Operator Preventive Maintenance

Operator Preventive Maintenance

Overview

To maintain the Gaylord Ventilator in good working order and to keep the system operating at optimum efficiency, preventive maintenance, using the following schedule, should be performed.

Important Note: Ventilators incorporating UV Lamps require special maintenance as shown on page 3-3. Some of the required maintenance on Ventilators with UV can be performed by the operator. However, direct exposure to UV light is hazardous to your skin and eyes and contact with live electrical components poses a significant risk of shock or death.

Recommended Scheduled Maintenance

Daily

If equipped with UV, make sure the green "UV System On" lamp on the Ventilator is on when the exhaust fan is on. If the light is not on refer to the Troubleshooting procedures on Page 4-3.

For general cleanliness the underside of the Ventilator should be wiped down as shown in Figure 3-2-2.

Weekly

The Detergent Tank, located in the Wash Control Cabinet, should be checked and kept full with detergent. Refer to Page 2-17 for recommend detergent.

Monthly

- 1. The detergent fittings should be checked. This is an airtight system and fittings should be tight. For complete details on the Detergent Pump refer to the Operation and Maintenance manual for the Gaylord Command Center and Wash Control Cabinet.
- 2. When a wash cycle is not on, open the Extractor Access Doors and remove the Extractors. (Refer to Figure 3-6-1). Check the Extractors and Plenum area to ensure they are adequately cleaned. If the Ventilator includes UV Lamps check to ensure that they are adequately cleaned. If overall cleaning appears to be inadequate, refer to the Troubleshooting procedure on Page 4-2.
- 3. Check the entire Grease Gutter and Drain Outlet and remove any foreign material such as paper towels, order chits etc. Also check to ensure the gutter is being adequately cleaned by the wash cycle. If overall cleaning appears to be inadequate, refer to the Troubleshooting procedure on Page 4-2.

Every Six Months

- 1. Check the exhaust fan(s) for belt tightness, belt alignment. Lubricate moving parts as required. Note: A blue lithium based grease is best suited for high heat and speed bearing lubrication.
- 2. Check for proper velocity at the air inlet slot. Refer to page 5-1 procedures.
- 3. Clean the Detergent Tank and Foot Valve.

Every 12 Months

Remove the Grease Canal Inspection Plate and check for adequate cleaning (Refer to Figure 2-2-2 on page 2-2). Clean if necessary.

Operator Preventive Maintenance - Cont.

Inspection and Cleaning Requirements

NFPA-96 (Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations) require that hoods (Ventilators), ducts and exhaust fans must be <u>inspected</u> by a properly trained, qualified and certified company or person(s) in accordance with the following table.

Table T-3-2-1

EXHAUST SYSTEM INSPECTION SCHEDULE	
Systems serving solid fuel cooking operations	Monthly
Systems serving high-volume cooking operations such as 24-hour cooking, charbroiling or wok cooking	Quarterly
Systems serving moderate-volume cooking operations	S emi-annually
Systems serving low-volume cooking operations, such as churches, day camps, seasonal businesses, or senior centers	Annually

Upon inspection, if found to be contaminated with deposits from grease laden vapors, the entire exhaust system shall be cleaned by a properly trained, qualified, and certified company or person(s) acceptable to the authority having jurisdiction.

When a vent cleaning service is used, a certificate showing date of inspection or cleaning shall be maintained on the premises. After cleaning is completed, the vent cleaning contractor shall place or display within the kitchen area a label indicating the date cleaned and the name of the servicing company. It shall also indicate the area not cleaned. It is good practice to get before and after pictures for quality control purposes.

CAUTION regarding pressure washing or steam cleaning: If the Ventilator includes a UV System the UV Modules must be removed prior to pressure washing or steam cleaning.



Figure 3-2-2 Cleaning

UV System Scheduled Preventive Maintenance

CAUTION: Preventive maintenance and repairs made to the UV System as outlined on pages 3-3 through 3-5 MUST be performed by Gaylord Certified Service Agent. For a list of Gaylord Certified Service Agencies (CSA's) visit www.gaylordventilation.com and go to "Service Agencies".

WARNING: Certified Service Agent maintenance and repair warning. Do not defeat any Safety Interlocks during cleaning, maintenance and repair.

Safety Requirements

Caution: Exposure to UV light is harmful to skin and eyes. Before servicing or repairing any of the UV System read and perform the following safety requirements.

Overview

The ELXC-UVi Ventilator is equipped with light attenuation barriers and Safety Interlocks to protect operators from direct exposure to UV light. All safety precautions called for in this manual must be followed to avoid the potential for harm to service personnel or operators.

As with many types of technology if it is not used properly and/or proper precautions are not taken there is the potential for injury or harm. This is especially true of UV light due to the fact that it does not physically hurt at the time of exposure. UV generated in these Ventilators is greater than what results from direct exposure to the sun. Under no circumstances is it acceptable to view the lighted lamps without proper eye protection or expose bare skin directly to the light. All safety precautions called for in this manual must be followed to avoid the potential for harm to service personnel and/or operators.

Personal Protective Equipment

- 1. Eye protection that prevents 100% of UV light from being transmitted through the lens must be worn at all times when replacing the UV Lamps on any ELXC-UVi Ventilator that is energized and/or has the potential to be energized and expose personnel to UV light.
- 2. Whenever service work is performed it is recommended that long sleeve shirts and pants be worn to minimize the potential for inadvertent exposure of the skin to UV light.

Preventive Maintenance

The following Preventive Maintenance items must be performed by a trained and qualified Certified Service Agency at a frequency shown on page 3-2, Table T-3-2-1, EXHAUST SYSTEM INSPECTION SCHEDULE. These tasks involve potential exposure to high doses of UV light and live electrical components. There is a risk of shock, injury and/or death from contact with live electrical components.

1. Testing UV Lamps and Ballasts

(For these tests all XGS Extractors must be in place, the Extractor Access Doors closed and all UV Module Access Doors in place and latched.)

a. Turn on the exhaust fan at the Gaylord Command Center. The "UVI SYSTEM ON" green Status Light in each Ventilator Section should be on. In addition to the Status Lights on the Ventilator, the Gaylord Command Center should display text indicating the similar message as the Status Lights.

UV System Scheduled Preventive Maintenance - Cont.

Testing UV Lamps and Ballasts - Cont.

- b. If the yellow "UVI LAMP FAILURE" Status Light is on it indicates that one or more of the UV Lamps are not operating. To troubleshoot and replace a lamp refer to the Troubleshooting page 4-4, and Testing and Repair section of this manual beginning on page 5-7.
- c. If the blue "UVi SYSTEM STANDBY" Status Light is on it indicates that one or more XGS Extractors are not in place and/or one or more UV Module Access Doors have not been closed properly or the internal temperature of the Ballast Box has exceeded 118° F. which activates the High Temperature Shutdown Controller. Refer to page 4-3 for troubleshooting and corrective action for the Temperature Shutdown Controller.

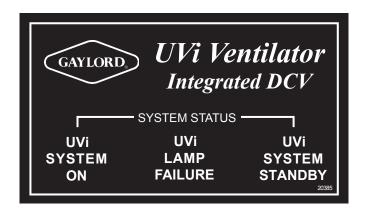


Figure 3-4-1
UV Status Lights

2. Inspect and Clean UV Modules

- a. Turn off the exhaust fan at the Command Center.
- b. Open the UV Module Access Door(s) (refer to Figure 2-10-2).
- c. Disconnect the UV Module Lamp Ballast Connector.
- d. Remove the UV Module(s) from the Ventilator. (Caution: Care must be taken to keep the connector from hitting the lamps while removing the module.)
- e. Using a damp non abrasive cloth and mild detergent, wipe down the Lamps and Lamp Housing. Lamps should be free of all grease and debris.
- f. Carefully inspect the UV Module Access Door and replace the gasket as needed to ensure a good seal.
- g. Reinstall the UV Module(s) being careful to not hit the Lamps.
- h. Reconnect the UV Module Lamp Ballast Connector.
- i. Close the UV Module Access Door(s).

3. Test Safety Interlocks for the XGS Extractors (*Pressure Switches*)

(Caution: For the following tests Polycarbonate Safety Glasses must be worn.)

a. Turn on the exhaust fan at the Command Center. The "UVI SYSTEM ON" green Status Light in each Ventilator Section should be on.

UV System Scheduled Preventive Maintenance - Cont.

Test Safety Interlocks for the XGS Extractors (*Pressure Switches*) - *Cont.*

- b. Open the Extractor Access Door at the left end of the Ventilator remove one XGS Extractor. The blue "UVi System Standby" Status Light should come on. If this action does not occur, immediately shut down the exhaust fan at the Command Center. Refer to the Troubleshooting section of this manual for corrective action. Repeat tests 3a and 3b for the right most XGS Extractor and again for the center XGS Extractor.
- c. If there is more than one Ventilator section, repeat tests 3a and 3b for each section.
- 4. Test Safety Interlocks for the UV Module Access Panel (Pressure Switches)
 (Caution: For the following tests Polycarbonate Safety Glasses must be worn.)
 - a. Turn on the exhaust fan at the Command Center. The "UV System On" green Status Light in each Ventilator Section should be on.
 - b. Open one UV Module Access Door (refer to Figure 2-10-2). (Note: If there are two UV Module Access Doors always open the shortest door for the test). The blue "UVi System Standby" Status Light should come on. If this action does not occur, immediately shut down the exhaust fan at the Command Center, refer to the Trouble Shooting section beginning on page 4-3 for corrective action.
 - c. If there is more than one Ventilator section, repeat the tests above, 4a and 4b, for each section.

5. Lamp Replacement

The UV Lamps need to be replaced after 13,000 hours of use. After 13,000 hours the Lamps will still work but the performance of the Lamps decreases dramatically. The Gaylord Command Center has a built-in UV hours of operation clock. Refer to the Operation and Maintenance Manual for the Gaylord Command Center for complete operational instructions. If the Lamps have been in use over 13,000 hours they should be replaced. Refer to Page 5-7 of this manual for detailed instructions for replacing Lamps.

Opening Extractor Access Door

To open the Extractor Access Doors proceed as follows:

- 1. Place your hands around the lower edge of the door as shown below. Pull the door out and slightly up until the hinge pin lines up with the vertical slot and the door drops down approximately 1/2".
- 2. Swing the door out and up as shown below.
- 3. Slide the door in to hold open.
- 4. To close the door reverse the procedure.

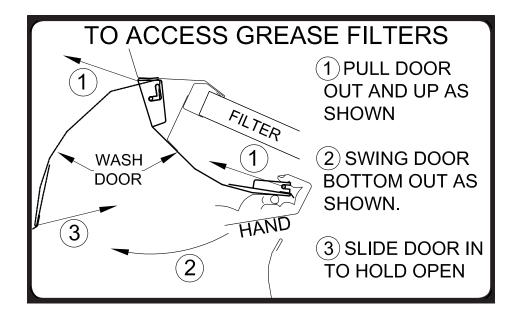


Figure 3-6-1
Opening Extractor Access Doors Label