

Cleaning and Maintenance

Operator Cleaning and 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 3-4. 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.

Daily Cleaning and Maintenance

At the end of the each cooking day, or at periodic intervals, depending upon the type of cooking, the XGS Extractors and Grease Drawer must be removed and cleaned. The Grease Gutter should also be wiped out.

CAUTION: Before proceeding with cleaning, check to see that the exhaust fan is shut off and the cooking equipment is cool. To clean proceed as follows:

1. Remove Extractors: **CAUTION:** Care should be taken when removing the Extractors, especially over fryers. It is recommended that the cooking equipment be cooled down and the fryers be covered prior to removing the Extractors. They may be removed by hand or by use of an optional Extractor Removal Tool (Refer to Figure 3-2-1). To remove, lift up slightly on the Extractor and pull out from the bottom, then straight down.
2. The Extractors may be cleaned either by using a dishwasher or by soaking in a deep well sink using hot water with a degreasing detergent, then scrubbed and rinsed. Gaylord Formula G-510EF detergent is highly recommended for this application. Refer to Page 3-7 for details.
3. With the Extractors removed inspect the back wall and the underside of the exhaust plenum. If necessary clean with hot detergent water.
4. Wipe and clean the Grease Gutter.
5. Remove and empty the Grease Drawer, clean and replace.
6. Replace the filters or Extractors. Note: Filters and Extractors must be installed with the openings running vertical as shown in Figure 3-2-2. Gaylord XGS Extractors have an arrow stamped on the face designating "UP".

Additional Cleaning Instructions for UVi Series Ventilators

The UV Lamps will develop a coating of dust, and sometimes debris that will have to be wiped away. The Lamps should be inspected weekly and cleaned when necessary. To clean proceed as follows:

1. Remove all the Extractors.
2. Reach up through the opening and carefully wipe each Lamp with a non abrasive wet cloth with mild detergent. Remove all the dust, grease or other contaminants that may have collected on the Lamp.
3. Replace the Extractors.

Note: Failure to maintain the cleanliness of the Lamps will reduce the UV systems ability to reduce the build-up of grease and debris on the exhaust ducts and fans.

Cleaning and Maintenance – Cont.

Operator Cleaning and Maintenance – Cont.

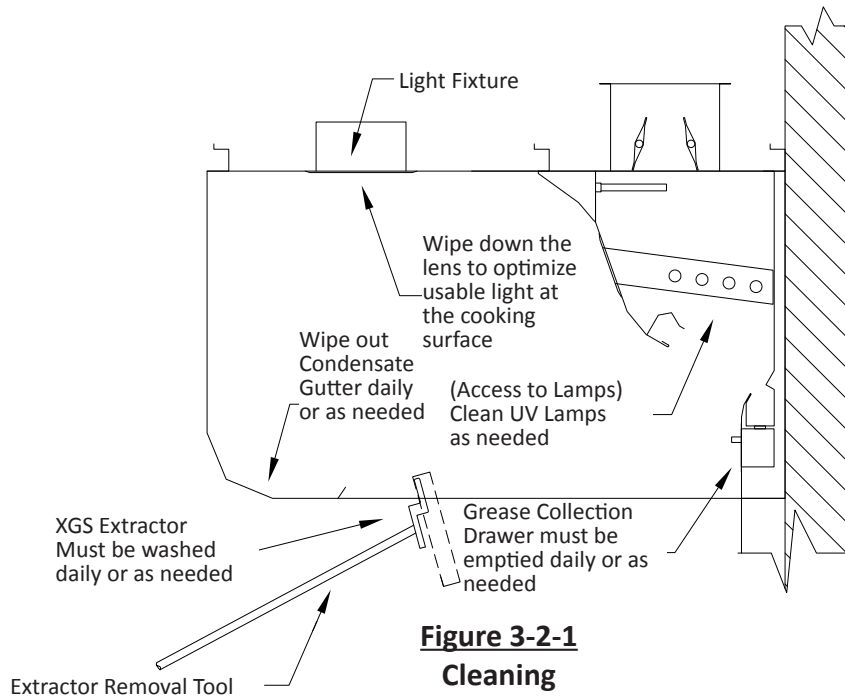


Figure 3-2-1
Cleaning

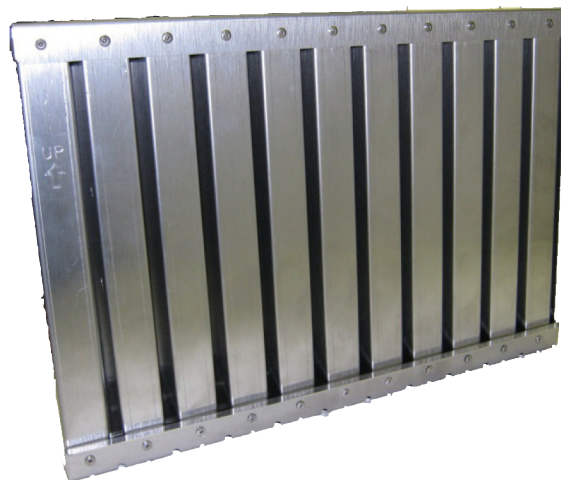


Figure 3-2-2
Gaylord Model XGS Extractor

Cleaning and Maintenance – Cont.

Operator Cleaning and Maintenance – Cont.

Code Required Inspection and Cleaning

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

Table T-3-3-1

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	Semi-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 any area not cleaned.

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.

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 ELX-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 ELX-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 5-13.
- 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 5-26 for troubleshooting and corrective action for the Temperature Shutdown Controller.

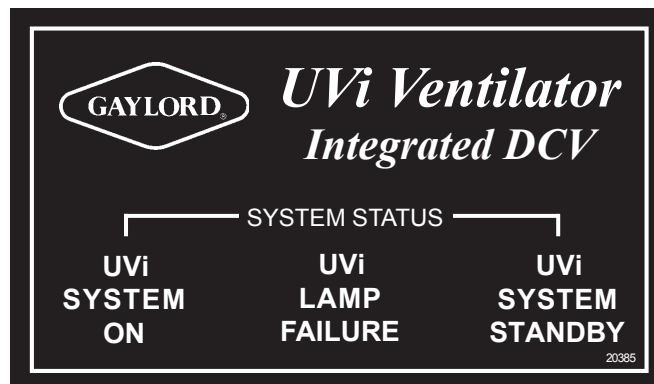


Figure 3-5-1
UV Status Lights

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 4-4 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 5-13 of this manual for detailed instructions for replacing Lamps.

Cleaning and Maintenance – Cont.

Detergent for Cleaning

FORMULA G-510EF is the only cleaner recommended by Gaylord Industries for use in cleaning Gaylord Model ELX Extractors. FORMULA G-510EF is a concentrated colloid cleaner specially formulated to remove the daily accumulation of grease in the Extractors and all other interior and exterior surfaces of the Ventilator. FORMULA G-510EF is safe for kitchen personnel and has a variety of uses.

FORMULA G-510EF Safety

FORMULA G-510EF is registered with the U.S. EPA's Design for the Environment Program (DfE) which seeks to promote the use of institutional cleaners and maintenance products with improved environmental and human health characteristics.

Cleaning the Gaylord Extractors

The Gaylord XGS Extractors may be cleaned by running through a dishwasher or by soaking in a deep well sink.

To soak proceed as follows:

1. Place the Extractors in a deep well sink.
2. Pour in 2-3 cups of FORMULA G-510EF.
3. Fill sink with hot water until the water covers the Extractors.
4. Let soak for 15-30 minutes.
5. Scrub and rinse.
6. Repeat if necessary.

FORMULA G-510EF for Cleaning the Ventilator Exterior

Mix one part FORMULA G-510EF to twenty parts water in hand spray bottle. Spray on, let stand for a few minutes and wipe off.

FORMULA G-510EF for Other Cleaning Jobs

The colloidal action of FORMULA G-510EF makes it a cleaner especially well-suited for use in kitchens. The colloids break up dirt and grease into millions of tiny particles that constantly repel each other. These particles cannot recombine or redeposit on a surface and are, therefore, easily washed away. FORMULA G-510EF contains no harsh chemicals, yet offers outstanding performance on the toughest cleaning jobs.

Use a mixture of one part FORMULA G-510EF to twenty parts water for:

- VINYL/PLASTIC/WALLS...Removes dirt, grease, food deposits and fingerprints.
- REFRIGERATORS...Removes dirt, spilled milk, blood, mildew and objectionable odors.
- RESTROOMS...Add a disinfectant to clean all fixtures, walls, floors, etc.

Use a mixture of one part FORMULA G-510EF to five parts water for extremely heavy grease build-up, such as on the floor and on equipment around deep-fryers. Spray on, let set for a few minutes and rinse or wipe off. For extremely soiled areas, gentle agitation, followed by a soaking period, will result in more thorough cleaning. DON'T be afraid to experiment with FORMULA G-510EF because it contains no phosphates, nitrates, enzymes, sulfates, suffocates or silicates.

Limited Warranty

2010 Products, Inc. warrants that Formula G-510EF will not cause cleansing agent damage to the rubber and synthetic parts of the injection pump (“O” rings, diaphragms, washers, tubing, and other such parts) used with The Gaylord Ventilator, Heat Reclaim Unit, or Pollution Control Equipment so long as used pursuant to its product instructions. 2010 Products, Inc. obligation under this warranty and any warranties implied by law shall be limited to repairing or replacing, at its option, any of said parts which 2010 Products, Inc. examination shall disclose to its satisfaction to have been damaged by the use of Formula G-510EF for the life of the detergent pumping system. This warranty shall not cover damages caused by any other detergent. The use of any other detergent shall void this warranty. All repairs and replacement parts under this warranty shall be F.O.B. 2010 Products, Inc. The owner shall pay the necessary freight and delivery charges; also removal and installation costs. Any federal, state or local taxes are also extra. Requests for repairs or replacement part should be made to 2010 Products, Inc., P.O. Box 7609, Salem, Oregon, 97303. This is the sole warranty with respect to FORMULA G510EF.

2010 Products, Inc. MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID OBLIGATION ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS AGREEMENT. 2010 Products, Inc. SHALL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM A BREACH OF THIS WARRANTY.

IMPORTANT

If a cleansing agent other than FORMULA G-510EF is used with The Gaylord Ventilator injection pump and solenoid valves, it is recommended that a warranty similar to the above be obtained from the manufacturer of said product, that the detergent has foaming properties similar to FORMULA G-510EF and that the above-referenced Warranty shall become null and void.

FORMULA G-510EF Distributor

For the name and address of the nearest FORMULA G-510EF distributor contact:

Gaylord Industries
10900 SW Avery Street
Tualatin, OR 97062
E-mail: info@gaylordventilation.com
Website: www.gaylordventilation.com
Phone: 800-547-9696