

SERVAIR POWDER BOOTH / DUST COLLECTOR

PRODUCT MANUAL



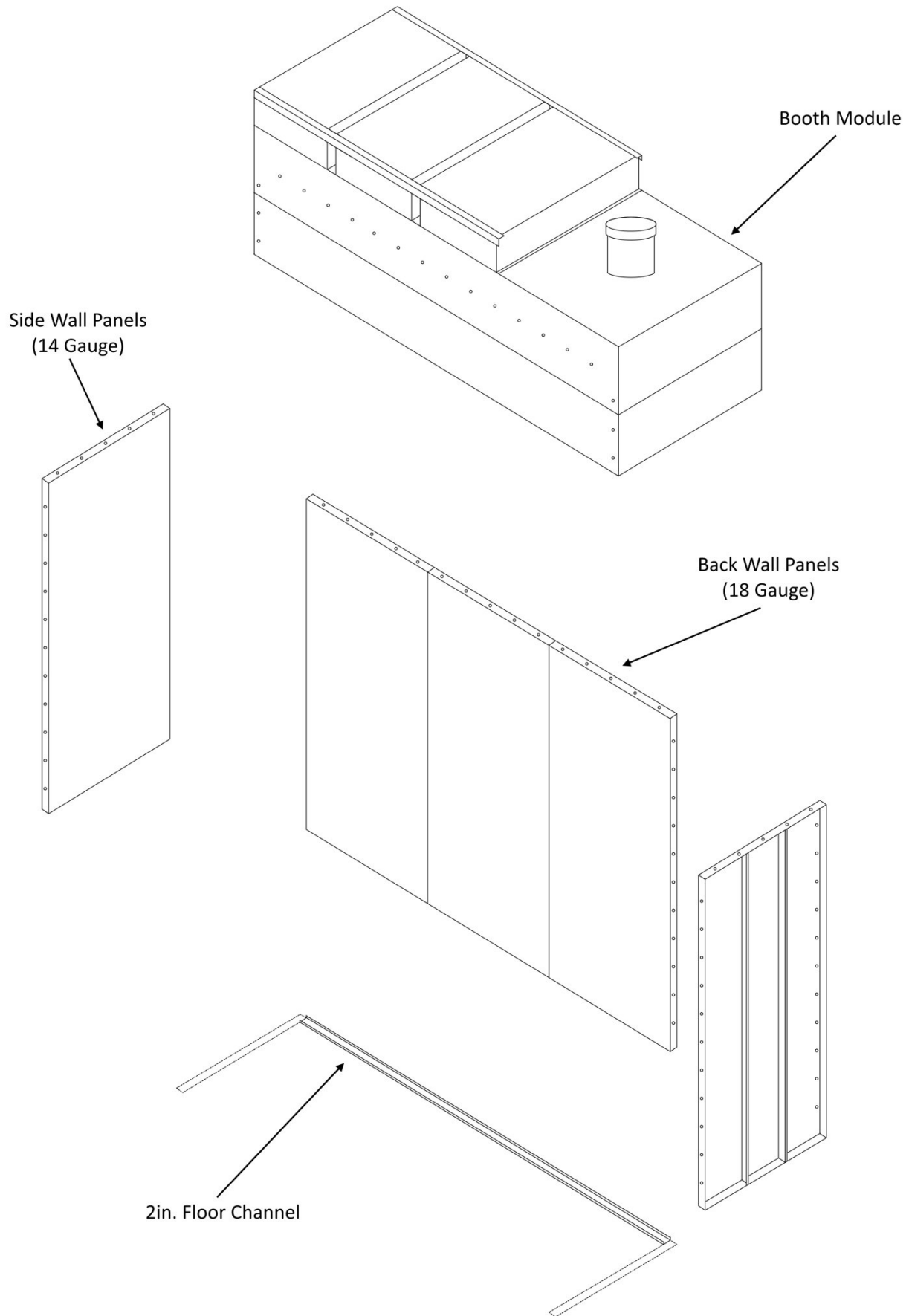
SERVAIR INC. - BRAMPTON, ONTARIO - CANADA

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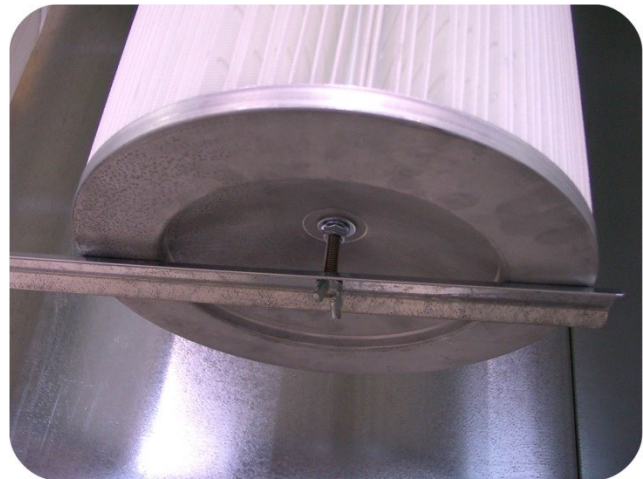
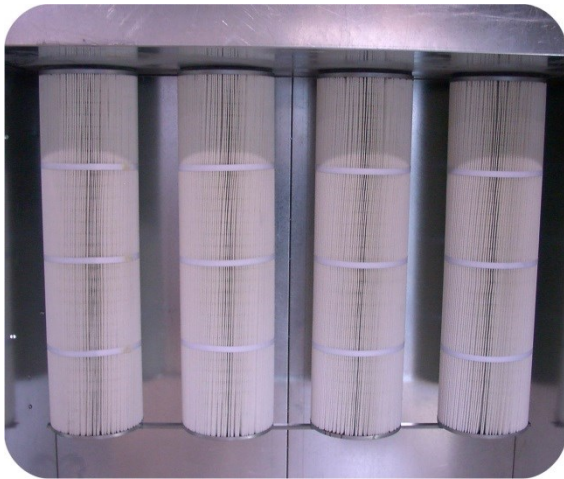
OVERVIEW

1. Clear installation site
2. Unpack components and visually inspect.
3. Mark out booth position.
4. Lay 2" floor channel (x 6', 9', or 12' long) along the position of the back wall of module.
5. Assemble booth side panels (3'0" wide, 14ga with stiffeners) and back panels (3'0" wide, 18ga) with 5/16" Nuts and bolts, hand tightened (see diagram and layout drawing).
6. Ensure panels are straight, side panels are square with back panels, and the structure is sitting solidly on the floor in the correct position. Shim if necessary (shims not supplied).
7. Tighten the nuts and bolts and lag the panel structure to the floor (lagging hardware **not** included) to provide a stable base for the booth upper section.
8. Using an appropriate lifting device, carefully raise the booth module onto the panel structure. Install nuts and bolts to attach the module to the panels, hand tight. Tighten nuts and bolts. Do not remove lifting device until the booth is assembled and found to be sound.
9. Mount control panel (side wall on the motor side), pilot valve assembly (mounting studs located above the 4 bulkheads on the left side of module.), and air manifold (mounting bracket and U-bolts supplied) on appropriate side of booth. Run 10mm red tubing from regulator to the 10mm bulkhead near the pilot valve for air to pulse. Run 6mm blue tubing from left side of control panel to 6mm bulkhead near the pilot valve. (Primary filter to Primary filter and Final Filter to Final filter) Plug in 6mm exhaust vent in to 6mm bulkhead marked (Panel Vent). Use liquid-tite clamps to secure conduit to module as needed.
10. Install 4" cover plates on side walls of modules.
11. Install Ground block (if required).
12. Install 48" cartridge primary filter rods and filters. Attach retainer(s) to bottom of filters. (see primary filter installation instructions).
13. Connect services to booth: Main Voltage to control panel. Dry, clean compressed air to air manifold (1/2"NPT connection) 0-100PSI.



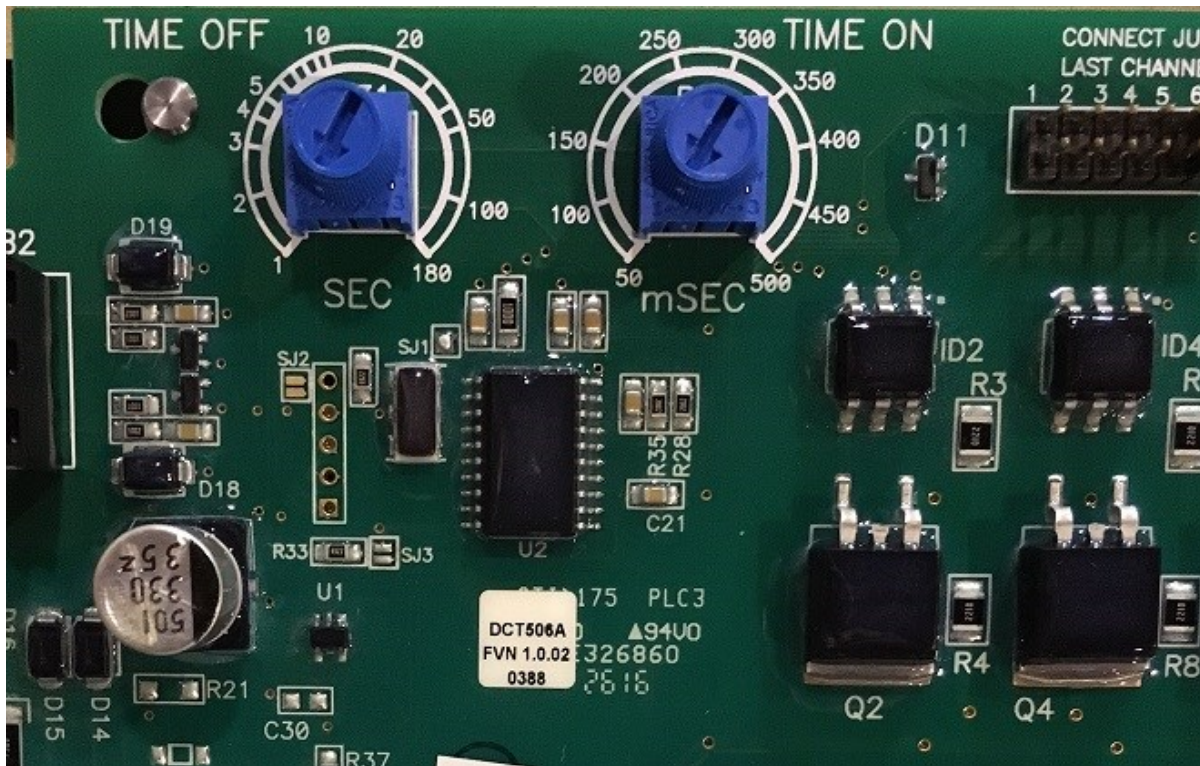
PRIMARY FILTER INSTALLATION INSTRUCTIONS

1. Remove 3/8" wing nut, 3/8" nut and 3/8" washer from the one end of the rod.
2. Insert rod into the filter from the open end of the filter thru the 7/16" hole in the closed end of the filter.
3. Install 3/8" washer and nut onto the rod so that the rod is just showing thru the nut.
4. Pick up assembly by the j-hook and hook it on to the spigot so that the hook is in the 1/2" by 1/2" groove.
5. Lift the filter up over the spigot on the module and then tighten the 3/8" nut to compress the filter
6. gasket on the open end. Compress the gasket about half way. Make sure there is not a gap between filter gasket and the main plenum, if there is tighten the filter a bit more.
7. Once all the filters are installed, install the retainer strip over the filter rod using the 3/8" wing nuts and then bolt the strip to the side walls to secure the filters.



ADJUSTING REVERSE PULSE SYSTEM

1. Set air regulator to 30 psi. Adjust as required to efficiently clean the filters.
2. The frequency of pulsing can be adjusted by setting the 'TIME OFF' potentiometer on the sequential controller inside the control panel. This setting will be dependent upon the volume of powder being sprayed and the static pressure reading. A lower setting results in more frequent pulsing, and a higher consumption of compressed air. Factory pre-set to 5 SEC.
3. The 'TIME ON' value is pre-set to 150 mSEC. Normally, this setting should not have to be altered.





ASSEMBLED – 9FT. MODEL

OPERATION

Startup

1. Turn on the compressed air supply.
2. Turn on control panel disconnect switch.
3. Press the start button.
4. Set the regulator on the air manifold to 30 psi for pulse cleaning. Adjust up as required to maintain the primary filters.
5. Check the primary filter differential pressure gauge on the control panel. It should be less than 4.0" w.c. If it is higher, increase the pulse frequency or the air pressure to the pulse to see if the filter pressure is lowered. If the pressure reading cannot be lowered then it is advisable to change the primary filters.
6. If the final filter differential pressure gauge gets to 3" w.c. the booth will shut down as the final filters are clogged. If this happens the filters will need to be replaced and the primary filters will need to be inspected for holes or air leakage.

Shutdown

1. Press the stop button.
2. Turn off the disconnect switch.

Spare Parts List

PART DESCRIPTION	SPB / SDC BOOTH MODULE		
	6FT. - 6000CFM	9FT. - 8000CFM	12FT. - 12000CFM
Motor - 208V/230V/460V	BA4N005-4C-183	BA4N010-4C-183	BA4N015-4C
Motor - 575V	BA4N005-5C-183	BA4N010-5C-183	BA4N015-5C
Pilot Valve	125469-4 120/60	125469-6 120/60	125469-8 120/60
Pulse Valve	8353C35 (4)	8353C35 (6)	8353C35 (8)
Final Filter	FF213606 (2)	FF243612 (3)	FF243612 (4)
Primary Filter	428-OP-48 (4)	428-OP-48 (6)	428-OP-48 (8)
Fan Wheel	PLR20	PLR22	PLR24
Inlet Cone	20ALIC	22ALIC	24ALIC
1/2" NPT Solenoid Valve	L8210G2 120/60		
NOTE: For all CONTROL PANEL PARTS see wiring diagram			

NOTES: