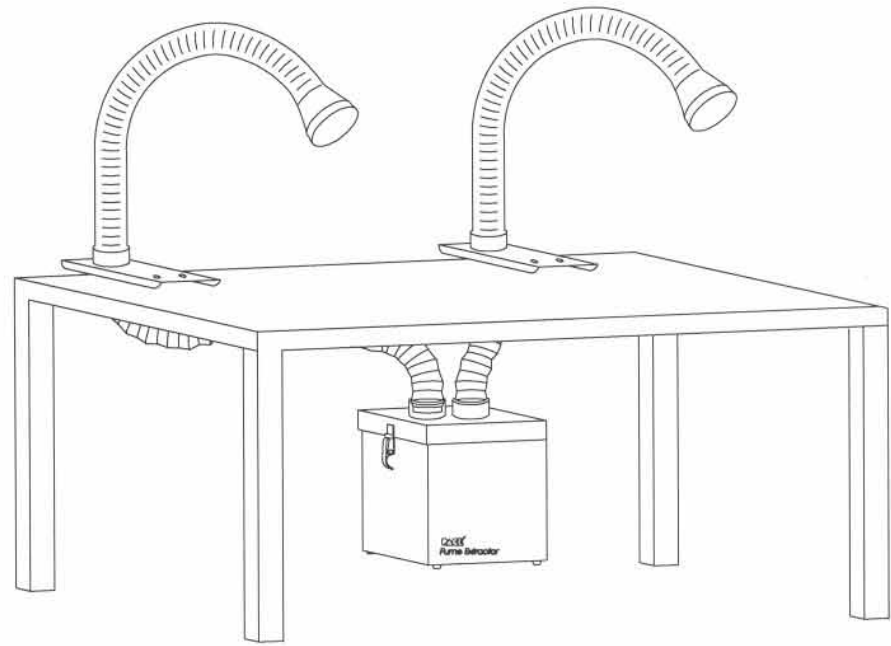


**PAGE**<sup>®</sup>

**PACE MULTI ARM-EVAC II<sup>®</sup>**

FUME EXTRACTION SYSTEMS



**OPERATION &**

**MAINTENANCE**

**MANUAL**



# **PACE MULTI ARM-EVAC II**

**MANUAL NO. 8881-0945**

**REV. F**

**JANUARY 1999**

## **Warning**

Read the safety and applications information section in the operation and maintenance manual thoroughly *before* installing and using your fume extraction system.



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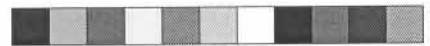
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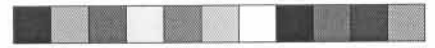
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# TABLE OF CONTENTS

<b>TITLE</b>	<b>PAGE</b>
General Information .....	1
Use of this Manual .....	1
Introduction .....	1
Specifications .....	1
Safety and Application Information .....	5
Installation .....	8
Operation .....	14
Procedure .....	14
General Tips .....	14
Fuses .....	14
Maintenance .....	15
Filters .....	15
Motor .....	16
Multi Arm-Evac II Accessories .....	16
Replacement Filters .....	16
Accessories .....	17
Accessories .....	17
Filter Options .....	19
Articulated Arms and Accessories .....	20
Endpieces and Mounting Brackets .....	20
Warranty .....	21



# TABLES & FIGURES

## TABLES

---

Table 1: Central Filtration Unit Specifications .....	2
Table 2: Replacement Filters .....	16
Table 3: Multi Arm-Evac II - Articulated Arms .....	20
Table 4: Endpieces and Mounting Brackets.....	20

## FIGURE

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Figure 1: Multi Arm-Evac II Dimensions .....	3
Figure 2: Multi Arm-Evac II Parts Identification .....	4




## **GENERAL INFORMATION**


### **USE OF THIS MANUAL**

This manual will provide the user with the basic knowledge to properly operate and maintain the PACE Multi Arm-Evac II Fume Extraction System. PACE STRONGLY RECOMMENDS THAT THE USER READ AND FULLY UNDERSTAND THIS MANUAL PRIOR TO USE OF THE SYSTEM. If you encounter any difficulty operating your system or have any questions, call your local authorized PACE dealer or contact PACE Applications Engineering directly at the United Kingdom Office at Tel. (44) 01908 277666, Fax (44) 01908 277777, or PACE Product Management at the U.S. Office at Tel. (301) 490-9860, Fax (301) 604-8782.

### **INTRODUCTION**



The PACE Multi Arm-Evac II Fume Extraction System represents the latest technology in fume extraction. It features a heavy-duty, maintenance-free brushless motor along with a filtration process that includes a pre-filter for coarse particle removal, and a High Efficiency Particulate Air (HEPA)/Gas Filter cartridge. The HEPA/Gas Filter is ideal for use in applications where high efficiency particulate removal is required with the additional benefit of a gas media blend to neutralize and adsorb noxious gases. Optional filters are also available. See Page 19.



PACE Multi Arm-Evac II Fume Extraction Systems use specially designed extraction accessories that can be conveniently mounted on any workbench or tabletop. The PACE Multi Arm-Evac II is designed to extract fumes from one or two work stations.

### **SPECIFICATIONS**

#### **Environmental**

Ambient Operating Temperature:	0°C to 50°C (32°F to 122°F)
Storage Temperature:	-40°C to 125°C (-40°F to 257°F)
Ambient Operating Humidity:	90% relative humidity maximum non-condensing
Storage Humidity:	90% relative humidity maximum non-condensing

# GENERAL INFORMATION

## Central Filtration Unit

### Multi Arm-Evac II Specification

Part Number	8888-0815	8888-0825
Power Requirements	220/240V, 50Hz 1.3 amps	110V, 60Hz 3 amps
Size	280mm x 280mm x 395mm (11" x 11" x 15.5")	
Weight	14.0kg (31 lbs)	
Flow Rate (Dual Inlet)	333 m <sup>3</sup> /h (165 cfm) [166.5 m <sup>3</sup> /h (198 cfm) per inlet]	
Flow Rate (Single Inlet)	280 m <sup>3</sup> /h (165 cfm)	
Motor Type	Single Stage Centrifugal Pump	
Pre-Filter Type	Multistage Polyester Media, Rated 86% Arrestance	
Pre-Filter Dimensions	254mm x 254mm x 178mm (10" x 10" x 7") P/N 8883-0111-P5	
Combo HEPA/Gas Filter Cartridge Dimensions	254mm x 254mm x 178mm (10" x 10" x 7") P/N 8883-0931	
HEPA Filter Rating	99.97% Overall Efficiency	
HEPA Filter Media Surface	2.8m <sup>2</sup> (30 sq. ft.)	
Gas Filter	Composite blend of Chemisorptive and Adsorptive Medias	
Optional Foam Filter Cartridge Dimensions	254mm x 254mm x 178mm (10" x 10" x 7") P/N 8883-0871	
Foam Filter Rating	95% Overall Efficiency	
Inlets	Two 75mm (3")	
Ducting Style	75mm (3") flexible hose	
Housing	18 gauge steel	
Noise Level at 2 meters (6.5')	59 dBA	

Table 1: Central Filtration Unit Specifications

## GENERAL INFORMATION

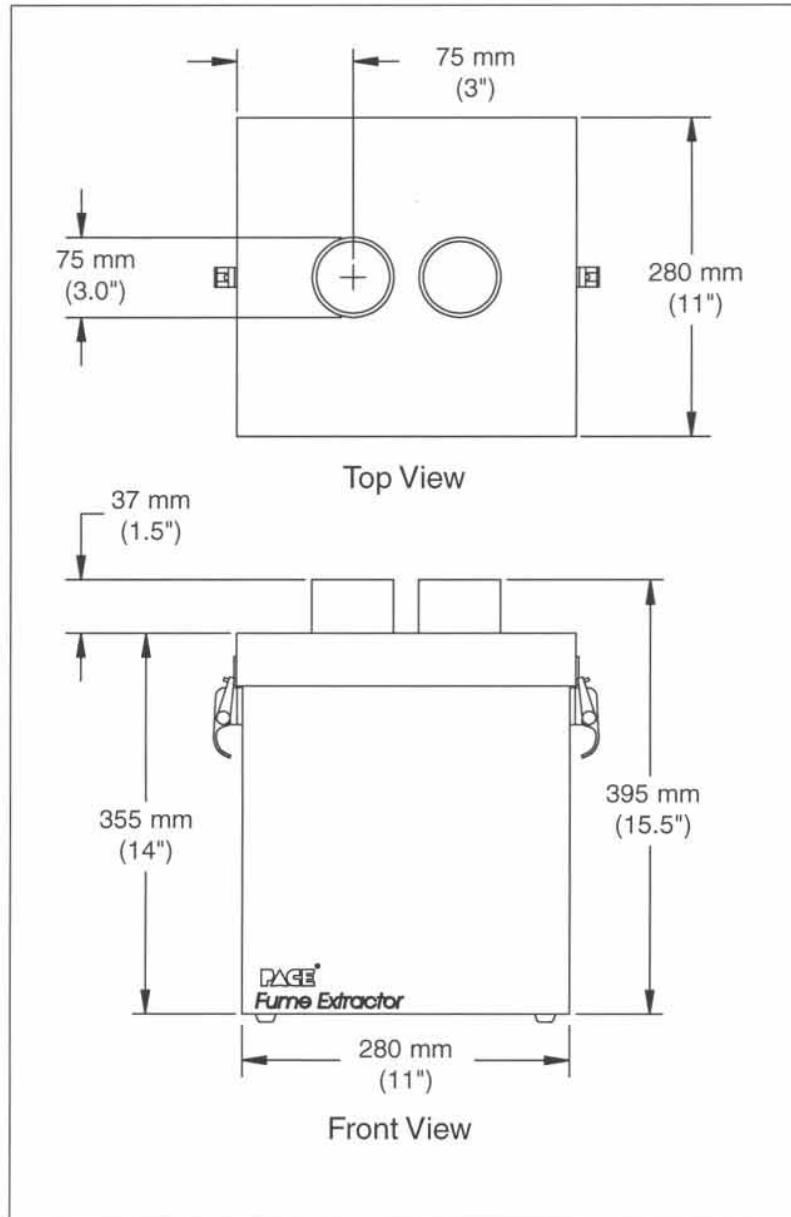


Figure 1: PACE Multi Arm-Evac II Dimensions



# GENERAL INFORMATION

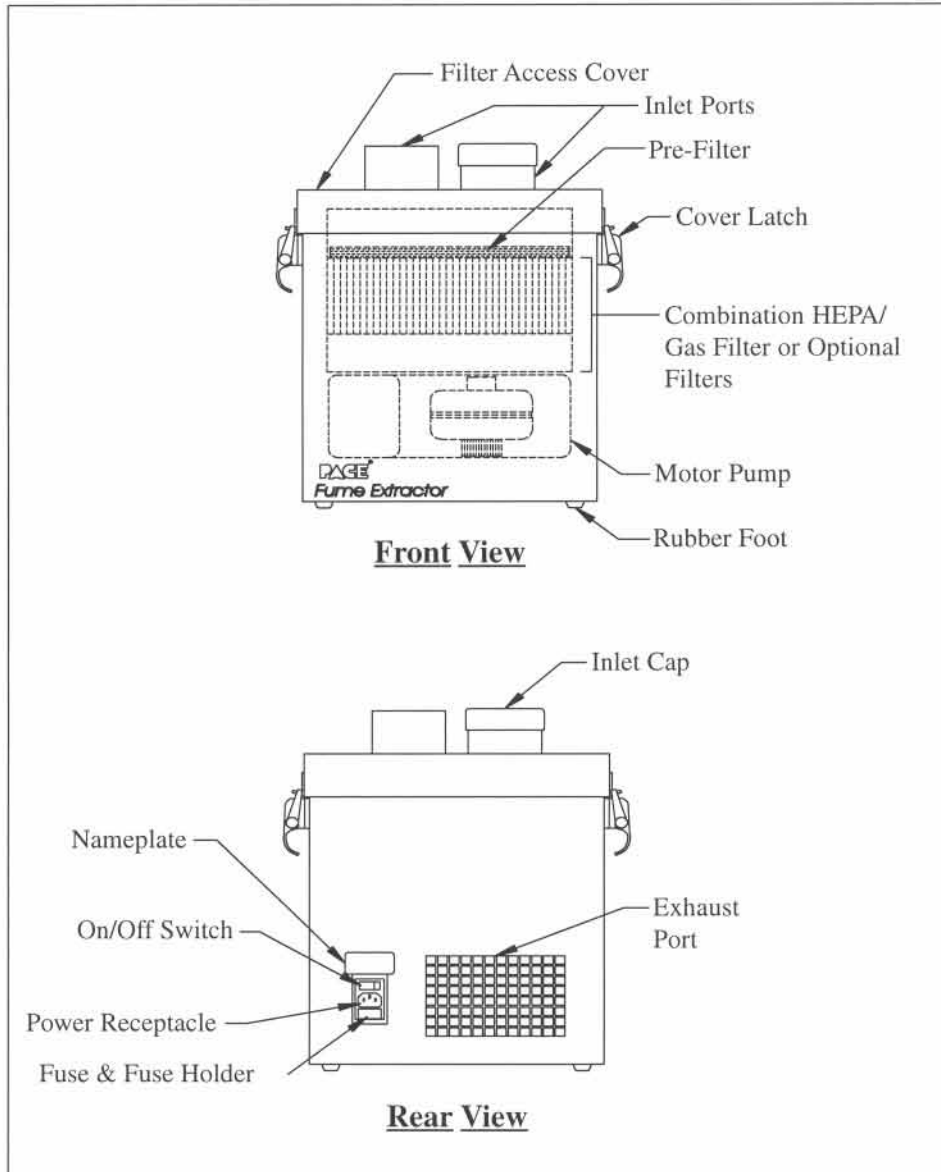


Figure 2: PACE Multi Arm-Evac II Parts Identification

## SAFETY AND APPLICATIONS INFORMATION

PACE Fume Extraction systems are designed to reduce the level of harmful contaminants from the work environment and to assist in the achievement of recommended health and safety requirements for local exhaust ventilation and contaminant removal. Be sure to follow all Application and Maintenance guidelines contained herein and precautions contained in other relevant product safety literature (i.e., Material Safety Data Sheets) provided with the substances and equipment producing the fumes to be extracted.

### DISCLAIMER

PACE hereby disclaims all responsibility for any personal injury, property damage, fine, citation or penalty imposed by any government or private entity which results from any use, misuse or mis-application of this product, failure of the user to regularly maintain the product according to the recommended guidelines, or failure to adequately monitor fume extraction exhaust air and the ambient workplace air for the presence of harmful levels of gases, fumes and particulates.

Compliance with all applicable environmental and personnel safety regulations is the sole responsibility of the user and adequate self-monitoring of exhaust air released into the atmosphere or the workplace as well as monitoring of the ambient workplace air is strongly recommended.

### Warning

FAILURE TO COMPLY WITH THE APPLICATION AND MAINTENANCE GUIDELINES, FILTER REPLACEMENT SCHEDULES, MONITORING RECOMMENDATIONS AND SAFETY GUIDELINES CONTAINED HEREIN AND IN OTHER RELEVANT PRODUCT SAFETY LITERATURE (I.E., MATERIAL SAFETY DATA SHEETS) PROVIDED WITH THE SUBSTANCES AND EQUIPMENT PRODUCING THE FUMES TO BE EXTRACTED COULD RESULT IN RISK OF SERIOUS INJURY, FIRE OR EXPLOSION.

To insure continued effective performance, the following guidelines must be followed.

### General Purpose Filter Cartridge

The Multi Arm-Evac II is equipped with the General Purpose Filter Cartridge which has been designed to capture particulates and noxious gases and odors that are present in the air being filtered. Over time, the HEPA filter will gradually become clogged, impeding air flow through the system, and the capacity of the gas filter will be reached, reducing its ability to continue to neutralize and adsorb noxious gases and odors.

General Purpose Filter Cartridges *must be replaced at regular intervals* to ensure that the fume extraction system is operating effectively. These intervals will vary depending on the type of work being performed, the level of use, and the amount and composition of airborne contaminants produced.

## SAFETY AND APPLICATIONS INFORMATION

### Caution

To ensure the highest level of performance, use only PACE replacement filters in your Multi Arm-Evac II.

The exhaust air stream from the central filtration unit as well as the ambient air in the workplace should be monitored with appropriate and adequate measuring/detection devices to assure compliance with all applicable Health and Safety regulations.

Flammable vapors and gases (i.e. Isopropyl Alcohol) are removed by and accumulate in the gas portion of the General Purpose Filter Cartridge presenting a potential fire hazard. Therefore, the user must exercise appropriate precautions when extracting such fumes or when handling and disposing of filters containing such flammable substances. Follow *all fire safety and personnel protection guidelines* contained in the Material Safety Data Sheet (MSDS) for the substance(s) producing the extracted vapors and gases (fumes).

When disposing of used filters, extreme care must be taken to comply with *all* applicable environmental

### Danger

PACE FUME EXTRACTORS ARE NOT INTENDED TO BE USED AS A SUBSTITUTE FOR DEVICES SUCH AS PERSONAL PROTECTIVE RESPIRATORS WHICH ARE DESIGNED TO REMOVE POORLY ADSORBED SUBSTANCES INCLUDING CARBON MONOXIDE, METHANE, HYDROGEN, ACETYLENE AND OTHER GASES. RISK OF SERIOUS INJURY OR DEATH, FIRE OR EXPLOSION MAY RESULT FROM IMPROPER USE. IF IN DOUBT, CONSULT WITH YOUR INDUSTRIAL HYGIENIST OR PACE.

regulations. Carefully consult the MSDS supplied with the material(s) producing the fume. If in doubt, check with your local Environmental Authority.

Extreme care must be exercised when disposing of a used General Purpose Filter Cartridge containing potentially hazardous substances. When disposing of filters, appropriate and adequate personal protective equipment (i.e. gloves, respirators, plastic containment bags, etc.) must be used when hazardous substances such as asbestos, lead, radioactive or biohazard materials may be present. Consult the Material Safety Data Sheet (MSDS) of the materials generating the extracted fume.



## ***SAFETY AND APPLICATIONS INFORMATION***

### **Danger**

NEVER USE PACE FUME EXTRACTION SYSTEMS TO EXTRACT FUMES FROM HIGHLY FLAMMABLE LIQUIDS AND GASES SUCH AS ETHER, GASOLINE (PETROL) AND OTHERS. RISK OF SERIOUS INJURY, DEATH, FIRE OR EXPLOSION MAY RESULT.

CERTAIN AIRBORNE CONTAMINANTS SUCH AS METHYL ETHYL KETONE, CYCLOHEXONE, OZONE AND OTHERS, WHEN CONTACTED WITH ACTIVATED CARBON, CAN UNDERGO OXIDATION, DECOMPOSITION OR POLYMERIZATION RESULTING IN EXOTHERMIC REACTIONS OR HEAT GENERATION. PACE FUME EXTRACTION SYSTEMS MUST NOT BE USED TO EXTRACT FUMES FROM THESE SUBSTANCES.



### **Warning**

Use with inappropriate chemicals or substances, failure to provide regular maintenance or other misuse of your Fume Extraction System may result in contaminated air being recirculated into the work environment.

# INSTALLATION

## GENERAL

The Multi Arm-Evac II has been designed with maximum installation flexibility in mind. A number of configurations may be used. (See the “Configurations” section.) The following are recommended guidelines for setting up your Multi Arm-Evac II. If you have any specific questions that this section does not cover please consult your PACE Representative or call PACE directly.

### 1. Placement

There are three major considerations that need to be addressed for proper placement of the central filtration unit.

- **Exhaust Port:** The exhaust port is located on the back of the filtration unit, next to the on/off switch. When positioning the unit, make sure that the exhaust port is *not* blocked or that airflow from the exhaust port is not restricted in any way. Additionally, the on/off switch must be readily accessible.
- **Unit Location:** The filtration unit should be located so that it will not block aiseways or impede normal operating traffic or material handling pathways. It is important to position the unit in such a way that allows for proper clearance to remove the filter access cover and replace the filter as needed.
- **Proximity to the work area:** The filtration unit should be placed as close to the work area as possible. If using a flex hose, it is advantageous to keep the length of flex hose as short as possible. **Do not** kink or create any sharp bends in the flex hose, as this will reduce airflow.

### 2. Power

The Multi Arm-Evac II will plug into a standard 110 volt or 230 volt electrical outlet, depending on the model you purchased. Be sure the unit you have is rated for the intended power supply.

<b>Warning</b>
----------------

Failure to supply the correct voltage to the unit will result in damage to the motor.
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### 3. Filters

Before operating the unit, make sure the filter is correctly positioned. The pre-filter is always on top and the blue side of the prefilter should be facing upward. The direction of airflow is clearly marked on the filter cartridge. Airflow is always in a downward direction for the Multi Arm-Evac II.

# INSTALLATION

## 4. Inlet Caps

If an inlet port is not connected to a collection device, it must be covered with the inlet cap provided.

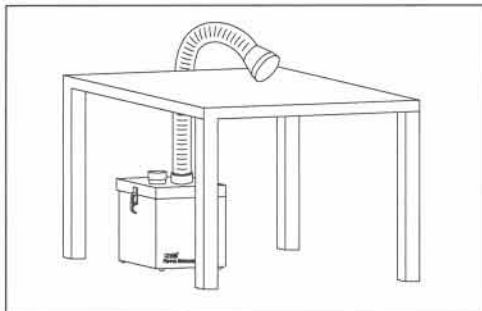
## 5. Accessories

The Multi Arm-Evac II is designed to be used with *one or two* collection accessories (i.e. flex arm, articulated arm, plenum, etc.). When using two collection devices, *any two* may be used together. This provides maximum flexibility in meeting the fume extraction needs in your work environment. See pages 19 through 22. Performance can only be guaranteed when using genuine PACE Fume Extraction collection accessories.

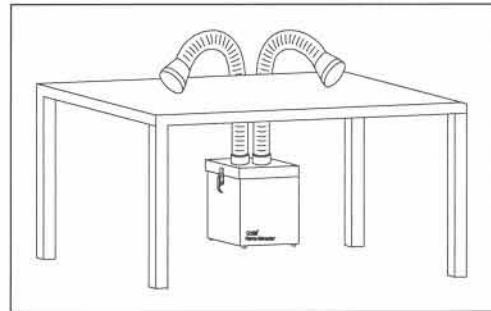
## CONFIGURATIONS

### *Connecting One or Two Flex Arms*

- 1) Slide the narrow end of the Flex Arm (P/N 8886-0365) over one inlet port on the Multi Arm-Evac II.
- 2) Secure the Flex Arm to the inlet of the Multi Arm-Evac II with the Flex Arm clamp (provided).
- 3) Position the Flex Arm for maximum extraction performance.
- 4) If using one Flex Arm, make sure the inlet cap covers the unused inlet.
- 5) Repeat steps 1 through 3 to attach second Flex Arm.



**Multi Arm-Evac II fitted with one Flex Arm**



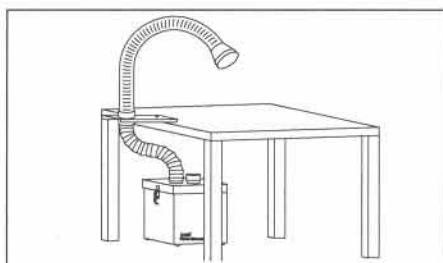
**Multi Arm-Evac II fitted with two Flex Arms**

**NOTE:** The Multi Arm-Evac II can be placed on the benchtop or located under a workbench, depending on operator preference.

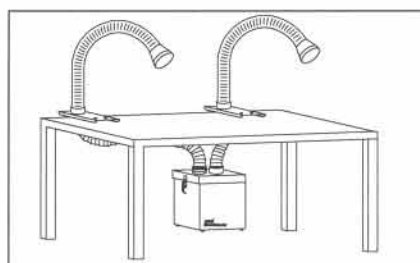
# INSTALLATION

## Connecting One or Two Bench Mounted Flex Arms

- 1) To mount the Flex Arm to a bench or tabletop, the optional Bench Mounting Kit (P/N 8886-0363) is required.
- 2) Position the bench mounting bracket on the tabletop and secure it with the two screws provided.
- 3) Slide one end of the flex hose over an inlet port on the Multi Arm-Evac II and secure it with a hose clamp (provided).
- 4) Connect the other end of the flex hose to the bottom of the bench mounting bracket and secure it with the other hose clamp.
- 5) Slide the Flex Arm over the top of the bench mounting bracket and secure it to the bracket with the Flex Arm clamp (provided).
- 6) Position the Flex Arm for maximum extraction performance.
- 7) If using one Flex Arm, make sure the inlet cap covers unused inlet.
- 8) Repeat steps 1 through 6 to attach second arm.

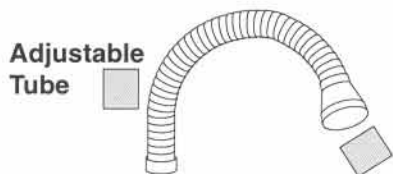


**Multi Arm-Evac II fitted with one Flex Arm and Bench Mounting Kit**

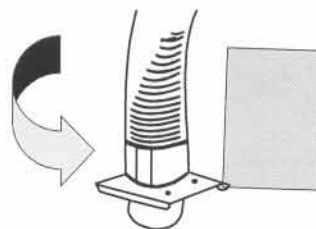


**Multi Arm-Evac II fitted with two Flex Arms and Bench Mounting Kits**

The Flex Arm is constructed of a slotted, flexible plastic strip, wound to form the tube length. The flexibility of this construction allows variable arm placement. Frequent adjustments of the arm can cause the arm to lose its ability to stay in position.



**Collection Canopy**



**Tighten Counter-Clockwise**

To restore the Flex Arm, first compress the tube by pressing down from the top of the arm towards the mounting bracket. Next, tighten the tube by twisting in a **COUNTER-CLOCKWISE** direction. Once tightened, adjust the arm to the desired position. **Do not twist the arm in a clockwise direction!**

### Warning

Unwinding the flex arm (twisting in a clockwise direction) may cause the arm windings to separate.

## INSTALLATION

### Connecting the 45mm (1.75") Static-Safe Metal Flex Arm

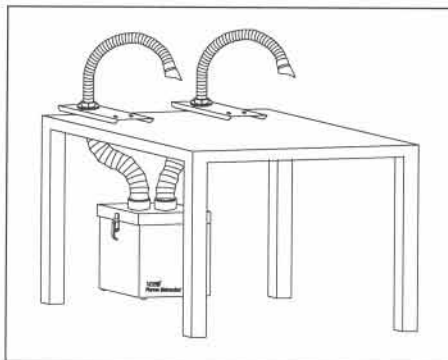
- 1) Attach the 45mm (1.75") Static-Safe Metal Flex Arm at a convenient location on the workbench either permanently or with the bench mounting bracket (P/N 8886-1121).

Permanent Mounting: The extraction arm can be permanently mounted to a workbench or tabletop.

- A.) Drill a 50mm (2") diameter hole in the workbench.
- B.) Locate the 45mm (1.75") Static-Safe Metal Flex Arm in the hole and mark the position of the 3 holes in the mounting flange. Remove the 45mm (1.75") Static-Safe Metal Flex Arm and drill the 3 marked areas with a 2mm (3/32") drill. Refit the 45mm (1.75") Static-Safe Metal Flex Arm. Secure the mounting flange to the workbench with the 3 mounting screws (**supplied**).

Portable Bench Mounting: The 45mm (1.75") Static-Safe Metal Flex Arm can be bench mounted with the bench mounting bracket (P/N 8886-1121).

- A.) Open the bench mounting bracket butterfly screw, position the bracket over the edge of the work bench, then tighten the butterfly screw until the bracket is securely mounted on the work bench.
  - B.) Install the 45mm (1.75") Static-Safe Metal Flex Arm on to the bench mounting bracket with the 3 mounting screws (supplied).
- 2) Position the 45mm (1.75") Static-Safe Metal Flex Arm as needed. The Arm can be repositioned simply by grasping the 45mm (1.75") Static-Safe Metal Flex Arm above the fume scoop and moving it to the desired location.
  - 3) Connect the flexible hose (P/N 8886-0299) to the inlet port of the Multi Arm-Evac II and secure it with the hose clamp (provided). Connect the other end of the flex hose, with the reducer, to the inlet of the 45mm (1.75") Static-Safe Metal Flex Arm.
  - 5) If only one inlet port on the Multi Arm-Evac II is used make sure the unused inlet port has its cap in place.
  - 6) Repeat steps 1 through 4 to install additional 45mm (1.75") Static-Safe Metal Flex Arms.





# INSTALLATION

## Connecting the Articulated Extraction Arm

- 1) Attach the 2 Section Articulated Arm at a convenient location on the workbench either permanently or with the bench mounting bracket. See Table 4, Page 20.

Permanent Mounting: The extraction arm can be permanently mounted to a workbench or tabletop.

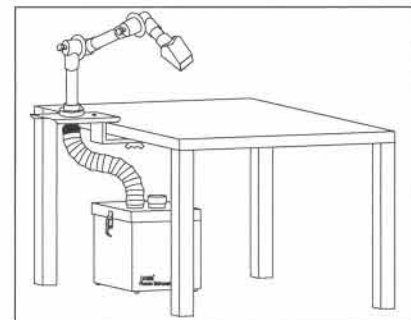
- A.) Drill a 50mm (2") diameter hole for the 50mm (2") Arm in the workbench for the vertical pipe section.
- B.) Locate the vertical pipe section in the hole and mark the position of the 3 holes in the mounting flange. Remove the vertical pipe section and drill the 3 marked areas with a 2mm (3/32") drill. Refit the vertical pipe section. Secure the mounting flange to the workbench with the 3 mounting screws (supplied).

Portable Bench Mounting: The extraction arm can be bench mounted with the bench mounting bracket (P/N 8886-1121 for 50mm (2") Arm).

- A.) Open the bench mounting bracket butterfly screw, position the bracket over the edge of the work bench, then tighten the butterfly screw until the bracket is securely mounted on the work bench.
  - B.) Install the vertical pipe section on to the bench mounting bracket with the 3 mounting screws (supplied).
- 2) When attaching the articulated arm to the vertical pipe section, make sure the articulated arm is installed in such a way that the torsion spring points away from the user. The arm should lift up when the thumb-screws are loose. If the arm pulls down, the arm needs to be rotated 180 degrees on the vertical pipe section.
  - 3) Install an endpiece (ordered separately) to the front articulation section, ensuring proper orientation of the nozzle or endpiece for maximum extraction capability. Use the small setscrew to secure the nozzle or endpiece.
  - 4) Connect the flexible hose (P/N 8886-0299 for 50mm (2") Arm) to the inlet port of the Multi Arm-Evac II and secure it with the hose clamp (provided). Connect the other end of the flex hose to the inlet of the articulated arm.
  - 5) If only one inlet port on the Multi Arm-Evac II is used make sure the unused inlet port has its cap in place.
  - 6) Repeat steps 1 through 4 if installing a second Articulated Extraction Arm.

### Important

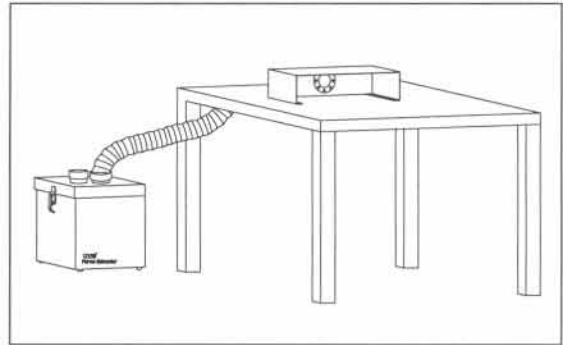
If the torsion spring is located properly, the extraction arm will support its own weight without over-tightening the thumbscrews. Otherwise, the arm will fall onto the tabletop.



## INSTALLATION

### Connecting the PACE Plenum

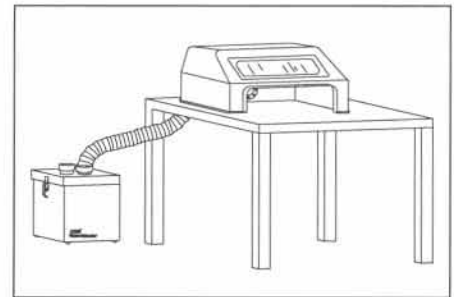
- 1) Position the Plenum directly behind the main work area. It is important that the entire Plenum is resting on the work surface or table top. Failure to do so will result in insufficient air flow over the work area.
- 2) Install one end of the flexible hose (provided) to the inlet of the Multi Arm-Evac II. Secure the flex hose to the inlet port with the hose clamp (provided).
- 3) Install the other end of the flexible hose to the Plenum. Secure the flex hose to the Plenum with the hose clamp (provided).
- 4) If only one inlet port on the Multi Arm-Evac II is used make sure the unused inlet port is covered with the inlet cap provided.
- 5) Repeat steps 1 through 3 if installing a second Plenum.



Multi Arm-Evac II fitted with one Plenum

### Connecting the Fume Cabinet

- 1) Place the Fume Cabinet in a convenient location on the tabletop.
- 2) Connect one end of the flexible hose to an inlet port on the Multi Arm-Evac II and the other end to the inlet port on the Fume Cabinet.
- 3) Secure the flexible hose to the inlet port and the Fume Cabinet with the hose clamps (provided).
- 4) Ensure proper orientation of the Fume Cabinet for maximum extraction capability.
- 5) Make sure the inlet cap covers the unused inlet port.



**Note:** Only one Fume Cabinet may be connected to a Multi Arm-Evac II.



## **OPERATION**

### **OPERATION**

The following information provides the user with the operating instruction for normal use.



#### ***Procedure***

- 1) Turn on the Multi Arm-Evac II.
- 2) Position the Multi Arm-Evac II accessory in a convenient and effective extraction location.

#### ***General Tips***

- Before opening the Multi Arm-Evac II, turn off the power source.
- Protect the Multi Arm-Evac II and accessories from dampness.
- Do not extract water vapor or steam.
- The Multi Arm-Evac II must not be used without filters. Impurities in the extracted air could damage the motor pump.
- Do not allow the Multi Arm-Evac II or ducting hoses to become blocked.
- Do not extract corrosive compounds without checking with PACE.

#### ***Fuses***



The Multi Arm-Evac II comes standard with a 3.15 amp fuse for 8888-0815 (230 volt) or an 8 amp fuse for 8888-0825 (110 volt). Replacement Fuses for 8888-0815 are available as P/N 8884-9966-P5 and for 8888-0825 as P/N 8884-9961-P5, in packages of 5 fuses.

The fuse is located in a sliding tray on the back side of the Multi Arm-Evac II, just below the power receptacle. Each Multi Arm-Evac II is supplied with one replacement fuse, also located in the sliding tray.

## FILTERS

### ***Pre-Filter***

The pre-filter removes coarse particles from the air. In general, the pre-filter must be changed on a monthly basis. However, depending on your particular process, the filter may need to be changed more or less frequently. A visual inspection on a weekly basis is recommended.

#### ***Replacing the Pre-Filter***

- 1) Remove the filter access cover.
- 2) Remove the old Pre-Filter.
- 3) Install a new Pre-Filter. Make sure that the blue side of the filter faces up.
- 4) Replace the filter access cover.
- 5) Dispose of used Pre-Filter properly.

### ***General Purpose Filter and Cleanroom Filter***

General Purpose Filter and Cleanroom Filter remove particulates from the air and capture noxious odors and gases. In general, the General Purpose and Cleanroom Filters must be changed every 6 to 9 months **based on a typical 8 hour work day**. However, depending on your particular process, the filter cartridge may need to be changed more or less frequently.

#### ***Replacing the General Purpose and Cleanroom Filter Cartridges***

- 1) Remove the filter access cover.
- 2) Remove the old filter cartridge.
- 3) Install new filter cartridge.
- 4) Install a new Pre-Filter. Make sure that the blue side of the filter faces up.
- 5) Replace filter access cover.
- 6) Dispose of old filter cartridge properly.

#### **Important**

**BESURE** the new filter cartridge is installed with the airflow arrow pointing downward.

### ***Adhesives and Foam Particulate Filters***

#### ***Replacing the Adhesives and Foam Particulate Cartridges***

- 1) Remove the filter access cover.
- 2) Remove the old filter cartridge.
- 3) Install new filter cartridge.
- 4) Install a new Pre-Filter. Make sure that the blue side of the filter faces up.
- 5) Replace filter access cover.
- 6) Dispose of old filter cartridge properly.

#### **Warning**

Do not attempt to clean the pre-filters or HEPA filters for reuse. Cleaning the filters will severely damage the filter media and, consequently, the filter's performance. This will result in unfiltered, contaminated air being returned to the working environment. Unfiltered air can also damage the motor pump.



## ***MAINTENANCE & REPLACEMENT FILTERS***

### **MOTOR**

Fume Extractor Motors are maintenance-free, brushless single inlet fans which do not require routine maintenance. It is important that fume extractor filters are changed on a regular basis to protect the motor impellers from pollutants.

### **MULTI ARM-EVAC II ACCESSORIES**

Monthly cleaning of the Multi Arm-Evac II extraction accessories is recommended. Multi Arm-Evac II accessories should be cleaned with a non-aggressive cleaning solvent or detergent only. Make sure the Multi Arm-Evac II accessories are completely dry before reuse.



### **REPLACEMENT FILTERS**

#### ***Multi Arm-Evac II Filter Cartridges***

<u>Description</u>	<u>Part Number</u>
Pre-Filter (Pack of 5)	8883-0111-P5
General Purpose Filter Cartridge	8883-0931
Adhesives Filter Cartridge	8883-0951
Cleanroom Filter Cartridge	8883-0921
Economy Foam Filter	8883-0871

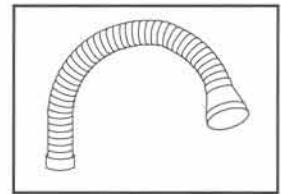
**Table 2: Replacement Filters**

## ACCESSORIES

### ACCESSORIES

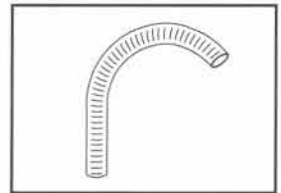
#### ***PACE Flex Arm (P/N 8886-0365)***

- 750mm (30") long x 75mm (3") diameter stay-put flex arm
- Fume collection hood
- Constructed of interlocked Polypropylene
- Optional Bench Mounting Kit (P/N 8886-0363)



#### ***PACE Stay-Put Flex Tube (P/N 8886-0752)***

- 750mm (30") long x 75mm (3") diameter stay-put flex arm
- Constructed of interlocked Polypropylene
- Can be used with any of three collection endpieces.
- Optional Bench Mounting Kit (P/N 8886-0363)



#### ***PACE Endpieces for Stay-Put Flex Tube***



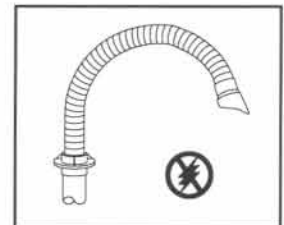
**Suction Hood**  
P/N 8886-0930  
For Omni-Directional  
Air Flow



**Fume Scoop**  
P/N 8886-0937  
For Focused, Directional Air Flow

#### ***PACE 45mm (1.75") Static Safe Metal Flex Arm (P/N 8886-0369)***

- Bench-Mounted
- Static-Safe
- Includes Fume Scoop
- 1 m (40") long
- Optional Bench Mounting Bracket, (P/N 8886-1121)

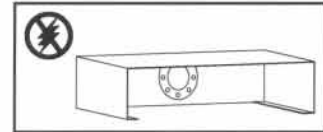


## ACCESSORIES

### ACCESSORIES

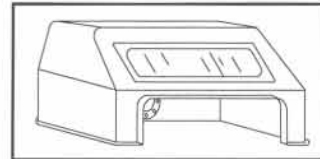
#### ***PACE Plenum (P/N 8886-0366)***

- 18 gauge steel
- Overall dimensions 460mm (18") x 130mm (5") x 130mm (5")
- Static-Safe
- Supplied with 2.5 m (8') of 75mm (3") diameter flexible hose



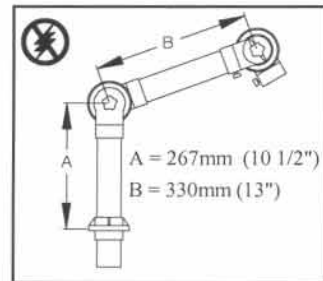
#### ***PACE Fume Cabinet (P/N 8886-0711)***

- Polycarbonate construction
- Tempered glass vision panel
- Overall dimensions: 690mm (27") x 490mm (19.5") x 360mm (14")
- Front Opening: 510mm (20") x 140mm (5 1/2")
- Supplied with 2.5m (8') of 75mm (3") diameter flexible hose



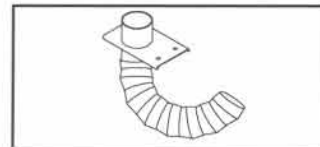
#### ***PACE 2-Section Articulated Arm***

- 50mm (2") diameter P/N 8886-0158 Bench-Mounted
- Static-Safe
- Uses Articulated Arm nozzles and endpieces (see pg. 22)
- Optional Bench Mounting Bracket  
50mm (2") Arm P/N 8886-1121
- Requires 2.5 m (8') long 75mm (3") diameter flexible hose for  
50mm (2") Arm P/N 8886-0299 with 50mm (2") reducer



#### ***Bench Mounting Kit for PACE Flex Arm (P/N 8886-0363)***

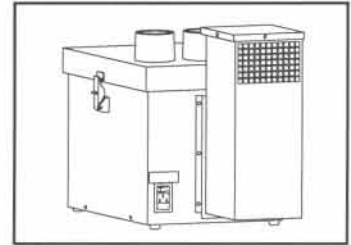
- Includes bench mounting bracket and 2.5 m (8')  
of 75mm (3") flex hose.



## ACCESSORIES

### **Multi Arm-Evac II Silencer (P/N 8885-0820)**

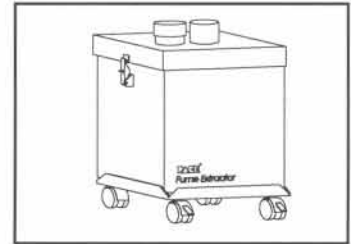
- For applications where the Multi Arm-Evac II will be operating in a setting with low background noise levels. Silencer reduces sound levels nearly in half.
- 370mm (15") H x 135mm (5.5") W x 110mm (4.5") D



\*Silencer shown with Multi Arm-Evac II

### **Multi Arm-Evac II Mobile Stand (P/N 8885-0152)**

- Increases Portability
- PACE Posi-Stop locking Casters
- Installs in Seconds
- 70mm (2.75") H x 285mm (11.2") W x 285mm (11.2") D



\*Mobile Stand shown with Multi Arm-Evac II

## **FILTER OPTIONS**

The Multi Arm-Evac II comes standard with the General Purpose filter consisting of a HEPA filter and a Gas filter. Three other filter options are also available.

1. **General Purpose Filter (P/N 8883-0931):** Comprised of 2.8 m<sup>2</sup> (30 ft<sup>2</sup>) of HEPA filter media and 450 g (1 lb.) of gas blend media. Typical applications are:  
Soldering  
Pharmaceuticals  
Laser Cutting/Laser Marking  
Jewelry Manufacturing and Repair
2. **Optional Adhesives Filter (P/N 8883-0951):** Blend of Adsorptive and Chemisorptive media. Comprised of 1.8 kg (4 lbs.) of gas filter media. Typical applications are:  
Benchtop Adhesives Procedures  
Gluing Applications  
Circuit Board Cleaning  
Laboratory Applications
3. **Optional Cleanroom Filter (P/N 8883-0921):** Comprised of 2.8 m<sup>2</sup> (30 ft<sup>2</sup>) of HEPA filter media and 450 g (1 lb.) of bonded activated carbon. Meets Class 100 cleanroom requirements. Typical applications: Fine particulate and gas removal in designated Cleanroom environments.
4. **Optional Economy Foam Filter (P/N 8883-0871):** Carbon-Impregnated Reticulated Foam Media. Designed for coarse particle capture. Typical applications:  
Sanding Operations  
Benchtop Machining and Prototyping Operations  
Grinding Applications



## ARTICULATED ARMS & ACCESSORIES

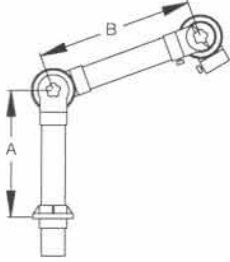
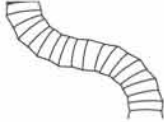

	<p>2-Section Articulated Extraction Arm 50mm (2")                  P/N 8886-0158</p> <p>Requires Flex Hose with 50mm (2") reducer (P/N 8886-0299) and optional Endpiece, See Figure 4.</p>
	<p>75mm (3") diameter Flex Hose, 2.5 m (8') in length                  P/N 8882-0755</p> <p>Available as static-safe P/N 8882-0955</p>
	<p>75mm (3") diameter Flex Hose, 2.5 m (8') in length with                  50mm (2") reducer.                  P/N 8886-0299</p>

Table 3: Multi Arm-Evac II - Articulated Arms








	<p><b>Suction Tube</b>                  P/N 8886-1511                  for 50mm (2") Arm 210mm Long</p>	<p><b>Suction Nozzle</b>                  P/N 8886-0315 100mm (4") Wide                  *For 50mm Arm Only</p>	
	<p><b>Extraction Canopy</b>                  P/N 8886-0341                  for 50mm (2") Arm 238mm x 238mm (9.75" x 11.5")</p>	<p><b>Suction Nozzle</b>                  P/N 8886-0325 200mm (8") Wide                  *For 50mm (2") Arm Only</p>	
	<p><b>Suction Hood</b>                  P/N 8886-0351                  for 50mm (2") Arm 200mm (8") Diameter</p>	<p><b>Suction Nozzle</b>                  P/N 8886-0335 300mm (12") Wide                  *For 50mm (2") Arm Only</p>	
	<p><b>Bench Mounting Bracket</b>                  P/N 8886-1121                  for 50mm (2") Arm</p>		

Table 4: Endpieces and Mounting Brackets for Articulated Arms



# WARRANTY

## LIMITED WARRANTY

*PACE warrants that this equipment will be free of defects in materials and workmanship for a period of one (1) year from the date of receipt by the first user.*

*This warranty does not cover repair or replacement required as a result of misuse, mishandling or improper storage. Failure to perform recommended routine maintenance, alterations or repairs made other than in accordance with PACE's directions, or removal or alteration of identification plates in any way will void this warranty. This warranty is available only to the first user, but the exclusions and limitations therein apply to all persons and entities.*

*This warranty does not apply to consumable items, such as tips, filter elements, hoses, collection chambers etc., except that heaters are normally warranted for a period of six (6) months from the date of receipt by the first user.*

**PACE MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

*PACE will, at its option, repair or replace any defective equipment or parts at its facility or other location approved by it at no charge to the user, or provide parts without charge for installation by the user in the field at user's expense and risk. User will be responsible for all costs of shipping equipment to PACE or other warranty location for warranty service.*

**EXCEPT FOR THE REMEDY ABOVE DESCRIBED, UNLESS OTHERWISE REQUIRED BY APPLICABLE LAW, PACE WILL HAVE NO OTHER OBLIGATION WITH REGARD TO ANY BREACH OF WARRANTY OR OTHER CLAIM WITH RESPECT TO THE EQUIPMENT, OR LIABILITY FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, OR INCIDENTAL LOSS OR DAMAGE CAUSED BY OR OCCURRING IN CONNECTION WITH ANY OF THE EQUIPMENT.**

*To obtain warranty service, contact the appropriate PACE company listed below*

PACE Inc. 9893 Brewers Court  
Laurel, Maryland 20723-1990  
Tel. (888) 535-7223 (toll-free) Warranty Service FAX 301 483 7030

PACE Europe Ltd. Sherbourne House Sherbourne Drive Tilbrook Milton Keynes  
Buckinghamshire England MK7 8HX  
Tel. (44) 01908 277 666 Warranty Service FAX (44) 10908 277 777

*Do NOT return defective equipment or parts to PACE without obtaining prior authorization.*

Any warranty or other claim with respect to the equipment must be made in writing and delivered to PACE (or local authorized PACE Distributor outside the U.S.) within a reasonable time of the expiration date of this warranty. Sufficient evidence of purchase and date of receipt must also be included, otherwise user's rights under this warranty shall be deemed waived.

To register your purchase with PACE, fill in the form below and mail or FAX to the applicable PACE address listed above.

### EQUIPMENT WARRANTY REGISTRATION CARD

Model No.	Serial No.	Date of Receipt
Purchased from		
Company Name		
Mailing Address		
City	State/Province	Country
		Zip/Postal Code
Telephone number with area code	FAX number	Internet Address
Full Name	Authorized Signature, Title	8881-0945

