

PERSONNEL AIR SHOWER SPECIFICATION

TESTING & RECERTIFICATION:

The Air Shower shall be factory tested and set to meet ISO standard 14644-1 classification of air cleanliness (Federal Standard 209E).

The manufacturer recommends that recertification of the V-cell HEPA filter should be performed on at least a yearly basis to assure that the unit is working at its optimum performance.

START-UP INSTRUCTIONS:

- Verify that the Air Shower has been properly installed per the Assembly instructions provided with the unit.
- Verify that all wiring harnesses to the controls enclosure have been plugged into the appropriate connectors.
- Verify that the power feed has been run and that the correct voltage has been supplied to the Air Shower.
- Power up the Air Shower
- At this time the LCD display should read Shower ready. If nothing is visible or the display shows all # signs press the clear button.
- If the Display does not read Shower ready refer to the trouble shooting instructions.
- At this time Refer to the Microprocessor programming instructions and go through the diagnostics and check for:
 - Blower function and rotation
 - Lock function
 - Switch function
 - Sensor function
 - E-stop function
- Program in preferred cycle time if different from default setting
- Program in correct day and time
- Verify that backup battery on rear of processor is on.
- Once all items have been checked and verified for correct operation, purge system several times to ensure that all construction debris has been blown out of the wall cavities
- The Air Shower is now ready for use.

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SEQUENCE OF OPERATION:

Once the Gowning Room door is opened, the Cleanroom side door will lock to avoid any cross contamination. Personnel shall step into the Air Shower and the presence sensor shall detect that presence. Once the door has closed the Air Shower shall go into the high-pressure scrubbing mode with the air velocity at the nozzles about 6000 FPM. While in this mode, both entry and exit doors shall be locked. The Air Shower scrubbing mode will be terminated once the programmed time cycle (factory set @ 30-second time period) is completed. The exit door shall unlock allowing personnel to enter the Cleanroom. Once the exit door is opened, the entry door shall lock. Once the Cleanroom side door has closed, the system shall be ready for another cycle.

In case of emergency the Emergency Stop button located on the inside of the Air Shower may be pressed which will sound the audible alarm and disable all systems including the interlock system allowing unrestricted exit from the room. Pressing the green reset button on the control panel can reset this.

GENERAL MAINTENANCE:

This model requires virtually no maintenance. The few elements, which do require attention, are readily accessible and take a minimum amount of time. Perform visual, electrical and mechanical inspections on a regular basis. This should be determined by the environment and frequency of use.



WARNING: Always disconnect primary power source before inspection or servicing unit.

MOTOR/BLOWER ASSEMBLY:

The direct-drive blowers are selected for continuous operation. Blower bearings are sealed and maintenance is not required. All others bearings are permanently lubricated. The motor/blowers are accessible through the service access panel located in the blower/filter section. Inspect motor/blower assembly periodically (every 3-6 months) for dirt accumulations etc. For more details, refer to the Dayton Motor Installation and Maintenance Information enclosed in the literature section of this manual.

PREFILTER:

The prefilters are contained in the stainless steel prefilter grilles. The Prefilters should be inspected weekly until a replacement cycle can be established. When contaminants begin to collect on the face of the prefilter, it should be replaced. To change the prefilter:

- Open the prefilter grille.
- Remove, discard and replace with a new prefilter.
- Close and secure the prefilter grille.

Note: If contaminants are allowed to continuously collect on the prefilter the life of the HEPA filter will gradually diminish.

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HEPA FILTER:

The average life of the HEPA filter is about two (2) to three (3) years, however, the life of the HEPA (or final) filter will depend on good prefilter maintenance and ambient conditions.

Initial air velocity will average a minimum of 6000 FPM (at the nozzle). When the air velocity drops 20% from its initial air velocity reading, the HEPA filter should be changed.

HEPA FILTER REPLACEMENT:

The HEPA filter is replaced through the service access panel located in the blower/filter section of the Air Shower. To change the HEPA filter (also, refer to **Std. Gasket Seal V-Cell Filter Installation** Instructions):

- Open the service access panel.
- Remove HEPA filter holding devices while holding HEPA filter in place.
- Slide HEPA filter out carefully and discard.
- Slide the new HEPA filter into place, replace the holding devices and tighten down on the holding devices securely so as not to have the seal of the HEPA filter leak.
- Close the access panel.

Note: The HEPA filter media is easily damaged please remember to handle the HEPA filters carefully!

LIGHTING:

Periodically, check the fluorescent lamps for flickering or burnout. This is an indication that the fluorescent lamps should be replaced. The fluorescent lamps are replaced through the lens cover of the fixtures located in the ceiling section in the interior of the Air Shower. To change the fluorescent lamps:

- Remove (4) screws from lens cover and pull downward
- Remove and replace the lamp
- Install lens cover

NOTE: AFTER ASSEMBLY OF THE AIR SHOWER AND PRIOR TO USING AIR SHOWER FOR THE FIRST TIME ** PLEASE REMOVE THE MASKING TAPE USED TO HOLD THE LIGHT TUBES SECURELY DURING SHIPPING!