
15. Dress properly. Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair. There is a danger of burning yourself with liquid solder. Wear the corresponding protective clothing in order to protect yourself against burns.
16. Avoid accidental starting. Be sure the Power Switch is off before plugging in. Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.
17. Remove adjusting keys, wrenches or other maintenance tools before turning the power tool on. A wrench, key or maintenance tool that is left attached to a part of the power tool may result in personal injury.
18. Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. When working with bonding agents, it is particularly important to observe the warning notices of the bonding agent manufacturer. Protect yourself against spattering solder. There is a danger of burning yourself with liquid solder. **If devices for solder vapor suction is available, ensure that these are connected and correctly used. Do not breath soldering fumes. Never breath soldering fumes as they may make you ill.**
19. Work Safe. Keep proper footing and balance at all times. Do not reach over or across running machines, hoses, etc. Never leave the Soldering Gun unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving. Never lay the Soldering Gun down where the heated parts can contact flammable materials or electrical wires. Always unplug the Soldering Gun from its electrical outlet before performing and inspection, maintenance, or cleaning procedures.

**WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

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- Stay alert. Watch what you are doing, use common sense. Do not operate any tool when you are tired.
- Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform. This is more secure than using your hands, and leaves both hands free to work with the tool. Holding the work by hand or against your body is unstable and may lead to loss of control.
- Take care of your soldering tool. Keep the soldering tool clean for better and safer work. Follow the maintenance instructions and the notices concerning changing the soldering tips. Regularly inspect all connected cords and hoses. Repairs should only be carried out by a qualified technician. Use only original PERFORMANCE TOOL® replacement parts.
- Check for damaged parts. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician.
- Repairs should only be carried out by a qualified electrician using original PERFORMANCE TOOLS® replacement parts. Failure to do so can lead to accidents for the operator. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Performance Tool®. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.
- Do not operate any tool if under the influence of alcohol or drugs. Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate any tool.
- Maintenance. For your safety, maintenance should be performed regularly by a qualified technician.

**WARNING:** Do not pull trigger continuing for more than 1 minute.

**WARNING:** Performance of this tool may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

**WARNING:** This product and its packaging contain a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

**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.

**WARNING:** The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator. Read and understand all of the instructions provided in the instruction manual of this product, as well as, any other tool (s) used with this product.

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### GROUNDING

**WARNING:** Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

### GROUNDING TOOLS: TOOLS WITH THREE PRONG PLUGS

- Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. (See Figure A.)
- The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. (See Figure A.)
- Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. (See Figure A.)

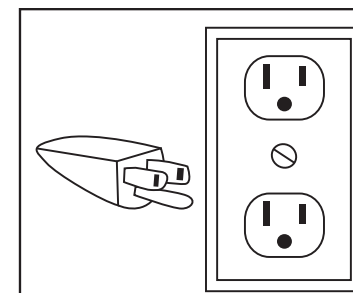


Figure A

### DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS

- Tools marked "Double Insulated" do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. (See Figure B.)
- Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration. (See Figure B.)

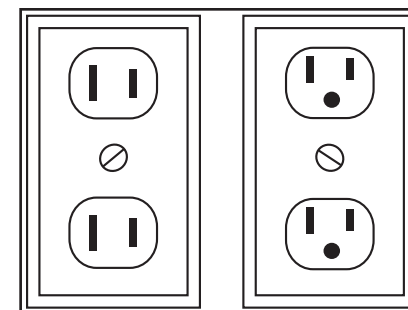


Figure B

### EXTENSION CORDS

- Grounded tools require a three wire extension cord. Double Insulated tools can use either a two or three wire extension cord.
- As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. (See Figure C, next page.)
- The smaller the gauge number of the wire, the greater the capacity of the cord. For

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example, a 14 gauge cord can carry a higher current than a 16 gauge cord. (See Fig.C.)

- When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. (See Fig. C.)
- If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. (See FIG. C.)

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT)					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

\* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

Figure C

## OPERATION

### Preparing the Soldering Tip

- Using a Phillips (#1) screwdriver, check that the Soldering Tip screws (2) are not loose. Do not overtighten as you may strip the threads.
- Set the Soldering Gun on the workbench, and plug the Line Cord into an electrical outlet.
- Press on the Trigger Switch (12) until the Soldering Tip (1) heats up.

### Preparing the Metal to be Soldered

- If wires are to be soldered, thoroughly clean or scrape the wires so that only the clean copper is showing. Make the wire splice.
- If other metals are to be soldered, thoroughly clean or scrape the metal surfaces. It may be necessary to apply acid flux (not supplied) to the metal surfaces before soldering.

**Caution:** If soldering on printed circuit boards, too much heat can soften the plastic form and loosen the metal eyelet connections. Use minimal heat, or solder with a low wattage soldering pencil. Never use acid core solder on wiring circuits.

### Soldering

- Press on the Trigger Switch (12) until the Soldering Tip (1) heats up.
- Brush on solder flux (not included), as needed, to the workpiece. Place the Soldering Tip to the joint, wiring splice, or metal to be soldered.

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- Apply solder to the wire splice or metal to be soldered, not the Soldering Tip. When the splice or metal is hot enough, it will melt the solder causing it to flow within the splice or between the metal surfaces.
- When the solder has flowed over the entire wire splice or metal surface, remove the Soldering Tip and release the Trigger Switch. If you are new to soldering, you may find it helpful to practice soldering first on scrap wires and splices.

## MAINTENANCE

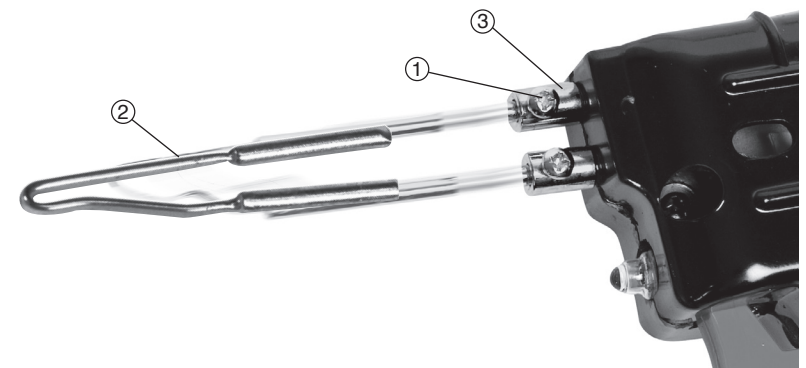
**Warning:** Before each use, inspect the general condition of the Soldering Gun. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. Do not use damaged equipment.

**Note:** Maintenance requiring disassembly of this tool should only be performed while the product is disconnected from the electrical supply circuit.

- When you are finished soldering, heat up the Soldering Tip (1) again and apply a small amount of rosin-core solder to coat the tip. Wipe off with a rag. This will leave the tip clean and ready for use again.
- If the Soldering Tip cracks or becomes eroded, the Soldering Tip needs to be replaced. In this condition, it will not heat up properly.

### Replacing the Soldering Tip

- To replace the Soldering Tip, use a Phillips (#1) screwdriver to remove each screw (1) by turning counterclockwise.
- Guide the old Soldering Tip (2) out of the Transformer Assembly mounting posts (3).
- Guide the prong ends of the new Soldering Tip (2) into the Transformer Assembly mounting posts (3).
- Carefully tighten the Screws (1) over the Transformer Assembly mounting posts (3). Make sure that the Screws fit straight into the slots. Do not overtighten.



### LIMITED WARRANTY

PERFORMANCE TOOL® extends only the following warranties, and only to original retail purchasers. These warranties give specific legal rights. Except where prohibited by local law, the law of the State of Washington governs all warranties and all exclusions and limitations of warranties and remedies. There may be other rights which vary from state to state.

PERFORMANCE TOOL® warrants the product to be free from defects in materials and workmanship under normal use and service. A defective product may be returned for a free replacement within 90 days from the date of purchase, provided that product is returned to place of purchase immediately after discovery of defect. After 90 days and up to one year from date of purchase, PERFORMANCE TOOL® will replace at no charge any parts which our examination shall disclose to be defective and under warranty. These warranties shall be valid only when a sales receipt showing the date of purchase accompanies the defective product or defective part (s) being returned. For part (s) after 90 days, please remit your request, postage prepaid to:

PERFORMANCE TOOL, P.O. Box 88259 Tukwila, WA 98138

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