MONOXIVENT®

Source Capture Systems

Operation and Maintenance Manual

After Filters

MONOXIVENT - SOURCE CAPTURE SYSTEMS

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Mounting Instructions for All of the Following Models:

Filter Units Starting With:

FT24, FT24S
FT25, FT25S, FT125, FT125S
FT40, FT40S, FT140, FT140S
FT64, FT64S, FT164, FT164S
FT88, FT88S, FT188, FT188S

Lubrication

Follow instructions on the motor manufacturer's tag attached to the motor. Put the motor of this filter unit on your regular motor maintenance. Every 6 months lubricate shaker connecting linkage with light oil. The shaker flange bearings should be lubricated every 3 years.

Filter Tube Shaking

1. The collected dust that accumulates on the inside surface of the filter tubes must be shaken off periodically. The amount of dust that is collected determines the frequency of shaking. Generally a shaking period of 15-30 seconds at the end of each shift is sufficient to recondition the filter tubes.

2. DO NOT shake filter tubes while the dust collection fan is operationg! This will reduce the filter performance by plugging up the filter tubes and causing fine dust to leak through the filter fabric.

3. DO NOT operate the shaker continuously! Excessive shaking will drastically reduce the life of the shaker drive linkage and the filter tubes.

4. When shaking the filter tubes no longer restores adequate suction, the filter tubes should be replaced with new ones. See "Filter Tube Replacement".

5. Powered shaking can either be controlled manually through a "jog button" or automatically by means of an SST-1 or SST-3 solid state shaker control.

6. The dust collection drum(s) or hopper should be checked regularly to establish a pattern that will provide for it being emptied when it becomes approximately 2/3 full of collected material. Allowing the dust collection drum(s) or hopper to overfill can result in a plugged hopper and/or filter tubes, which can seriously reduce the unit's air handling capacity (CFM) and filtration efficiency.

7. Collected dust should be disposed of properly, especially in cases where the dust being collected is rated as being either hazardous or toxic. In such case, established governmental disposal regulations must be strictly obeyed.

Filter Operation and Maintenance

1. Make absolutely certain that all electrical power to the filter unit is disconnected before servicing or replacing filter components, especially when the fan motor and/or shaker are involved.

2. In order for your filter unit to operate at its maximum possible efficiency, its' duct system should be designed in accordance with good dust collection practices to ensure proper airflow. The Industrial Ventilation Manual of the Conference of Governmental Industrial Hygienists, or other recognized reference material, is recommended as a guide to proper duct system design.

3. The dust collector electrical system, including wiring, controllers, overload protection, and disconnect must be installed in accordance with the National Electrical Code, Articles #310 and #430 or as specified by local code.

4. In order for your filter unit to function properly, the fan must be checked visually to ensure rotation is in the proper direction as shown by the arrows on the fan housing. Rotation can be checked by viewing the fan wheel, the cooling fan on the back of the motor, or the motor shaft behind the fan house. Reverse rotation will not reverse airflow direction, but will greatly reduce air volume, suction (S.P.), dust capture, and seperation efficiency.

5. It is **EXTREMELY IMPORTANT** that an airtight seal be maintained at all times on the dust storage container. On "D1", "D2", IRC and RCS units, this means an airtight seal between the drum cover(s) and drum(s) and hose connections be maintained. On hopper models, the slide gate must be tightly closed. On "pull through" models, failure to maintain the airtight seal in any of the above mentioned cases will provide an air entry in this part of the system that will deplete the required exhaust air volume (CFM) for the dust collection system. Consequently, dust may not be properly collected at the various collection points or may even build up in the ductwork.

6. Employees should be warned not to throw lit cigarettes or any burning or glowing objects into the dust collection hood.

Filter Tube Replacement

1. Shake filters and allow dust to settle.

2. Disconnect all electrical power to the dust collector.

3. Follow all local safety codes and/or OSHA standards for breathing apparatus, if required.

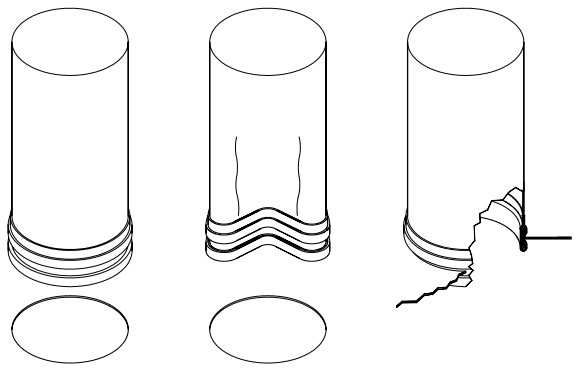
4. Remove access panel, to gain access to the filter tubes, if so equipped.

5. Remove existing filter tubes, being careful not to stir up any more dust than necessary. Clean out baghouse as required.

6. Install new filter tubes, as illustrated in the three step procedure located at the bottom of the page. Make sure filter tubes are straight, not twisted, and properly connected to the shaker linkage. Make sure filter tube snap ring cuff is seated properly in the bagplate.

7. Reconnect all electrical power to the dust collector.

8. Dispose of dirty filter tubes, following all local, state, and federal regulations.



TROUBLESHOOTING

Problem: Inadequate Airflow and Suction

Possible Cause:	Solution:
Fan running backwards	Have electrician reverse motor direction.
Drum cover(s) not clamped or sealed properly to drum(s). Hopper slide gate not closed. (Pull-Through models only)	Clamp drum covers on drum properly. Obtain a good 55 gallon drum with a uniform rim (not bent or dented). Tightly close slide gate on hopper. Leakage is inward and not easily detectable
Filters Plugged	Shake filter tubes. If airflow is not restored, filter tube replacement maybe necessary.
Ductwork or cyclone plugged	Visually check ductwork and cyclone interiors, and clean as required.
System design/duct sizes	Contact Monoxivent - 877-608-4383 or info@monoxivent.com

Problem: Electrical Overload

Possible Cause:	Solution:
Branch circuit fuses incorrect size	Size fuses for branch circuit protection per National Electrical Code 430-52 and Table 430-152.
Motor Starter heater elements incorrect size	Size heater elements according to motor nameplate full load amps, per National Electrical Code 430-32.
Motor starter, disconnect, or wiring undersized	Size according to National Electrical Code Article 430
Loose connection	Check all connection points.

Problem: Excessive Dust Bleed-Through

Possible Cause:	Solution:
Air-to-filter ratio too high	Add more filter
Incorrect filter media	Contact nearest Monoxivent representative
Shaker operating while dust collection fan is running	Shake should only be operating when dust collection fan is off
Ruptured filter tube, or improperly installed filter tube cuff in bagplate	Replace ruptured filter tube. Reposition filter tube cuff in bagplate

Problem: High Filter Resistance

Possible Cause:	Solution:
Filter tubes plugged	Shake filter tubes. If airflow is not restored, filter replacement may be necessary.
Shaker operating while fan is running	Operate shaker only when fan is stopped
Not shaking filter tubes often enough, or long enough	Increase shaking frequency and only if necessary, increase shaking time. Time should rarely exceed 30 seconds.
Shaker control not operating	Review wiring diagram and trouble shooting sheet shipped with control
air-to-filter ratio too high	Add more filter area
Dust bin or dum(s) overfilled and backed up into filter tubes	Empty dust bin or drum(s). Clean dust out of filter tubes where it has backed up into them.
Incorrect filter media	Contact your Monoxivent representative

Statement of Warranty

We guarantee equipment for a period of one year from the date of shipment against defects in workmanship and materials. All necessary replacements or repairs are subject to our inspection.

All electrical motors furnished with our equipment are warranted by the motor manufacturer and the motor industry's policy on repair or replacement must be followed in the event of a failure. The user must take the motor to the nearest authorized repair or service station with the request, preferably in writing that the motor is for warranty inspection and giving the source of the motor and the date of its acquisition.

From code numbers on the motor, the service shop can deterimine whether or not it is still within the warranty period. If found to be defective, it will either be repaired or replaced.

Contact us first before taking any action on a defective motor, as stated on the red tag attached to it. We can then advise the location of the nearest motor service authorized by the motor manufacturer to handle claims under warranty.

The warranty is in lieu of any other warranty, spoken or implied.