

#### **OPERATING INSTRUCTIONS AND REPLACEMENT PARTS**

# MODEL: PFE-230 PORTABLE FUME EXTRACTOR



### AIR SYSTEMS INTERNATIONAL, INC.

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#### GENERAL SAFETY INFORMATION

#### **WARNING!**

Use this product carefully to effectively avoid any possible danger. Observe the following safety regulations to avoid bodily injury due to electrocution during use.

Read this Manual carefully before operating the product.

- 1. Keep work area clean and organized.
  - A disorderly working environment will cause inconvenience and danger during operation.
- 2. Check if the working environment is suitable for using the product.
  - Do not use the product in a humid environment.
  - Use the product in a good working environment to reduce risks.
  - Do not use the product in a flammable gas or liquid environment to avoid danger.
- 3. Keep other persons away from the product, except for the operator, to avoid danger.
- 4. All tools shall be safely stored.
  - When the tools are not used, please store them in a dry place safely beyond the reach and access of children.
- 5. If the machine breaks down, contact a service technician. Do not attempt to repair and possibly damage the machine.
- 6. When using the product, be sure to put on a welding suit and mask.
- 7. Use the electrical wires correctly.
  - During use, do not drag the electrical wires forcefully. Do not use these wires if fraying or current leakage occur to avoid injury to the operator.
- 8. Before replacing parts, shut off power to the machine.
  - Check that the switch is in "on" or "off" position. Do not attempt the replacement when the machine is running. To replace parts or filter material, make certain that the switch is "off".
- 9. Use the power cord correctly. The total length of power cord shall not exceed 10 feet to avoid low power due to a drop in voltage and to prevent a possible hazard.
- 10. Care and Maintenance:
  - Confirm that the parts/accessories have been fully assembled and will not adversely affect the machine operattion.
  - Check if the machine is operated properly.
  - Replace damaged parts or accessories according to the instructions of the Manual. If the said instructions are not specified in the Manual, have a professional technician carry out the maintenance or replacement.
  - Check that the electrical specifications of this machine meet safety requirements, and that the maintenance is carried out by a licensed electrician. Use original manufacturer's parts and accessories to avoid injury.
  - If a problem occurs, contact your dealer immediately.

### WELDING FUME EXTRACTOR SAFETY RULES

The Welding Fume Extractor can be dangerous if it is operated incorrectly. Therefore, the product must be used cautiously to avoid causing a hazard or damage. Unnecessary injuries may occur by failing to follow the instructions of the Safety Rules Manual. Be sure to put on protection equipment or suit that can protect your body, such as helmet and eye mask to avoid injuries from occurring. If any doubts or any unfitness occurs during use, be sure to stop the operation immediately. Keep in mind that the user shall be liable for using according to the specified safety rules and for operating the machine correctly.

- 1. Read this Manual carefully before operating the product.
- 2. Be sure to follow local electrical and safety regulations and observe the electrical safety standards practiced in the relevant area. All electrical wire connections and installation shall be carried out by a licensed electrician.
- 3. Do not operate the product near flammable materials, as sparks may ignite these materials and cause an explosion Please confirm there aren't any flammables near the working site to avoid hazard.
- 4. This product is suitable for collecting smoke and welding oil gas. Do not use it in collecting iron chips and dust at the same time to avoid producing sparks.
- 5. Before replacement of parts or filter materials, be certain that the switch is disconnected.
- 6. Do not kink the power cord and keep it away from oil, chemicals or flammables.
- 7. Check that the voltage, phase count and grounding wire match the machine requirements.
- 8. When the fan blades are operated at high speed, do not reach hand near these blades to prevent finger from breaking or clothes/necktie from getting caught. Do not put the hand or foreign matter into the air inlet to avoid getting caught in the high-speed rotation of fan blades.
- 9. When not in use, all air inlets of shall be covered.

### **POWER CONNECTION**

1. Confirm that the power is properly connected under normal power supply condition, 115 VAC with minimum 15 amp service.

### **UNPACKING**



The machine should be unpacked carefully. Check if the machine and components are consistent with those indicated in the parts list. If any doubt arises or if components are incomplete, contact Air Systems, toll free 1-800-866-8100.

PFE-230-F1 Stainless Filter - captures up to 95% of the sparks and steel chips.

PFE-230PF1 Pleated Filter - 12" x 12" x 1" MERV 8 rated, 50-70% efficient.

PFE-230PF4 Pleated Filter - 12" x 12" x 4" MERV 8 rated, 50-70% efficient.

PFE-230-HF Pleated HEPA Filter - 12" x 12" x 5-7/8" captures 99.97% of the 0.3 micron particles and provides better working environment, DOP certified.

PFE-230-HF

PFE-230PF4

PFE-230PF1

PFE-230-F1

### SET-UP AND DAILY USAGE

- 1. Check that all filters are clean and secured in place with the stainless steel wire screen.
- 2. Replace pre-filter(s) as they become clogged from welding fumes. Start with the first pre-filter and check the second for any heavy build-up of welding smoke and fumes that may reduce suction.
- 3. Do not replace the HEPA filter until no suction improvements result from changing the pre-filters.

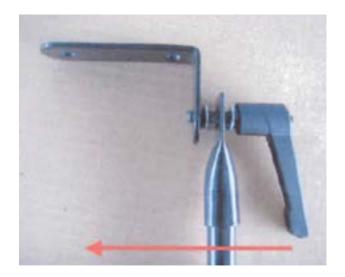


**HOOD FIXING PLATE** 



FIXING SUPPORT





STEP 1)
Put handle thru (1) pc. of 5/16" spring washer and suction hood fixing pipe. Then fasten (1) pc. of 5/16" spring washer to the hood fixing support.





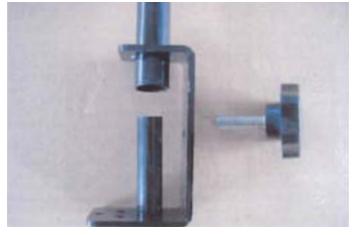
STEP 2)
Use (2) 5/16" x 3/4" hex screws, (4) 5/16" flatwashers, and (2) 5/6" hex nuts to fasten the hood to the hood fixing plate.



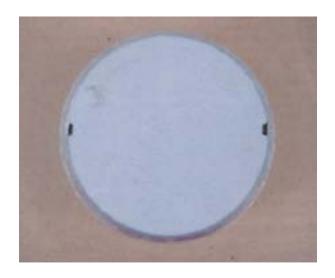


**STEP 3)**Fit the assembled hood fixing pipe to the L-shaped pipe using (1) 5/16" x 5/8" wing screw to fasten.





**STEP 4)**Fit the L-shaped pipe onto the fixing support. Use (1) pc. of 5/16" x 1" fixing knob to fasten.



**STEP 5)**Open the base board on the back of the magnetic base.





STEP 6)
Put (3) 3/16" x 3/8" Phillips head screws thru the magnetic base and thru the (3) holes on the fixing support. Use (3) hex nuts to fasten.



STEP 7)
Assembly completed.

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