1. ID# - located on left hand side of power control box

2. Physical Check (document findings under table heading "Physical Check"):

    a. Unit for damage such as dents and scrapes.

    b. Hose for holes and wear/tear.

    c. Clamp on hose is tight.

    d. Power cord and plug for damage.

    e. Four screw in knobs on bottom of the unit are hand tight (do not over tighten the knobs).

3. Pre-filter test (document findings under table heading "Pre-filter Gauge Reading"):

    a. Turn unit on highest setting located just past the on position. Wait one minute.

    b. Note gauge reading on front of machine.

    c. If the reading is below 1, notify Environmental Health and Safety.

    d. Turn machine off.

4. Main filter check (document findings under table heading "Breakthrough Indicator Sticker status"):

    a. Tilt machine far enough for partner to see the bottom of filter on the underside of the unit. There will be a round sticker on the filter.

    b. Note "good" or "bad" (see example below) in the box labeled "Break-through Indicator Status" on Maintenance Log

    c. If the indicator sticker is "bad", notify Environmental Health and Safety.

Good   **Bad**

Filter Install _____
Expect Yearly Saturation Point for LS 261 Unit

Inspector Name & Unit ID #	Physical Check	Pre-filter Gauge reading	Breakthrough Indicator Sticker status	Initials	Date
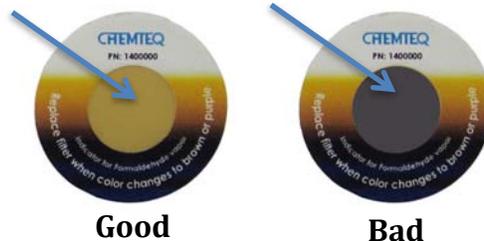
Formaldehyde Vapor
Breakthrough Indicator Sticker
HCHO BTIS

(PN: 140-0000)

Manual

Industrial Hygiene

Safety

Green Technology

Environmental

Sustainability

1. Application

The Formaldehyde BTIS (PN: 140-0000) is qualitative (yes/no) colorimetric indicator for the saturation and end-of-service life of ductless hood filters. The Indicator is designed to provide real-time indication of the breakthrough of formaldehyde vapor.

2. Specifications

a. Weight: 0.4g (0.02oz)
b. Dimensions: 2.8mm (0.11in),φ: 31.8mm (1.25in)
c. Operating temperature: -20°C to 55°C (-4°F to 131°F)
d. Operating humidity: 5% RH to 85%RH
e. Minimum detectable limit: 0.3ppm•hr at 30 cm/sec face velocity
f. Color change: Light brown to dark blue
g. Storage temperature: 4°C to 25°C, (39°F to 77°F)
h. Shelf life: 1 year at 4°C to 25°C, (39°F to 77°F)
i. Service life: 1 year

Cross interferences: Acrolein and aldehydes found in cigarette smoke react with approximately the same sensitivity. The formaldehyde breakthrough indicator sticker was exposed to atmospheres containing at least two times the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) for the following substances: alcohols (methanol, ethanol and isopropanol), aromatic hydrocarbons (benzene, toluene and xylene), halogenated hydrocarbons (chloroform, methylene chloride and carbon tetrachloride), ammonia, carbon monoxide, chlorine, glutaraldehyde, hydrogen sulfide, nitrogen dioxide, phenol and sulfur dioxide. These substances showed no effect on the performance of the formaldehyde breakthrough indicator. No other interferences are known.

3. Operating Instructions

a. Ensure that packaging pouch is intact.
b. Open packaging pouch by tearing off the top part from one of side notches
c. Remove indicator sticker from the packaging pouch.
d. Peel off the protective liner to expose the bottom adhesive (Figure 1).

⚠ Caution: Do not touch bottom adhesive or exposure area

e. Hold the sticker from the edges, as shown in Figure 2, and place it on center clean area of the filter's outlet with the reading area (glossy surface) of the sticker facing up.
f. Press firmly to adhere sticker to the filter's outlet Figure 3.
g. Replace filter when the reading area of the indicator changes color to blue.
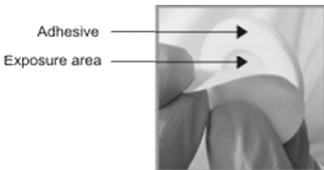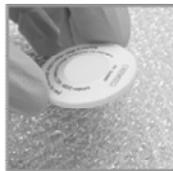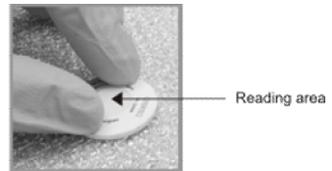
Figure 1   Figure 2   Figure 3

USA: 1-800-799-4609
INTL: 1-713-690-2153

SERIES 400/SERIES 450

Operation and Maintenance Manual

WARNING!
Read and understand all rules and instructions in safety manual before operating. Read Operations and Maintenance Manual before Servicing.

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General Safety Precautions

ATTENTION!: Read and understand all rules and instructions in safety manual before operating.

DANGER!: Not intended for use in highly flammable or explosive environments, i.e. where the Lower Flammability Limit for any chemical may be exceeded. Consult the specific Material Safety Data Sheet for questions regarding flammability limits and/or handling guidelines. DO NOT LEAVE EQUIPMENT UNATTENDED.

WARNING BIOHAZARD!: DIRTY FILTERS MAY BE CONTAMINATED. Use Personal Protective Equipment (PPE) during filter changes.

CAUTION!: BEFORE ATTEMPTING OR STARTING ANY MAINTENANCE OR SERVICE ON ANY EQUIPMENT, THE EQUIPMENT MUST BE UNPLUGGED FROM ELECTRICAL OUTLET (POWER SUPPLY)!

CAUTION!: All filters must be in place whenever the equipment is in operation. Do not operate the equipment with one or more filters missing and/or filters incorrectly installed.

DO NOT substitute any other filters (particulate or chemical) for the filters supplied by SAS.

WARNING BIOHAZARD!: Sentry Air Systems Fume, Gas, and Particulate 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, death, fire or explosion may result from improper use. If in doubt, consult with your industrial hygienist.

WARNING! FIRE AND/OR EXPLOSION: Never use SAS Extraction Systems to extract fumes from highly flammable liquids and gases such as ether, gasoline and others. Risk of serious injury, death, fire or explosion may result.

WARNING: No part of SAS units or components may come into direct contact with fire or flame**, smoking is prohibited.**

WARNING! FIRE AND/OR EXPLOSION: Failure to comply with the operations and maintenance guidelines, filter replacement schedules, monitoring recommendations and safety guidelines contained herein, and in other relevant product safety literature provided with the substances and equipment producing the fumes to be extracted, could result in risk of serious injury, fire or explosion.

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CAUTION!: Due to the modular nature of SAS Extraction Systems, SAS products provide a variety of mounting options to accommodate the requirements of various applications. Heavy-Duty reinforced mounting sections are an integral part of SAS units. **Responsibility for safely and securely mounting SAS units is the sole responsibility of the purchaser.**

CAUTION BIOHAZARD!: Do not attempt to clean any SAS Extraction Systems filters for reuse. Cleaning the filters will severely damage the filter media and, consequently, the filters performance. This will result in unfiltered, contaminated air being returned to the working environment.

CAUTION BIOHAZARD!: Do not use with inappropriate chemicals or substances. Failure to provide regular maintenance or other misuse of your SAS Extraction System may result in contaminated air being re-circulated into the work environment.

CAUTION: Failure to supply the correct voltage to the unit will result in damage to the motor and/or individual.

ATTENTION: To ensure the highest level of performance, use only SAS replacement filters in your SAS Extraction System.

IMPORTANT SAFETY INSTRUCTIONS
When using an electrical appliance, basic precautions should always be followed.

WARNING!: TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK, OR INJURY:
1. Do not leave unit unattended while turned on.
2. Use only manufacturer's recommended attachments and filters.
3. Do not use with damaged cord or plug.
4. Do not use in rain or other wet environment. Store indoors.
5. Do not pull or carry by flex arm or other attachment not intended for portability use.
6. Do not pull or carry by cord. To unplug, grasp the plug, not the cord.
7. Do not handle plug or unit with wet hands.
8. Do not put any objects into openings. Avoid loose clothing and jewelry near openings with moving parts.
9. Do not service unit while turned on. Disconnect power before servicing.
10. Do not change filters without Personal Protective Equipment (PPE).
11. Used filters must be changed periodically and disposed of correctly.
12. Do not use unit with missing or damaged filters.
13. Do not use unit to vacuum, or pick up, objects that are burning or smoking.
14. Do not smoke near unit.
15. Do not use to vacuum, or pick up, flammable or combustible liquids such as gasoline.
16. Do not vacuum toxic, combustible, carcinogenic or other hazardous materials such as arsenic, beryllium, lead or other health endangering materials.

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⚠️ Keep this manual in a safe place as its content are important for proper operations and maintenance.

⚠️ Throughout the manual, make sure to understand the procedures for filter installation, removal, and replacement.

⚠️ ALL SAS EQUIPMENT MUST BE STORED AND OPERATED INDOORS.

For more information contact us:
Toll Free: 1-800-799-4609
Tel: 713-690-2153
Fax: 713-690-7872
Email: info@sentryair.com
Web: www.sentryair.com

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USE OF THIS MANUAL

This manual may not be copied in whole and/or in part without written permission of Sentry Air Systems, Inc. (SAS). This operation and maintenance manual will provide the user with the basic knowledge to properly operate and maintain SAS Series 400/Series 450 equipment.

INTRODUCTION TO SENTRY AIR SYSTEMS PRODUCTS

Sentry Air Systems, Inc. is a twenty-four year old manufacturer of high quality portable and bench top air purification equipment. This quiet and compact line of patented products offers simple and unique air quality solutions for many applications in laboratory, industrial, electronic and institutional environments where worker safety is a major concern.

SAS products are designed and manufactured to be dependable, modular and economical. There are ten basic lines to select from: Series 100, 200, 300, 400, 450, 500, 2000, Ductless Containment Hoods, Portable Clean Room Hoods, and Exhaust Hoods. All products may utilize a variety of filters tailored to meet the needs of your specific application. These may include pre-filters, HEPA, Activated Carbon, Potassium Permanganate, and other media as required. Replacement filters are readily available from SAS.

We are continuously researching and developing new products and accessories, and can provide "custom" units to meet specific air cleaning applications. As of this writing, there has not been a single customer report of faulty workmanship or component failure on an SAS air purification unit.

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DISCLAIMER

Sentry Air Systems, Inc. disclaims all responsibility for any personal injury, property damage, fine, citation or penalty imposed by any government, private entity, or any other entity which results from any use, misuse or mis-application of any SAS products, failure of the user to properly use or 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. To ensure continued effective performance, the following guidelines must be followed.

- General Safety Precautions
- Filter Safety Precautions
- Operation and Installation
- Maintenance
- Flex Hose Assembly
- Filter Installation and Replacement

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GENERAL INSTALLATION PROCEDURES:

I. Placement of Equipment

1. **Unit:** SAS Equipment should be positioned so that it will not block aisle ways or impede normal operating traffic or material handling pathways. It is important to position SAS Equipment to allow for proper clearance to remove the filter screws and replace the filter cartridges as needed.

2. **Exhaust:** Typical systems will exhaust air out through the filters. When positioning the unit make sure that the exhaust area is not blocked or that airflow from the exhaust is not restricted in any way.

3. **Work Area:** SAS Equipment should be positioned as close to the application/ work area as possible to maximize fume/dust capture. When using a flex hose, the suction point must be adequately placed in close proximity to the source of the contaminant. **DO NOT** create kinks or obstructions in the flex hose, as this will create a negative impact in the effectiveness of the equipment.

II. Power to Equipment

⚠CAUTION

1. 🤚 ⚡   **CAUTION:** FAILURE TO SUPPLY THE CORRECT INPUT POWER TO THE SAS EQUIPMENT MAY RESULT IN INJURY OR DAMAGE TO PERSONNEL AND /OR EQUIPMENT.

2. **SAS EQUIPMENT PLUGS INTO A STANDARD 115 VOLT, 60 HZ, SINGLE PHASE GROUNDED ELECTRICAL OUTLET.**

III. Filters

1. Before operating any unit, make sure all filters are correctly positioned, as filters may have shifted during shipment. All filters gaskets should be sufficiently compressed to accomplish filter sealing. Filter screws must be well secured, but NOT over tightened.

2. All filters are clearly marked with the filter type and direction of airflow. Identify which way the filters are installed to understand the direction of airflow.

3. Refer to Assembly Instructions provided with equipment for further instructions.

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A. **Motor:** SAS supplied motors are nearly maintenance free. The motors do not require significant routine maintenance. Occasionally monitor air inlet perforations, fan blades, and motor to ensure excessive particulate build up has not occurred. If there is a noticeable amount of fan vibration, inspect fan and cabinet for particulate build up. Contact factory if additional assistance is required.

B. **Accessories/Flex Hose:** Cleaning of parts and accessories should be cleaned with non-aggressive cleaning solvent or detergent only. Make sure after cleaning that all parts are dry before using.
   *Note: See following page for Flex Hose Assembly Diagram.

WARNING BIOHAZARD!: DIRTY FILTERS MAY BE CONTAMINATED. Use Personal Protective Equipment (PPE) during filter changes.

C. **Filters:** Filters must be changed out regularly. Filter changes will vary by application and usage. SAS is not held liable for proper and/or timely filter changes.

D. **Operating and Storage Environmental Conditions:**

ALL SAS EQUIPMENT MUST BE USED AND STORED INDOORS

Ambient Operating Temperature:
33°F to 110°F

Storage Temperature:
33°F to 100°F

Ambient Operating Humidity:
90% Relative humidity maximum non-condensing

Storage Humidity:
90% Relative humidity maximum non-condensing

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Flex Hose General Information:

1) **PARTS:** SAS Flex Hose Assembly comes equipped with a semi self-supporting round hose, round or square capture hood and hose clamp(s).
   a. Flex hose may come in 4", 5" or 6" Diameters.
   b. Length of flex will vary by Model. Most flex arms are approximately 45"L, fully compressed.

2) **USE:** SAS provides flex hose to create a convenient and easy to use device for source capture. The flex hose must be placed adequately in close proximity to the source of the contaminant. **DO NOT** create kinks or obstructions in the flex hose, as this will create a negative impact in the effectiveness of the equipment.

3) Occasionally, due to over-extension the flex hose may "pop apart." When this happens **DO NOT** change the diameter of the flex hose by twisting the flex at the open sections. Simply, realign open ends and snap together. Although simple, this procedure may take two operators to complete. Contact SAS for further assistance.
   **See Diagrams Below:

   To Fix Flex Hose Break:

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GENERAL INFORMATION:

I. Pre-Filter/Carbon Pre-Filter: This filter removes coarse particles and dust from the ambient air. The pre-filter/carbon pre-filter must be changed regularly. Depending on your application and usage, it may need to be changed more or less frequently. Setting up a regular filter maintenance schedule is recommended.

II. HEPA Filter: This filter removes particulates from the air. The HEPA Filter is up to 99.97% efficient on particles down to 0.3 microns in size. Filter replacement may vary due to application and usage.

III. Carbon Filter: This filter reduces certain odors and gases that can be noxious to an operator or work area. See the Carbon Adsorption chart at the back of this manual. Filter replacement may vary due to application and usage.

IV. Specialty Filters: These filters are blended with different types of filter media to reduce certain odors and gases that are not suitable to a standard carbon filter. Filter replacement may vary due to application and usage.

Model 400 Replacement Filters/Model 450 Replacement Filters

SS-400-PFP	**MODEL 400/450 PRE-FILTER PADS** – (Pkg. of 12)
SS-400-CFP	**MODEL 400/450 ACTIVATED CARBON Pre-filter Pads** – (Pkg. of 12)
SS-400-P65	**MODEL 400/450-PRE-FILTER 65A** 65% ASHRAE Pre filter Pads (Pkg. of 8)
SS-400-HF	**MODEL 400/450 HEPA** – Up to 99.97% Efficient on particles down to .3µ in size.
SS-408-CF	**MODEL 400/450 CARBON** – 8 lb. Heavy-Duty Activated Carbon
SS-422-CF	**MODEL 400/450 CARBON** – 22 lb. Heavy-Duty Activated Carbon
SS-408-AGF	**MODEL 400/450 ACID GAS FILTER** – 8 lb. Heavy-Duty Acid Gas Filter
SS-422-AGF	**MODEL 400/450 ACID GAS FILTER** – 22 lb. Heavy-Duty Acid Gas Filter
SS-408-B50	**MODEL 400/450 BLENDED FILTER** – 8 lb. Heavy-Duty Special Blended Filter
SS-422-B50	**MODEL 400/450 BLENDED FILTER** – 22 lb. Heavy-Duty Special Blended Filter
SS-408-ASRB	**MODEL 400/450 AMMONIASORB FILTER** – 8 lb. Heavy-Duty Ammoniasorb Filter
SS-422-ASRB	**MODEL 400/450 AMMONIASORB FILTER** – 22 lb. Heavy-Duty Ammoniasorb Filter
SS-408-FORM	**MODEL 400/450 FORMALDEHYDE FILTER** – 8 lb. Heavy-Duty Formaldehyde Filter
SS-422-FORM	**MODEL 400/450 FORMALDEHYDE FILTER** – 22 lb. Heavy-Duty Formaldehyde Filter
SS-408-MERC	**MODEL 400/450 MERCURY FILTER** – 8lb. Heavy-Duty Mercury Filter
SS-422-MERC	**MODEL 400/450 MERCURY FILTER-** 22 lb. Heavy-Duty Mercury Filter

*See the following for replacement procedures.

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REPLACEMENT PROCEDURE:

1.   **DISCONNECT POWER SUPPLY.**

2.   **USE PERSONAL PROTECTIVE EQUIPMENT BEFORE HANDLING FILTERS OR OTHER ITEMS THAT MAY BE CONTAMINATED.**
3.   Position the fan/filter unit gently on its side.
4.   Loosen all filter screws until the base of the screws are flush with the inside of the filter cabinet. (Filter screws must be flush with filter cabinet to avoid potential damage to the filters during removal or replacement).
5.   **Note the order the filters are placed in chassis before removing as well as the direction of airflow. Filters must be replaced in the same order and in the same direction as old filters.**
6.   Remove all filter trays and dispose of used media. **DO NOT** discard the Pre-Filter tray. Only the media in the Pre-Filter tray must be disposed of. The Pre-Filter tray must be reused.
7.   Follow local and national codes for disposal.
8.   Replace filters as needed, making sure that the gaskets face toward the fan inlet.
9.   Re-tighten all filter screws until filter gaskets are sufficiently compressed to accomplish filter sealing. **DO NOT** over tighten.
10.   Resume normal operation.

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Your unit may come equipped with an electronic hour counter and/or mini-helic gauge. These devices are options and intended to assist with the timing of filter changes and/or filter maintenance. Please contact your SAS rep with any questions regarding their usage.

*NOTE: These devices are provided to augment information and are not firm indicators of filter condition. Filter changes will vary by application and usage and are the sole responsibility of the user. Compliance with all applicable environmental and personnel safety guidelines is the sole responsibility of the user and strongly recommended. A reliable filter maintenance schedule is the responsibility of the user. Sentry Air Systems, Inc. will not be held liable for lack of proper and/or timely filter changes.

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Specifications

Specification differences between the Model 400 and Model 450 are noted in blue.

MODEL	SS-400-MS/SS-450-MS
DESCRIPTION	High Flow Mounted Sentry
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	20"D x 20"W x 15"H (w/ 9"Dia. Inlet Collar)
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
MOUNTING BRACKETS	(Qty.4) Epoxy Coated "L" shaped mounting brackets
SOUND LEVEL	Approx. 58 to 62 dba/**Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

MODEL	SS-400-MSP/SS-450-MSP
DESCRIPTION	High Flow Mounted Sentry with Outlet Plenum
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs./**Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	20"D x 20"W x 15"H (Unit) 18"D x 18"W x 18"H (Plenum) (9"Diameter Outlet)
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
MOUNTING BRACKETS	(Qty.4) Epoxy Coated "L" shaped mounting brackets
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

*All specifications are nominal and subject to change without notice.

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MODEL	SS-400-MSS/SS-450-MSS
DESCRIPTION	High Flow Mounted Sentry Single
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	*OPTION#1*: (with 4"Diameter Inlet) 20"D x 20"W x 15"H (Unit) (Overall Height with Adaptors 34"H) 9"Dia. to 6"Dia. Machine Adaptor w/ 10.5"H 6"Dia. to 4"Dia. Machine Adaptor w/ 8.5"H *OPTION#2:* (with 6" Diameter Inlet) 20"D x 20"W x 15"H (Unit) (Overall Height with Adaptor, 25.5"H) 9"Dia. to 6"Dia. Machine Adaptor w/ 10.5"H
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
MOUNTING BRACKETS	(Qty.4) Epoxy Coated "L" shaped mounting brackets
FLEX HOSE	4"Dia.Flex Arm : (32"L x 4"Dia. Flex Hose w/ round hood and hose clamp) (or) 6"Dia.Flex Arm: (32"L x 6" Dia. Flex Hose w/ 10.5"square hood and hose clamp)
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

MODEL	SS-400-MSD/SS-450-MSD
DESCRIPTION	High Flow Mounted Sentry Double
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	20"D x 20"W x 15"H (Unit) (Overall Height with Adaptors 39"H) 9"Dia. to 6"Dia. Machine Adaptor w/ 10.5"H 6"Dia. to two 4"Dia. "Y" Adaptor w/ 13.5"H
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
MOUNTING BRACKETS	(Qty.4) Epoxy Coated "L" shaped mounting brackets
FLEX HOSE	(Qty.2)-4"Dia.Flex Arms:48"L x 4"Dia. Flex Hose w/ round hood and hose clamp
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

MODEL	SS-400-MSQ/SS-450-MSQ
DESCRIPTION	High Flow Mounted Sentry Quad
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	20"D x 20"W x 20"H (Unit) (Inlet Plenum w/ Qty. 4, 4" Inlets)
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
FLEX HOSE	(Qty.4)-4"Dia.Flex Arms:48"L x 4"Dia. Flex Hose w/ round hood and hose clamp
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**

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AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

All specifications are nominal and subject to change without notice.

Specifications

MODEL	*SS-400-PFS*/*SS-450-PFS*
DESCRIPTION	High Flow Portable Floor Sentry
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	*OPTION#1*: (with 4"Diameter Inlet) 20"D x 20"W x 19.5"H (Unit)(Overall Height w/ Adaptors 38.5"H)(with casters) 9"Dia. to 6"Dia. Machine Adaptor w/ 10.5"H 6"Dia. to 4"Dia. Machine Adaptor w/ 8.5"H *OPTION#2:* (with 6" Diameter Inlet) 20"D x 20"W x 19.5"H (Unit)(Overall Height w/ Adaptor, 30"H)(with casters) 9"Dia. to 6"Dia. Machine Adaptor w/ 10.5"H
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
FLEX HOSE	4"Dia.Flex Arm : (45"L x 4"Dia. Flex Hose w/ round hood and hose clamp) (or) 6"Dia.Flex Arm: (45"L x 6" Dia. Flex Hose w/ 10.5"square hood and hose clamp)
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

MODEL	*SS-400-FSD*/*SS-450-FSD*
DESCRIPTION	High Flow Floor Sentry Double
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	20"D x 20"W x 19.5"H (Unit)(Overall Height w/ Adaptors 43.5"H)(with casters) 9"Dia. to 6"Dia. Machine Adaptor w/ 10.5"H 6"Dia. to two 4"Dia. "Y" Adaptor w/ 13.5"H
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
FLEX HOSE	(Qty.2)-4"Dia.Flex Arms:48"L x 4"Dia. Flex Hose w/ round hood and hose clamp
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

MODEL	*SS-400-FSQ*/*SS-450/FSQ*
DESCRIPTION	High Flow Floor Sentry Quad
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	20"D x 20"W x 24.5"H (Unit) (Inlet Plenum w/ Qty. 4, 4" Inlets) (with casters)

BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
FLEX HOSE	(Qty.4)-4"Dia.Flex Arms:48"L x 4"Dia. Flex Hose w/ round hood and hose clamp
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

*All specifications are nominal and subject to change without notice.

Specifications

MODEL	*SS-400-WFE/SS-450-WFE*
DESCRIPTION	High Flow Welding Fume Extractor
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	*OPTION#1*: (with 4"Diameter Inlet) 20"D x 20"W x 19.5"H (Unit)(Overall Height w/ Adaptors 38.5"H)(with casters) 9"Dia. to 6"Dia. Machine Adaptor w/ 10.5"H 6"Dia. to 4"Dia. Machine Adaptor w/ 8.5"H *OPTION#2:* (with 6" Diameter Inlet) 20"D x 20"W x 19.5"H (Unit)(Overall Height w/ Adaptor, 30"H)(with casters) 9"Dia. to 6"Dia. Machine Adaptor w/ 10.5"H
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
FLEX HOSE	4"Dia.Flex Arm : (45"L x 4"Dia. Flex Hose w/ round hood and hose clamp) (or) 6"Dia.Flex Arm: (45"L x 6" Dia. Flex Hose w/ 10.5"square hood and hose clamp)
ACCESSORIES	Magnehelic Gauge and Portability Handle
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

MODEL	*SS-400-DWFE/SS-450-DWFE*
DESCRIPTION	High Flow Dual Welding Fume Extractor
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	20"D x 20"W x 19.5"H (Unit)(Overall Height w/ Adaptors 43.5"H)(with casters) 9"Dia. to 6"Dia. Machine Adaptor w/ 10.5"H 6"Dia. to two 4"Dia. "Y" Adaptor w/ 13.5"H
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
FLEX HOSE	(Qty.2)-4"Dia.Flex Arms:48"L x 4"Dia. Flex Hose w/ round hood and hose clamp
ACCESSORIES	Magnehelic Gauge and Portability Handle
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

Rev.3; May 2, 2012

MODEL	SS-400-PRAC/SS-450-PRAC
DESCRIPTION	High Flow Portable Room Air Cleaner
ELECTRICAL	115/1/60, Approximately 3 amps/ **115/1/60, 10.7 amps**
WEIGHT	Base Unit: Approx. 50-100lbs. / **Approx. 62-112lbs.** (Depends on Filter Media Used)
CABINET DIMS.	20"D x 20"W x 19.5"H (w/ 9"Dia. Inlet Collar) (with casters)
BLOWER MATERIAL	16 ga. carbon steel w/ polyester epoxy coating on all surfaces.
SOUND LEVEL	Approx. 58 to 62 dba/ **Approx. 72 dba at 3'**
AIRFLOW	High-700 CFM, Low-50 CFM, Variable Speed Control **High-950 CFM, Low-50 CFM, Variable Speed Control**
WARRANTY	Limited two-year warranty from date of shipment on defects due to materials or workmanship
PATENTED DESIGN	U.S. PATENT #5,843,197

*All specifications are nominal and subject to change without notice.

DISCLAIMER:

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Sentry Air Systems, Inc. disclaims all responsibility for any personal injury, property damage, fine, citation or penalty imposed by any government, private entity or any other entity which results from any use, misuse or mis-application of any SAS products, failure of the user to properly use or 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. To ensure continued effective performance, the fore mentioned guidelines must be followed.

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LIMITED WARRANTY:

Sentry Air Systems, Inc. warrants to the first user that this equipment will be free of defects in materials and workmanship for a period of two (2) year from the date of shipment.

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 Sentry Air System's directions, or removal or alteration of identification plates in any way will void this warranty. This warranty is available to the first user, but the exclusions and limitations herein apply to all persons and entities.

This warranty does not apply to consumable items such as filters, hoses or electrical components.

SENTRY AIR SYSTEMS, INC. MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Within the warranty period, Sentry Air Systems, Inc. will, at its option, repair or replace any defective equipment or parts at its facility or other locations approved by it at no charge to user or provide parts with charge for installation by qualified technicians in the field at user's expense and risk. User will be responsible for all costs of shipping and handling of equipment to Sentry Air Systems or other location for warranty service.

EXCEPT FOR THE REMEDY ABOVE DESCRIBED, UNLESS OTHERWISE REQUIRED BY APPLICABLE LAW, SENTRY AIR SYSTEMS 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 OCCURIRNG IN CONNECTION WITH ANY OF THE EQUIPMENT.

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ASSEMBLY INSTRUCTIONS
MODEL 400
PORTABLE FUME EXTRACTOR

SAS
SENTRY AIR SYSTEMS, INC.

SS-450-PFS

1.	Remove the parts from the cartons and inspect for damage. If damage has occurred, contact carrier immediately.	**MAJOR COMPONENTS:** (1) CHASSIS ASSEMBLY (1) (Qty.4) CASTERS (1) SWIVEL ASSEMBLY (1) FLEX ARM (1) FLEX ARM SUPPORT (CLEAR BAR) (1) PORTABILITY HANDLE (1) MAGNEHELIC GAUGE **(OPTIONAL)**
2.	Remove and discard the packing material.	
3.	Position chassis gently on its side w/out casters on flat surface and insert the casters into the 4 corners of the cabinet.	
5.	Attach Swivel Assembly with provided hardware (8-Screws)	
7.	Attach the flex arm support to the swivel inlet collar with the 2-screws provided. This bar should be positioned inside the inlet collar. The screws should be inserted from the outside of the inlet collar to the inside of the inlet collar. Smooth side of arm support should face the swivel assembly collar.	
8.	Attach the flex arm using the (1) hose clamp provided. If Internal Support Assembly is provided, **DO NOT** attach the flex arm to the flex arm support. Simply slide flex arm over support bar.	
9.	If optional portability handle is included, remove (2) bolts on each side of the back of the chassis and attach handle using these bolts.	

10.	Plug into a 115/1/60 grounded outlet and use as required.	
11.	The final assembly should look like: **(FIGURE SHOWN WITH ALL OPTIONS)**	

FILTER INFORMATION: The unit comes equipped with your limited set of filters. Many applications require filter replacement approximated by six (6) months. Your application may vary, requiring more or less frequent changes. Call SAS at 800-799-4609 to request replacement filters.

NOTE: This product is not intended for use with explosive, highly flammable, or toxic substances and environments *(e.g. where the Lower Flammability Limit may be exceeded; please see chemical's specific MSDS for more information on these limits)*. So as to not compromise the integrity of the material, **operating conditions within the system should not exceed 170°F.**

WARRANTY:
All permanent components are protected by a one year parts warranty from the date of shipment. Defective parts may be returned to the factory freight prepaid by the shipper.