



Operations & Maintenance Manual

SolderPure

SPB Series

1.0 INTRODUCTION

You are now the owner of an advanced effective fume extraction system. You may now expect a noticeable improvement in your air quality as the **SolderPure** begins the process of reducing microscopic airborne particulate as well as harmful gases, smoke and dust.

2.0 SAFETY PRECAUTION

Read all of the instructions contained within this manual before operating this unit. Keep this manual, as it contains information for proper operation and maintenance. Keep all fastening hardware tight to ensure that the unit is in safe working condition. Familiarise yourself with the way in which filters are removed, installed, and serviced. All filters must be in place whenever this machine is in operation. Use only on a grounded electrical circuit; do not use any two-wire electrical prong adapters to defeat the three-pronged plug on the end of the cord. When servicing the motor, be careful when touching the exterior of the motor as soon as it has been turned off; it may be hot enough to be painful or cause injury. they are built to operate at higher temperatures. **Do not substitute any other filters (particulate or chemical) for those supplied, as this will alter the unit efficiency.**

DO NOT SERVICE MOTOR OR CONTROL PANEL UNLESS UNIT IS UNPLUGGED FROM RECEPTACLE (ITS POWER SUPPLY)!

3.0 PRINCIPLE OF OPERATION

The **AF Unit** features a threefold method of operation;

- a) captures general particulate;
- b) HEPA filter removes microscopic particulate matter;
- c) Chemically adsorbs, reacts or scrubs toxic or nuisance gases;

FILTER SEQUENCE HAS BEEN SPECIFICALLY SELECTED FOR YOUR APPLICATION

4.0 SYSTEM COMPONENTS

STANDARD FILTERS: see page 3

BLOWER ASSEMBLY: The blower is factory balanced and tested to ensure quiet, vibration-free operation. The blower in the unit features a motor mounting system designed to reduce vibration and noise.

CONTROL PANEL: Designed for easy monitoring, features include on/off switch, visual system pressure indicator (optional), 120 volt fuse

5.0 SYSTEM COMPONENTS

Description	SPB-560-1(A,B,F,G,J)	SPB-560-2(A,B,F,G,J)	SPB-560-1(B,C,D,E,H)	SPB-560-2(B,C,D,E,H)
Dimensions, Height:	20"(508mm) (plus 2"(51mm) collar)	20"(508mm) (plus 2"(51mm) collar)	24"(610mm) (plus 2"(51mm) collar)	24"(610mm) (plus 2"(51mm) collar)
Dimensions, Width: *	12.75" (324mm)	12.75" (324mm)	12.75" (324mm)	12.75" (324mm)
Dimensions Length:	15.75" (400mm)	15.75" (400mm)	15.75" (400mm)	15.75" (400mm)
Voltage	120/1/60	120/1/60	120/1/60	120/1/60
Max. Power Consumption:	85watts	85watts	85watts	85watts
Current:	1.0amps	1.0amps	1.0amps	1.0amps
Approx. Weight:	48lbs (22kgs)	48lbs (22kgs)	48lbs (22kgs)	48lbs (22kgs)

* - add 2" for bend on power cord if req'd for width dimension

6.0 UNIT RECEIVING INSTRUCTIONS

6.1 INSPECTION

Upon receipt, inspect unit for either visible or concealed damage. Damage should be immediately reported to the transport company.

6.2 PRE START-UP CHECKLIST

- a) All internal components are present and are adequately supported and installed;
- b) Labels and serial numbers are present for future identification;
- c) Verify that power supply is compatible with equipment. Also check that the unit is plugged into a grounded receptacle;
- d) Ensure that unit-mounted casters are tight and secure before manoeuvring the system.

7.0 START-UP

- a) Place unit on a flat surface, ensure filters are installed (see **Equipment Installation and Filter Maintenance Guide** on face of unit);
- b) Ensure that grille below unit is not obstructed in any way (air circulation patterns will be inhibited if airflow is obstructed);
- c) Insert male end of cord into grounded circuit;
- d) Turn power toggle switch to "HIGH" position and verify that system operating light is illuminated;
- e) Pressure gauge should read between 0.9 and 1.1 with filters in place;

WARNING: DO NOT OPERATE UNIT UNLESS ALL FILTERS ARE IN PLACE.

8.0 EQUIPMENT MAINTENANCE PROCEDURES

Proper maintenance is critical to extend the life of the filtration system. The information presented below outlines basic maintenance procedures ensuring the unit will provide trouble-free operation for years to come. The purifier is designed to allow quick access to the filters, blower/motor and control panel assembly.

8.1 GENERAL FILTER MAINTENANCE

It is very difficult to predetermine a specific maintenance schedule as the rate of dust loading and chemical filter consumption will vary on each application. Periodic inspection of the filters and pressure gauge during the first few months of operation should help establish an appropriate replacement schedule.

Model	Filter Sequence (top to bottom)	
SPB-560-__A		
SPB-560-__B	F071, F074, F072-gpc	
SPB-560-__C	F071, F073, F072-gpc	
SPB-560-__D	F071, F072-gpc, F074	
SPB-560-__E	F071, F072-gpc, F076	
SPB-560-__F	F071, F077-gpc	
SPB-560-__G	F071, F077-gppc	
SPB-560-__H	F071, F075, F072-gpc	
SPB-560-__J	Poly, F072-___, F077-___, Poly	
SPB-560-__R	F071, F074, F072-bpc	

8.2 PARTICULATE FILTER REPLACEMENT

- Open top with appropriate tool (Phillips screw driver) to avoid stripping of screws;
- Carefully pull up filters, carefully drop clean filters gently into place;
- If encountering difficulties, confirm that there are no obstructions in the filter track;
- HEPA filters should be installed with gaskets facing down on the filter tracking;
- Utmost care must be taken not to damage the exposed portions of the HEPA filter. Do not bend aluminum separators as this will obstruct airflow.

8.3 CHEMICAL FILTER TRAY (F072, F077) MAINTENANCE

It is essential that the chemical filter be replaced approximately once every twelve months **OR** immediately following any detection of odor on the discharge of the system. After an operating period of twelve months (or when the filters are consumed), call your authorised distributor to purchase a new set of chemical filtration assemblies (Part No: F072-___ or F077-___) prior to removal of existing one.

To replace Odor Filter:

- Ensure that the unit is unplugged, open door with appropriate tool to avoid stripping of screws;
- Pull out the existing F072 or F077, remove new F072 or F077 from the box that it was shipped in;
- Reinsert new filter back into the system (ensure airflow arrows are pointing up);
- Return door to the closed position and verify that an airtight seal is maintained;

To refill existing F072 or F077 filter cell with new odor filters:

- Pull out existing F072 (or F077) filter;
- Unscrew the two (2) top panel covers and lift off cover;
- Pour out used odor filter (**this procedure may be dusty, therefore a dust mask is recommended**);
- Refill container with fresh odor filters;
- Replace the 2 panel covers and re-insert into unit;

Filter disposal is the responsibility of the end-user. Please contact local authorities for proper and legal disposal.

8.4 BLOWER MAINTENANCE

WARNING: Switch unit off and unplug power cord from wall before servicing the blower.

The motor is equipped with electric motor grade double shielded ball bearings and a special lubricant, assuring long life and quiet operation. No extra motor maintenance is required.

8.5 ANNUAL GENERAL INSPECTION

The sealing integrity of the **SolderPure** is essential. Every 12 months, verify that all gaskets are in proper condition. Should the door gaskets adhere to the unit when opening a door, lubricate its surface with a transparent grease or petroleum jelly. Should the unit be relocated continuously for optimum efficiency, ensure all casters are tightly fastened.

9.0 OPERATION

The air is drawn in through the inlet collar or capture arm located at top of unit. The air then passes through the various stages of particulate and odor/gas filtration. Powered by a 120-volt motor/blower assembly, the clean air is then released through the bottom discharge grille into the room.

9.1 CONTROLS

For your convenience, the **SolderPure** is optionally equipped with a pressure gauge recessed within the control panel to allow for a visual indication of filter pressure. IN THE EVENT OF HIGH FILTER PRESSURE (1.5 to 1.6"wc), CALL YOUR DEALER IMMEDIATELY TO REPLACE YOUR FILTERS.

9.2 REDUCTION IN AIRFLOW

The **SolderPure** is designed to operate at a clean filter pressure of between 0.9 and 1.1". This reading can be observed on the pressure gauge optionally located in the control panel. As the unit cleans the air, the filters are removing the particles of dust and dirt in the air stream. As the filters accumulate dirt (both visible and microscopic), a restriction on the blower/motor is created. As the restriction becomes greater, the air capacity delivered by the blower decreases rendering the unit less effective. IT IS VERY IMPORTANT TO CHANGE FILTERS ON A REGULAR BASIS.

9.3 TROUBLESHOOTING GUIDE

Symptoms	Possible Cause	Suggested Solution
Unit will not start	<ul style="list-style-type: none"> o Faulty Power supply o Return or supply grille blocked o HEPA filter improperly installed o Blown fuse o Unit not plugged into receptacle 	<ul style="list-style-type: none"> o Check breaker box o Remove obstruction o See Section 8.2 o Replace fuse o Plug unit in
Excessive noise	<ul style="list-style-type: none"> o Blower wheel contacting cone o Fan isolators loose or off 	<ul style="list-style-type: none"> o Realign/replace wheel o Replace isolator
Insufficient airflow	<ul style="list-style-type: none"> o Obstruction in system o Clogged filters 	<ul style="list-style-type: none"> o Remove obstruction o Replace filters
Excessive airflow	<ul style="list-style-type: none"> o Filters not in place 	<ul style="list-style-type: none"> o Install filters

9.0 WARRANTY

QUATRO Air Technologies warrants its equipment to be free from defect in material and workmanship under normal use and service for a period of one year from date of shipment. QUATRO's obligation under this warranty shall be limited to replacing any parts, thereof, which shall be demonstrated to have been defective. This is expressly in lieu of all other warranties, express or implied, including the warranties of merchantability and fitness.

QUATRO claims no warranty as to merchantability or as to the fitness of the merchandise for any particular use and shall not be liable for any loss or damage. No person, firm or corporation is authorized to assume for QUATRO any other liability in connection with the sale of these goods. Equipment, parts and material manufactured by others and incorporated in QUATRO's equipment are warranted by QUATRO only to the extent of the original manufacturer's liability to QUATRO Air Technologies Inc.

Conditions and Limitations:

This warranty does not cover abuse, misuse, maintenance negligence, improper assembly, acts of vandalism, acts of God, fear wear, modifications of the equipment or installation of a part not recommended by QUATRO Air Technologies, as well as operation of the equipment at voltages other than those specified by QUATRO Air Technologies Inc.

10.0 COMMON SPARE PARTS, To ALL SolderPure MODELS

Qty	Description	Part	Qty	Description	Part	Qty	Description	Part
1	1/8" Gasket Roll (40')	H006	4	Rubber Fan Isolators	B022	1	Pressure Gauge	E010

11.0 INDIVIDUAL PARTS

SPB-560-		
Qty	Description	Part
1	Fuse	E086
1	Toggle Switch	E011
1	Control Panel Assy	A040
1	Blower Motor Assy	A010
1	Blower Motor Only	A009
4	Casters	H042

FILTER REPLACEMENT

Qty	Part Nos.	Description	Approx. Repl. Frequency	Package d
1	F071	Dust Filters	Every 6 months	6 per box
1	F072-gpc, F077-gpc, F072-bpc	Odor Filters,container & media	When odors are noticed (every 6-12 months)	1 per box
1	F072, F077	Odor Filters,empty container		1 per box
	Nc-gpc, nc-bpc	Odor Filter Refill	Container refill kit, 3.5 refills for F072, 2 refills for F077	1 per box
1	F074, F075, F076	Hepa filters	When airflow is notably decreased (every 12-24 months)	1 per box

For specific filter sequence per unit model number, see section 8.1