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SSTP
Maintenance Instructions

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Casing

Every six months the casing of the unit should be checked:

1. Check caulking in all interior and exterior seams and reseal if necessary. Condensation or frost on the inside of the unit walls is an indication that there may be a vapor leak in the casing.
2. Check the roof to unit casing wall flashing and repair/reseal as necessary.
3. If the unit has an EPDM rubber roof, check for damage or wear and repair if necessary.
4. Inspect the door gasketing and replace if it shows any sign of wear or if the gasketing is leaking air.
5. Check the operation of the door handles, especially the interior safety emergency release.
6. Check to insure the door heater (when supplied) is functioning properly. This can be accomplished by checking to see if there is amperage in the heater circuit.

Fan and Motor Assembly

1) Every 6 months the fastening bolts for the motor-to-motor base and the motor pipe support to the unit fan frame should be checked for tightness.

2) The motors are permanently lubricated and should not need re-lubrication.

3) Every 6 months the fan bushing (to motor) fasteners should be checked. Do not over-tighten.

Electrical Connections

The control system for the unit should be checked at least twice a year for proper operation of the system. Also check all terminals to ensure they are tight. It is suggested that the units be checked in the fall, prior to the heating season and in the spring, prior to the summer cooling season.properly.

Pressure Relief Valves (Optional Feature)

These tamper-resistant pressure relief valves are accurately factory set and do not require any field adjustments whatsoever. They are intended for one time over-pressure operation and should be replaced immediately after discharging because setting or seat tightness may be altered. Every six months, relief valves shall be visually inspected for corrosion or accumulation of scale and for leaks. Normally pressure-relief valves should be removed and replaced with new valves at least every five years. Even when simply replacing an existing valve, a review of requirements per current local and national code is advisable. Valves should not be removed unless system has been evacuated to zero pressure.

NOTE: See service manual for more detailed information.

Figure 1

Ammonia Detector (Optional Feature)

For proper operation it is essential that the test and calibration schedule be adhered to. Manning Systems recommends the following maintenance schedule.

1) Response test once per month. Expose sensor to ammonia/water solution to verify proper sensor response and alarm functions. Test more frequently in highly critical applications.

2) Calibration should be performed with certified calibration gas every six months. Calibration kits are available from Manning Systems.

3) All tests and calibrations must be logged.

The unit must be mounted level. The unit can either be mounted on the roof deck or mounted up on structural steel, above the roof.

To ensure proper drain pan drainage and refrigeration coil operation, the unit must be mounted level. It is recommended that

Sensor Life

These electrochemical cells are extremely reliable, but several things can cause the cell chemicals to become depleted including:

1) A period of time.

2) Exposure to high temperatures.

3) Exposure to varying concentrations of the target gas.

4) Exposure to high moisture for extended periods without proper sensor enclosure

When the cell becomes depleted, the unit will give no indication of failure other than that the sensor will not respond. For this reason it is absolutely essential that these units be exercised with a gas sample on a regular and timely basis.

Typical sensor life in a refrigerated area will be 18 months to 2 years or more. Typical life in a non-refrigerated area will be 12 months or less. Exposure to high levels of ammonia will shorten these times. In addition to timely response checks, a preventative maintenance program of periodic cell replacement should be implemented.

When the cell becomes depleted, a replacement cell can be obtained from Manning Systems. Simply unplug the ribbon cable from the pins labeled Sensor, pull the old cell from the spring clip, discard the old cell and replace it with a new one.

The sensor should be calibrated after a 24 hour warm-up period.

WARNING: WITHOUT PROPER SERVICE AND MAINTENANCE, THE AMMONIA DETECTOR COULD INITIATE FALSE ALARMS OR FAIL TO FUNCTION PROPERLY IN THE CASE OF AN AMMONIA LEAK. STRICT SERVICE AND MAINTENANCE SCHEDULES MUST BE FOLLOWED AND COMPLETE SERVICE RECORDS KEPT.

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