

Model
PFE-750-8
PORTABLE FUME EXTRACTOR

Manual No. PFE02
(Rev 2 February 2008)

Operating Manual



[Air Systems International PFE-750-8 Fume Extractor](#)
[Air Systems International PFE-750CAB Fume Extractor](#)

OVERVIEW

Air Systems' portable HEPA filtered fume extractor is used mainly for source capture of welding smoke and fumes. The Portable Fume Extractor series operates at less than 80dbA. A 13" fumehood is placed on the 360° rotating adjustable arm and is supplied with an adjustable damper to control air flow velocity at the capture site. The contaminated air is drawn in through the arm or central duct; clean filtered air is exhausted through the rear of the cabinet.



SPECIFICATIONS

MOTOR:	1.0 HP, 115 VAC prewired, 230 VAC optional wiring, 60Hz, 1-phase, TEFC, 3450 RPM
FAN:	750 cfm with 10ft arm
CABINET:	18 gauge steel with epoxy powder coating
DIMENSIONS:	40" D x 27" W x 32.5" H (w/o arm)
WHEELS:	(4) casters 5" diameter with locking feature
AMP DRAW:	Start up requires 13 amps - minimum 20 amp service is recommended
FILTERS:	Supplied pre-filter pad with steel holder (24" x 24" x 1") and 99.97% HEPA filter (24"x24"x11.5")

INITIAL SETUP

The Fume Air 750 is delivered in 2 pieces. The cabinet is supplied with filters installed and the 10' arm is in a separate box. Remove the arm assembly from the box. The screws to secure the arm to the cabinet are threaded into the mounting inlet on the cabinet.

Note: When mounting the fume extractor arm, index tabs as shown here.



REAR OF CABINET



Remove the screws and place the arm over the inlet aligning the mounting holes to the cabinet. The piston will always be placed toward the front of the cabinet as shown in the picture above. Install the six screws and securely tighten the arm to the cabinet. The unit is now ready for use.

CAUTION

This unit is designed for source capture of toxic welding fume particulate created during welding and burning operations. Under certain windy conditions, the welder may not get 100% of the toxic particulate captured. Please consult with your safety and health personnel about wearing the proper respirator during welding operations. This electric unit is not explosion-proof. Do not operate in atmospheres containing explosive gases.

OPERATION

Plug the unit into a grounded 115 VAC outlet. Turn the unit on with the switch located on the top of the cabinet.



Position the 13" fume hood within approximately 12" of the welding operation for best capture of the welding smoke. Two of the roller casters have foot locks; these should be actuated during use to prevent the unit from moving. A flow dampener is located on the 10ft arm near the hood. This can be left open or partially closed to regulate the proper amount of air flow desired depending on the type of welding operation performed.

FILTERS SUPPLIED

The Fume-Air 750 unit is supplied with a DOP tested fire retardant HEPA filter and pre-filter. The HEPA filter can be installed in either direction. A test flow arrow is located on the top of the filter to show the air flow direction used during its factory testing. A certification label on filter performance is also supplied. The pre-filter is installed ahead of the HEPA filter at the factory. It is designed to collect large bulky particulate and extend the service life of the HEPA filter.



Inspect the pre-filter every 8 hours and replace if clogged. Heavy welding operations create a tremendous amount of smoke and dust that gets trapped in the pre-filter. In order to maintain adequate suction, the pre-filter must be changed after 8 hours of operation after extremely heavy use. Operating the fume extractor without a pre-filter will ruin the expensive HEPA filter prematurely.

FILTER CHANGE INDICATOR

A differential pressure switch is supplied with the unit and will activate a red light when the filter loses approximately 10% flow capacity. The indicator light is located next to the on/off switch.



**FILTER CHANGE
INDICATOR**

If this light actuates, change the pre-filter pad. **Every 8 hours, inspect the pre-filter pad and replace if clogged. If the red light stays on after replacing the pre-filter, the HEPA filter should be replaced.**

FILTER REPLACEMENT

The HEPA and pre-filter are located directly behind the air inlet where the arm is attached. To access the filters, lift the hinged cabinet door on the fume extractor. The pre-filter pad is installed in a steel holder and should be removed first. Inspect and replace pre-filter if clogged. Re-install metal frame in front of HEPA filter and align with HEPA filter gaskets. To replace the HEPA filter, always remove the pre-filter assembly first. Tilt the HEPA forward and lift out of the cabinet.

NOTE: DOOR MUST REMAIN CLOSED WHILE THE UNIT IS IN USE!



PRE-FILTER

HEPA FILTER

The HEPA filter may be contaminated with potentially toxic dust. Use approved EPA methods for disposing of the HEPA filter and contaminated products.



REPLACEMENT ITEMS

Model #	Description
1630P	Fume-Air 750 arm only
PFE-2412HF	Replacement HEPA filter
PFE-2424PF	Replacement pre-filter pads, box of 10
PFE-2424C	Charcoal pre-filter pad, box of 10

Warranty Disclaimer

Air Systems' manufactured equipment is warranted to the original user against defects in workmanship or materials under normal use for one year after date of purchase. Any part which is determined by Air Systems to be defective in material or workmanship will be, as the exclusive remedy, repaired or replaced at Air Systems' option. This warranty does not apply to electrical systems or electronic components. Electrical parts are warranted, to the original user, for 90 days from the date of sale. During the warranty period, electrical components will be repaired or replaced at Air Systems' option.

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The purchaser shall be solely responsible for compliance with all applicable Federal, State and Local OSHA and/or MSHA requirements. Although Air Systems International believes that its products, if operated and maintained as shipped from the factory and in accordance with our "operations manual", conform to OSHA and/or MSHA requirements, there are no implied or expressed warranties of such compliance extending beyond the limited warranty described herein. Product designs and specifications are subject to change without notice. **Rev 2 12/98**

Air leaks are not covered under warranty except when they result from a defective system component, i.e. an on/off valve or regulator or upon initial delivery due to poor workmanship. Air leaks due to poor delivery or damage will be covered under delivery claims. Minor air leaks are part of routine service and maintenance and are the responsibility of the customer just as are filters and oil changes.