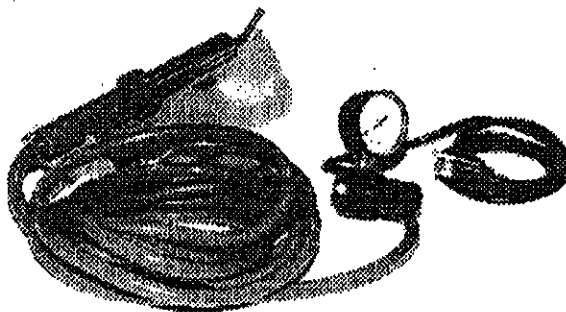


# PVC WELDING KIT

## Model 41592

### ASSEMBLY AND OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011

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For technical questions and replacement parts, please call 1-800-444-3353

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## Specifications

ITEM	DESCRIPTION
Air Hose	12 feet molded rubber
Heating Temperature	600° F. maximum
Electrical Cord	6 feet, 18 AWG, 3-wire, 110V
Element Housing	Stainless steel housing and tip
Air Regulator dial	Adjusting, locking
Air Inlet	1/4 inch NPT
Handle	Molded PVC
Air Pressure	15 PSI maximum
Safety rack	Metal

## Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

## Safety Warnings and Precautions

**WARNING:** When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

**Read all instructions before using this tool!**

1. **Do not touch barrel or tip when using. (HOT! 600° F)** Do not touch metal parts on the welding gun until they have cooled.
2. **Do not use near flammable materials.**
3. **Never attempt to do hot air welding with a flammable gas.**
4. **REMEMBER AIR FLOW FIRST AND AIR FLOW LAST. START AIR FLOW BEFORE HEATING THE ELEMENT. CLOSE AIR FLOW AFTER TURNING OFF HEATING ELEMENT AND ALLOWING IT TO COOL.**
5. **Always use pliers to change the tip on a welding gun. (Do not overtighten.)**

6. **Avoid working alone.** If an accident happens, an assistant can bring help.
7. **Avoid electrical shock.** Do not use in wet environment. Do not use if electrical cord is damaged.
8. **Avoid damaging gauge.** Use only as specified in this manual.
9. **Do not put the welder in a vise** to change heating elements.
10. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
11. **Store idle equipment.** When not in use, tools must be stored in a clean dry location to inhibit corrosion or contamination. Always lock up tools and keep out of reach of children.
12. **Dress properly.** Protective, electrically nonconductive clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
13. **Use eye protection.** Always wear ANSI approved impact safety goggles.
14. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across electrical cables or frames.
15. **Stay alert.** Watch what you are doing; use common sense. Do not operate any tool when you are tired.
16. **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 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.
17. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
18. **Do not operate 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 the tool.

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

**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.

## Unpacking

When unpacking, check to make sure the following parts are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual. Refer to the Parts List and Assembly Drawing on the last page of this manual.

## Operation

**Caution: The heat generated can cause serious burns.** Observe Safety Warnings and Precautions (pages 2, 3). Inspect PVC Welder components for signs of damage prior to using.

**Caution: Operating the welder without the recommended air flow will cause overheating and possible failure of the unit.**

1. Connect the Air Regulator (5) to a clean, dry compressed air supply. The air supply must be filtered and regulated.
2. **Turn on the air flow, using the Air Regulator (5).** Set the air flow at 3-1/2 to 4 PSI.
3. Place the heating element to rest on the metal Safety Rack (8).
4. Plug the Electrical Cord (4) into 110V grounded electrical outlet.
5. Allow the PVC Welder to warm up for several minutes before starting to weld.

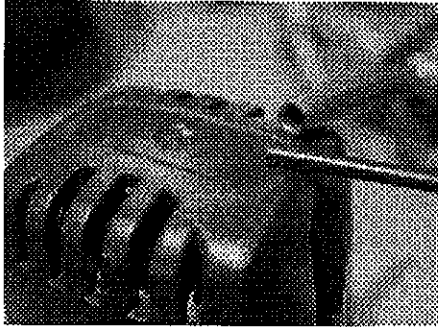
Note: You must use the correct type of welding rod for the material being welded.  
Included: White Rod: ABS; Grey Rod: PVC; Green Rod: PP.

Note: You must use the correct type of welding rod for the material being welded. If welding vinyl, use a vinyl welding rod. If welding PVC, a PVC welding rod must be used.

**NOTE: NEVER PLACE THE WELDING ROD INSIDE THE WELDING TIP (#2).**

Hold the welding rod in close proximity (1/4" to 3/8") to the Welding Tip (#2) - see photograph #1 on next page. Material up to 1/2" thick can be welded. As different types of plastic material will melt at different temperatures, adjustments must be made to the required heating time of the material and welding rod.

6. With one hand, grasp the Handle (#7) of the welder. With the other hand, hold the welding rod - see photograph #2. You are ready to begin the welding operation.



**Photograph #1**



**Photograph #2**

**NOTE: NEVER PLACE THE WELDING ROD INSIDE THE WELDING TIP (#2).**

7. When pausing between welds, and when finished using, always place the welder onto the safety rack.
8. When finished using the welder, disconnect the Electrical Cord from the outlet.
9. **Allow the welder to cool for several minutes, then close the air supply.**

**REMEMBER AIR FLOW FIRST AND AIR FLOW LAST. START AIR FLOW BEFORE HEATING THE ELEMENT. CLOSE AIR FLOW AFTER TURNING OFF HEATING ELEMENT AND ALLOWING IT TO COOL.**

## **Maintenance**

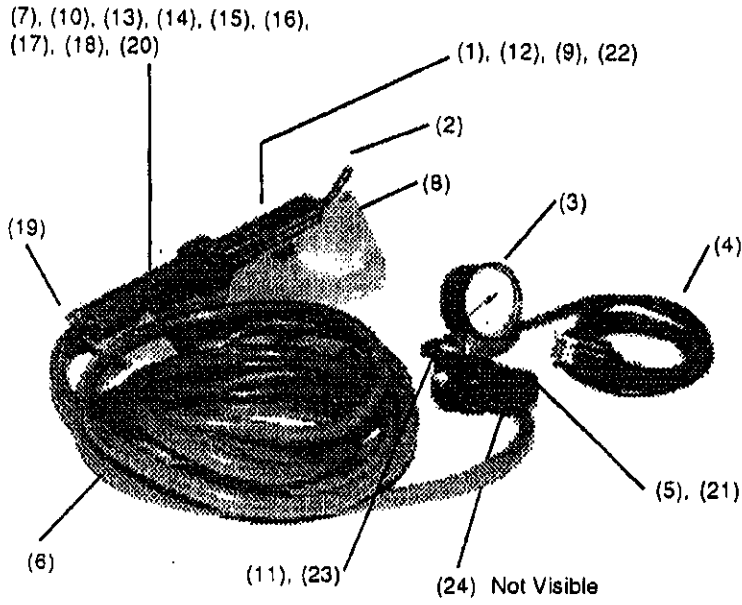
Inspect welding kit components for wear or damage before using. Replace worn or damaged parts as needed.

Note: Remember air flow first and air flow last. Start air flow before connecting the electricity. When finished welding, keep air flowing for 5 minutes after turning off the electricity.

## Parts List

Item #	Description	Qty
1	Heating element, 500 W, 120 VAC	1
2	Welding Tip	1
3	Pressure Gauge	1
4	Electrical cord	1
5	Air Regulator	1
6	Hose	1
7	Handle	1
8	Safety rack	1
9	Tubing, Inner	1
10	Handle Jacket	1
11	Ring, Connection	1
12	Ring, Alignment	1
13	Pins, Terminal	1
14	Insulators, Teflon	1
15	Terminals, Ground	1
16	Clamp, Cable	1
17	Adapter, Aluminum	1
18	O-ring	1
19	Handle Screw	1
20	Screw, Ground	1
21	Tee	1
22	Jacket, Metal	1
23	Cord O-ring	1
24	Clamp, Hose	1

Assembly Drawing



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