

# CAPS II



CAPTURED AIR POLLUTANTS SYSTEM



## User's Manual

*U.S. Patents 7,550,022*

### **Smith Eastern Corporation**

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Compliance • Quality • Performance • Reliability



Please Read User's Manual *BEFORE*  
Using This Equipment

**WHEN IN THE PROXIMITY OF HAZARDOUS FUGITIVE EMISSIONS  
USE PROPER PERSONAL SAFETY.**

## WARRANTY

Smith Eastern Corporation warrants to the Purchaser that Captured Air Pollutants System (CAPS) is free from defects in material or workmanship under normal use and service for a period of twelve (12) months from the date of shipment.

Should any failure appear during this period, Smith Eastern shall, if given prompt written notice by the Purchaser, correct such nonconformity by repair or replacement of the nonconforming part, F.O.B. Smith Eastern's repair facility. Repair parts are warranted for ninety (90) days from the date of shipment, but repairs or replacements to original equipment shall not renew or extend the warranty period of such equipment.

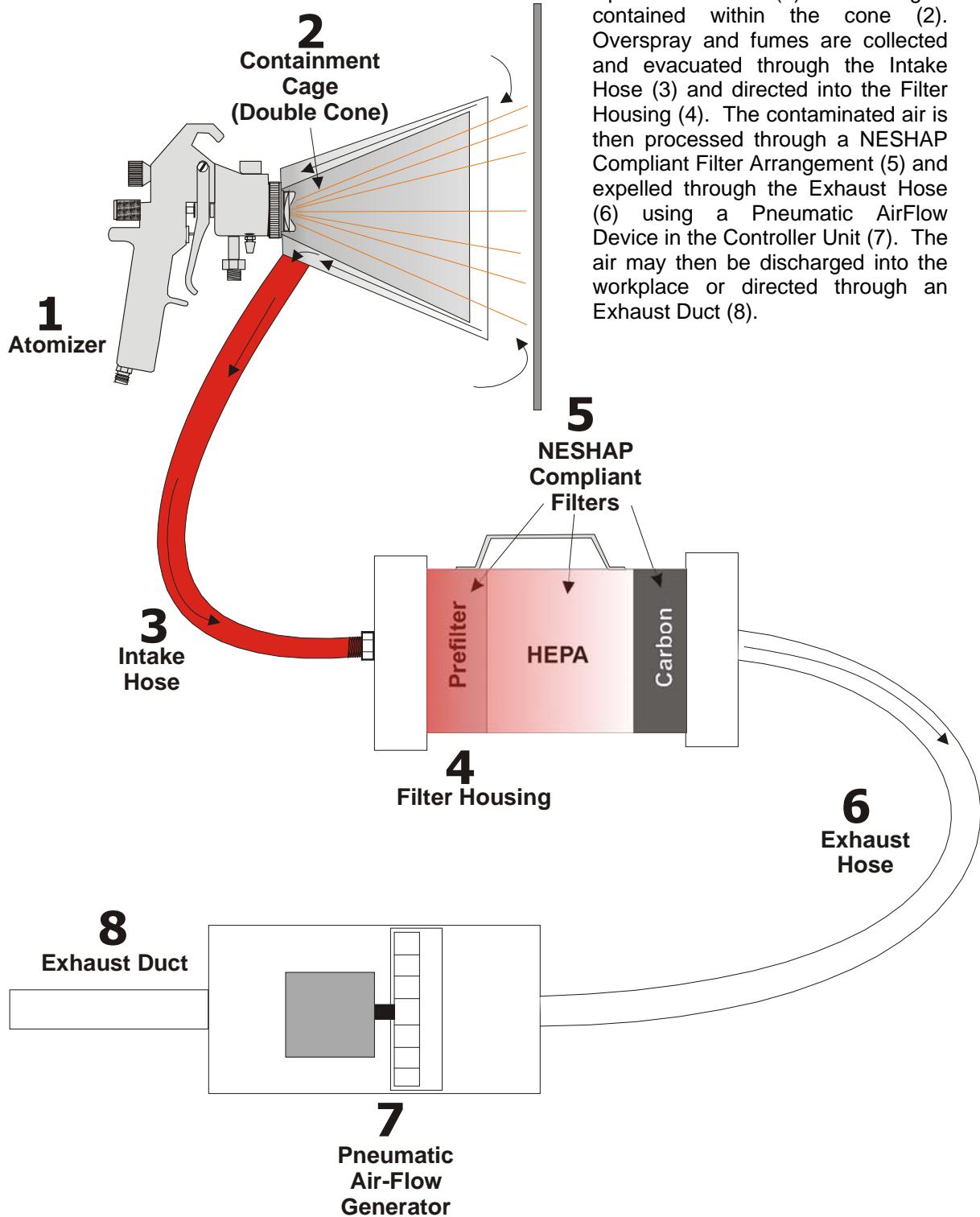
Equipment and parts furnished by Smith Eastern but manufactured by others shall be limited to the warranty offered by the manufacturer thereof.

Smith Eastern reserves the right to limit this warranty in cases of misuse or abuse. Any modifications to equipment or recommended procedures will void the warranty.

The foregoing warranty is exclusive and in lieu of other warranties of quality or performance, expressed, implied or statutory, including any warranties of merchantability or of fitness for a particular purpose.

# AirVerter® Captured Air Pollutants System

## How CAPS II Works



Upon atomization (1) the coating is contained within the cone (2). Overspray and fumes are collected and evacuated through the Intake Hose (3) and directed into the Filter Housing (4). The contaminated air is then processed through a NESHAP Compliant Filter Arrangement (5) and expelled through the Exhaust Hose (6) using a Pneumatic AirFlow Device in the Controller Unit (7). The air may then be discharged into the workplace or directed through an Exhaust Duct (8).

## Set-up

The CAPS II System consists of a Controller Unit (CA-100), Filter Unit (CA-075), Containment Cone Assembly (CA-070), Intake Hose (CA-060), and an Exhaust Hose (CA-050)

- A. Open the Filter Unit and remove the protective covering from the Carbon Filter. Replace the Carbon Filter in the Filter Unit and close the Filter Unit



- B. Attach the Intake Hose to the intake port of the Filter Unit
- C. Attach one end of the Exhaust Hose to the exhaust port of the Filter Unit and the other end to the intake port on the Controller Unit. Attach grounding wires to the grounding lugs
- D. Connect the pressurized air supply to the Air Intake Fitting on the Controller Unit.
- E. Attach the Containment Cone to the Intake Hose.
- F. Connect the Air Hose from the Controller Unit to the Spray Gun.
- G. If needed, an additional Exhaust Hose (not included) can be connected to the Controller unit to duct exhausted air further away from the workplace.

## OPERATION

### After completing the set-up and before operation:

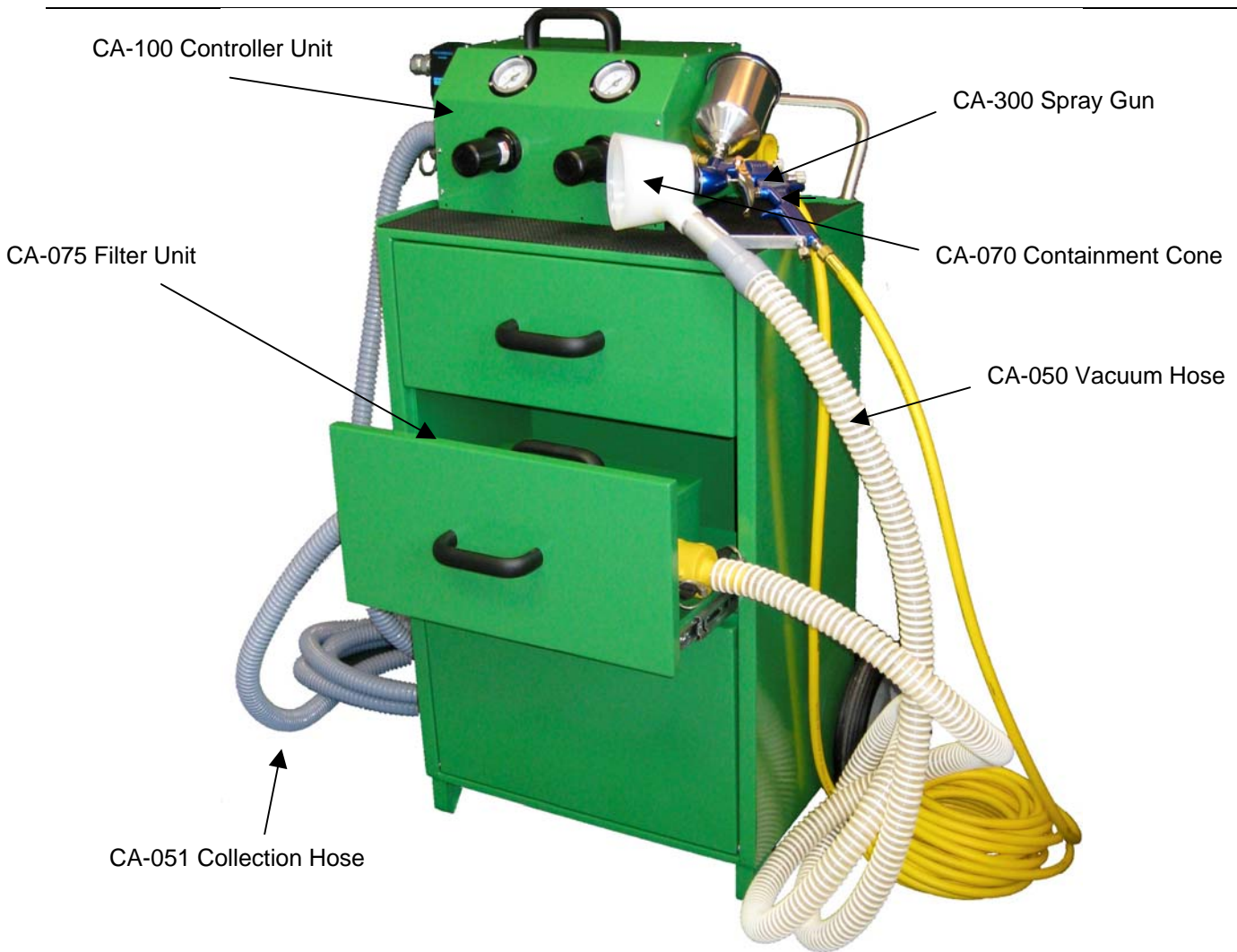
- A. Turn on Pressurized Air Supply to the unit.
- B. Adjust the pattern size and atomizing air pressure so that it does not impinge on the cone walls
- C. Adjust Vacuum Pressure to remove overspray and odors without distorting spray pattern.

### Spraying

- A. When spraying, hold the cone approximately ½-1 inch from the surface being sprayed to achieve maximum containment/evacuation.
- B. Maintain the cone as parallel to the substrate as possible. Tilting the cone will cause overspray and fumes to escape the containment area.

- C. If overspray/fumes are being blown out of the containment area, increase vacuum, or reduce atomizing air pressure/fluid volume

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### ILLUSTRATED PARTS BREAKDOWN

Part #	NSN	Description
CA-037	-	Pre-Filter
CA-038	-	HEPA Filter
CA-039	-	Carbon Filter
CA-050	-	Vacuum Hose w ends
CA-051	-	Collection Hose w ends
CA-070	-	Containment Cone Assembly
CA-071	-	Containment Cone (replacements)
CA-075	-	Filter Unit
CA-081	-	CAPS Cart
CA-100	-	Controller Unit
CA-300	-	CAPS Spray Gun

TO REMOVE THE CONTAINMENT CONES:

- A. Loosen the air-regulating valve to allow the Containment Cone Gun Adapter to pivot slightly



- B. Insert the metal probe under the snap ring and gently lift the ring from the groove by moving the probe around the Air Cap Retaining Ring. Once the snap ring is free remove the inner and outer cones, taking care not to lose the snap ring.

TO REPLACE THE CONTAINMENT CONES:



- A. Place the outer and inner cones over the Air Cap Retaining Ring. Place the snap ring over the air cap and with the tool provided, gently push the snap ring into place using a slight rocking motion
- B. Insert the Containment Cone Gun Adapter into the exhaust port of the Outer Containment Cone.
- C. Tighten the Air Regulating Valve securing the Containment Cone Gun Adapter to the spray gun.

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### ACTIVATED CARBON FILTER

Carbon Filters are designed for odor removal only. They are not for particulate collection. Odor removal is a direct function of the amount of carbon exposed to the air stream.

Each filter is sealed to prevent adsorption from occurring prior to installation.

Carbon filters are designed for light to moderate odor conditions in multi-stage filtration systems where other filters are installed upstream from the carbon filters.

Other filters are necessary to remove particulate contaminants from the air to prevent coating the microscopic carbon pore structure.

### TROUBLESHOOTING

<b>Problem</b>	<b>Probable Cause</b>	<b>Remedy</b>
No/Low Air Flow	<ol style="list-style-type: none"><li>1. Filter Clogged</li><li>2. Ducts Blocked</li></ol>	<ol style="list-style-type: none"><li>1. Replace Clogged Filter</li><li>2. Remove Blockage</li></ol>



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## USING CAPS WITH PAPCE

To use the CAPS spray gun with a PAPCE system, attach the Collection Hose to the port on the Motor Starter end of the PAPCE. Ensure that both of the ducts on the PAPCE collection arms are open.



You may use the CAPS system alone or in conjunction with the PAPCE collection arms





***AirVerte***<sup>®</sup>