



Breathe easy.



Certified Service Agency Manual

For

OPERATION, MAINTENANCE & INSTALLATION

of

MODEL C-7000A COMMAND CENTER

and

GPC-7000A SERIES WASH CONTROL CABINET

GAYLORD INDUSTRIES

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The manufacturer reserves the right to modify the materials and specifications resulting from a continuing program of product improvement or the availability of new materials



Breathe easy.

To Our Customers:

Congratulations on your recent purchase of a Gaylord Command Center / Wash Control Cabinet Model GPC-7000A Series. We are proud to be able to provide you with a quality product that exemplifies our long standing dedication to quality engineering and manufacturing.

Your Command Center / Wash Control Cabinet is assembled from the very finest components available and is designed for years of efficient, effective, and trouble-free operation. In addition, the product has undergone rigorous quality control inspections and testing prior to shipment.

If you have any questions, please contact us at info@gaylordventilation.com or by calling us toll free 800-547-9696. We are more than happy to help.

Sincerely,

Gaylord Industries

Gaylord Industries

10900 SW Avery St.

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www.gaylordventilation.com

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Introduction

About this Manual

The purpose of this manual is to provide the Operator, Owner, Maintenance and Service personnel instructions for operating, and programming the Gaylord Model GPC-7000A Series Command Center/Wash Control Cabinet. The Command Center controls various functions of Gaylord Ventilation Equipment as described on page 1-5. This manual also includes information and guidance to contractors for initial installation of the Command Center/Wash Control Cabinet.

The manual is divided into chapters for easy reference to a particular subject. The pages in the chapters are numbered with the chapter number, then a dash, and then the page number. So for example pages in Chapter 2 are numbered 2-1, 2-2, 2-3 etc. Figures and Tables are numbered in a similar manner. For example Figure 5-3-2 is on page 5-3 and is the second figure. Please keep your manual in a convenient location for so it can be accessed easily.

If you have any questions or concerns with the installation, operation, or service of your Gaylord Model GPC-7000A Command Center/ Wash Control Cabinet, please contact Gaylord Industries;

Web: www.gaylordventilation.com

E-Mail: info@gaylordventilation.com

Main Phone: 503-691-2010

Toll Free: 800-547-9696

Related Technical Manuals

1. ELXC and ELXC-UVi Series Ventilators are controlled by a Gaylord Command Center. The specific manual for this Ventilator Series is titled **Operation and Maintenance Manual for the Gaylord Model ELXC and ELXC-UVi Series Ventilators.**
2. If the C-7000A Command Center is controlling a Model CG3, CG3-UV, CG3-SPC or CG3-UV-SPC Series Ventilator the specific manual for this Ventilator Series is titled **Operation and Maintenance Manual for the Gaylord Model CG3 Series Ventilators.**
3. If the C-7000A Command Center is controlling a Pollution Control Unit, Model RSPC-ESP Series the specific manual for this Series is titled **Operation and Maintenance Manual for the Gaylord Model RSPC -ESP Series Pollution Control Unit.**
4. If the Ventilators have a Gaylord AirVantage Demand Control Ventilation System, the specific manual for this system is **Air Vantage Model "DCV-AV" Series Operators Manual.**

Operation and Maintenance Manuals may be downloaded from the Gaylord website:
www.gaylordventilation.com or be obtained by calling Gaylord Industries.

Introduction – Cont.

Safety

This publication includes the description of operation, maintenance and repair of the Model C-7000A Command Center. Please read this manual in its entirety before operating the Command Center. Some portions of the control circuitry operate on 120 volts. The following **Danger** statement precedes any instructions or guidance where contact with 120 volts could occur:

Danger: 120 volt circuit. Opening the Electrical Compartment access door and working on this equipment may result in immediate electrical shock or death. The components in the Electrical Compartment should only be serviced by a Gaylord Certified Service Agency.

Caution: Caution statements precede any instruction or guidance that could cause the equipment to malfunction, or create unintentional consequences.

Introduction – Cont.

Application

The C-7000A Command Center controls the exhaust fan(s), supply fan(s), wash cycles, and fire modes for different series of Gaylord Ventilators and Pollution Control equipment. The C-7000A is the standard control for the ELXC and ELXC-UVi Series Ventilators and is a replacement control for previous Series of Gaylord Ventilators. Specifically the control is used for the following:

Ventilator Series

Standard for:

- ELXC
- ELXC-UVi

Replacement for:

- CG3
- CG3-UV
- CG3-SPC
- CG3-UV-SPC
- CG
- CG-SPC

Pollution Control and Other Equipment

- RSPC Series Pollution Control Equipment
- GDS Series Duct Sump

Control Location

Typically the C-7000A Command Center is installed in a Gaylord Wash Control Cabinet, as shown on Figure 1-3-1, but may be installed in a Gaylord UDS (Utility Distribution System) or may be remotely mounted, such as in a managers or maintenance personnel's office.

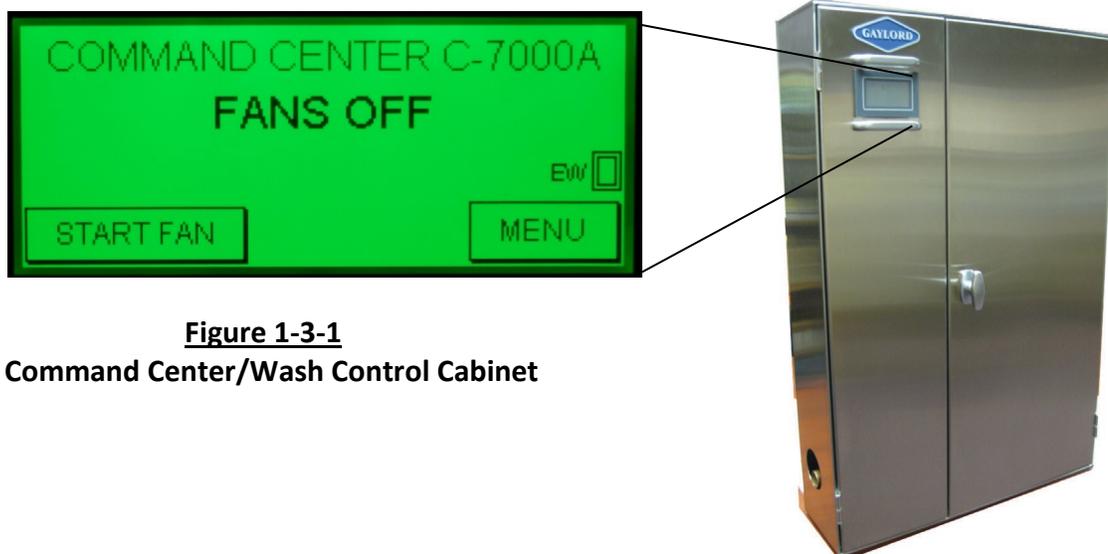


Figure 1-3-1

Command Center/Wash Control Cabinet

Introduction – Cont.

Model Number Sequence

The **C-7000A** Gaylord Command Center is typically installed in a Wash Control Cabinet as shown in Figure 1-3-1. The model number for the Wash Control Cabinet is made up of an alphabetic prefix followed by a series of alphabetic and/or numeric suffixes to designate the type of control and various options. Sequence of model numbers is as follows.

- | | | | | | | | |
|-------------------------------|-----------------------|-----------------|--------------|--------------------|--------------------------|-------------------------|------------------|
| 1. _____ | 2. _____ | 3. _____ | 4. _____ | 5. _____ | 6. _____ | 7. _____ | 8. _____ |
| Prefix
Gaylord
Plumbing | Control | ESP | UVi | ED | #
Total
Sequences | #
Local
Solenoids | Low
Detergent |
| 9. _____ | 10. _____ | 11. _____ | 12. _____ | 13. _____ | 14. _____ | 15. _____ | |
| Remote
Detergent
Pump | Cold
Water
Mist | Light
Switch | Trim
Ring | Security
Access | Plumbing
Loop
Size | 220 Volts | |

Explanation of Pre-Fixes and Suffixes

1. **GPC**
GPC Gaylord Plumbing Cabinet.
2. **Control #**
7000AUtilizes C-7000A Control.
3. **ESP (If Applicable)**
ESPHas inputs and outputs for Electrostatic Precipitator (ESP), typically used for PCU Model RSPC-ESP-OW, and Ventilator Series CG3-UVi-SPC and CG-SPC Series.
4. **UVi (If Applicable)**
UViHas inputs and outputs for Ultraviolet light control (UVi) [1U, 2U, 3U, 6U].
5. **ED (If Applicable)**
ED Has inputs and outputs for Electric Damper Motors (GFBD, GEBD, fully-featured CG3, or fully-featured GX2) [Damper outlet terminals 15, 17, 18, 19, GX, GXT].
6. **# Sequences (Total # Wash Solenoid Valves Controlled)**
S#Indicates Total Number of wash sequences (# of solenoid valves) indicated to wash at different times (Always indicate the Number of Sequences/solenoids controlled).
Ex) S1 = 1 Wash Sequence.
S3 = 3 Wash Sequences.
7. **# of Local Solenoid Valves**
L# Indicates Number of plumbing sequences (solenoids) installed locally **IN** the GPC-7000A Cabinet (Leave Blank if Zero Local Solenoids).
Examples: L1 = 1 Plumbing Solenoid Valve located **IN** the GPC-7000A Cabinet. L3 = 3 Plumbing Solenoid Valves located **IN** the GPC-7000A Cabinet.

Introduction – Cont.

Model Number Sequence – cont.

Notes:

- For 1.00" Loops with Zero Local Solenoid valves - All Plumbing Components are 0.75", with 1.00" Inlet and 1.00" Outlet.
- For 1.00" Loops with 1 or more Local Solenoid valves - All Plumbing Components are 1.00".
- Any other Size Loops with Local Solenoids - All Plumbing Components are the Size specified.

8. **Low Detergent**

LD If cabinet has a Low Detergent Flow switch installed.

9. **Remote Detergent Pump**

RD If control will control a Remote Detergent Pump.

10. **Cold Water Mist**

CM If cabinet has a Cold Water Mist plumbing loop installed.

11. **Light Switch**

LS If cabinet has a Light Switch installed.

12. **Trim Ring**

TR If cabinet has a Trim Ring installed.

13. **Security Access**

SA If cabinet has Security Access (Keyed Lift and Turn latch).

14. **Plumbing Loop Size**

1.00 Indicates Plumbing Loop Size (diameter of pipe to and from the cabinet) in inches.

15. **220 Volts**

220V Indicates that Control is designed to be connected to 220VAC Supply Voltage.

Model Number Examples:

GPC-7000A-S4-LD-1.00

GPC-7000A-ESP-UVi-ED-S4-L2-LD-CM-LS-TR-SA-1.25-220V

Sub Panel Model Number Example:

GPC-SUB-S3-LD-1.25

Model Number/Serial Number Nameplate

The exact Model Number and Serial Number of the GPC-7000A Wash Control Cabinet is stamped on the Wash Control Cabinet Nameplate. Refer to Figure 3-9-1 on Page 3-9 for a sample Nameplate.

Introduction – Cont.

Functions and Features of the C-7000A Command Center

Control of Exhaust and Supply Fans

- Manually Start and Stop fans by pushing the **START FAN** and **STOP FAN** buttons on the touch screen. **Important Note:** If the Ventilator is equipped with a Gaylord **AirVantage Demand Control Ventilation System**, manually starting and stopping the fans is controlled by the AirVantage System, not the C-7000A Command Center. Refer to Figure 1-8-1 for photo of typical AirVantage Command Center.
- May be programmed to automatically Start and Stop fans at specific times each day.
- If the Ventilator is equipped with Gaylord Autostart sensors, the Command Center will automatically start the fans if the temperature in the Ventilator canopy reaches 90°F., or the set point temperature.
- The Command Center may be interfaced with a Building Management System (BMS) for remote Start and Stop of the fans.

Control of Wash Cycles

- Controls the frequency of the Wash Cycle based on the Duty of the cooking equipment, Light Duty, Light/Medium Duty, Medium Duty, Heavy Duty, and Extra Heavy Duty, and the number of hours of fan operation. This function is factory pre-programmed.
- The Length of each wash cycle may be programmed from 3 to 10 minutes.
- May be programmed for a delay of 1 to 99 minutes between Wash Cycles. This may be necessary if the building's hot water system is not capable of supplying the required volume of water at one given time.
- Controls up to 16 Wash Cycles (Solenoid Valves), with each being able to be programmed for Duty of cooking equipment and length of Wash Cycle.
- May be programmed for a Rinse Cycle for equipment, such as an RSPC Pollution Control Unit, that requires a rinse.

Control of Fire Mode and Interface with Fire Extinguishing Systems

- Controls opening and closing of optional electric balancing damper and optional fire dampers in ELXC and ELX Series Ventilators.
- Controls opening and closing of fire damper in CG and CG3 Series Ventilators.
- Includes dry contacts for interfacing Fire Extinguishing System with gas solenoid valve, reset relays, building fire alarm systems, and Building Management Systems (BMS).

Other Features

- Available to operate Detergent Pumps mounted remote from the Gaylord Wash Control Cabinet.
- Built in light switch for Ventilator lights.
- Trim ring to finish off space between Wash Control Cabinet and wall.
- Keyed Lift and Turn Latches for Wash Control Cabinet Door.
- Optional 220 volt system.

Introduction – Cont.

Functions and Features of the C-7000A Command Center – Cont.

Programming

- Easy to program Touch Screen buttons.
- 3 levels of access to program: 1) Operator, 2) Owner, 3) Gaylord Representative or Gaylord Certified Service Agency (CSA). Pass Code required for levels 2 and 3.

Primary Screen Displays (when activated)

- FAN ON ----- FAN OFF ----- DAMPER OPENING ----- DAMPER CLOSING ----- UV LAMPS ON
 - UV LAMPS OFF ----- EXTRACTOR WASH # X ON ----- PLENUM WASH # X ON
 - WASH OFF IN XXX SEC ----- UV SAFETY STANDBY ----- ONE OR MORE UV LAMPS FAILED
 - CALL FOR SERVICE ----- FIRE IN THE HOOD ----- FIRE SYSTEM ACTIVATED
 - CALL FIRE DEPARTMENT ----- NO DETERGENT ----- FILL DETERGENT ----- CHECK PUMP
 - FOR DETERGENT CALL 503-783-0924 ----- FAN AUTOSTARTED DUE TO HIGH TEMP IN HOOD
- FOR NEAREST CERTIFIED SERVICE AGENT VISIT www.gaylordventilation.com OR CALL 503-691-2010.

Introduction – Cont.



Figure 1-8-1
Typical AirVantage
Command Center

Introduction – Cont.

C-7000A Command Center

Overview

The Command Center is typically mounted in the Gaylord Wash Control Cabinet (Refer to Figure 1-3-1). The Command Center controls all functions of Gaylord Ventilators, and other Gaylord equipment as described in Chapter 1. Some programming may be required depending on the type of Gaylord equipment and automatic operations desired. All programming is accomplished by using the touch buttons on the display screen.

Access to Operate and Program

The Gaylord Command Center has three levels of access to obtain information, and to program various functions. They are:

Level 1 – Operator- This level does not require an access code. This level allows the operator to perform the following:

1. Manually start and stop the exhaust fan(s).
Important Note: If the Ventilator is equipped with a Gaylord **AirVantage Demand Control Ventilation System**, manually starting and stopping the fans is controlled by the AirVantage System, not the C-7000A Command Center. Refer to Figure 1-8-1 for photo of typical AirVantage Command Center.
2. Access to a display that gives information on how to obtain Gaylord Service.
3. Access to a display that gives information on how to obtain FORMULA G510EF Detergent for the Ventilator Wash Cycles.

Level 2 – Owner – This level requires a one digit access code, programmed by the owner, or appointed person, to access. At this level the Owner can access the following functions:

1. Program the Current Time and Day of Week.
2. Program the length of the Extractor and Plenum Wash Cycles for ELXC Series Ventilators.
3. Program the length of the Wash Cycle if the Command Center serves a Gaylord Duct Sump, a CG3 Series Ventilator, and/or a Gaylord Pollution Control Unit (RSPC-ESP Series).
4. Set the Equipment Duty for all Wash Cycles.
5. Program Automatic Start and Stop of the exhaust fan for specific times and days of the week if desired.
6. Set the Delay Time between Wash Cycles.
7. If the Ventilator is equipped with UV Lamps, access data that shows total UV Lamp run hours.
8. If the Ventilator is equipped with a thermostatically activated Fire Damper, access data that shows the number of times the thermostat activated. This function is called an Internal Fire Mode.
9. If the Ventilator is equipped with a Fire Extinguishing System, access data that shows the number of times the Fire Extinguishing System has discharged.
10. If the Ventilator is Water Wash, access data that shows the number of times the system has washed and the total number of run time in minutes.

Introduction – Cont.

Access to Operate and Program – Cont.

11. Access data that shows the total number of times the exhaust fan has started.
12. Access data that shows the total run hours of the exhaust fan.
13. Conduct a Plenum and Extractor Wash Cycle test.

Level 3 – Gaylord Certified Service Agent – This Level requires a 3 digit code only available to Gaylord Certified Service Agents or a Gaylord Authorized Representative. This Level also provides access to the password for Level 2. In Level 3 the following functions are programmed:

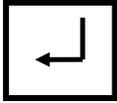
1. Program the Command Center to operate a Remote Detergent Pump.
2. Program the Command Center to operate either an ELXC or CG3 Series Ventilator.
3. Program the Command Center to operate a Gaylord Duct Sump.
4. Program the Command Center to operate an Electric Fire Damper or an Electric Balancing Damper.
5. Program the Command Center to operate UV Lamps.
6. Program the Command Center to operate a Pollution Control Unit (PCU, or ESP Series).
7. Program the number of ESP Power Packs.
8. Program an Autostart Delay after a Ventilator Wash Cycle.
9. Turn on the Autostart function if the Ventilator is equipped.
10. Turn on AirVantage Demand Ventilation Control if the Ventilator is equipped.

Basic Touch Screen Button Functions

MENU	Pushing this button takes you to the next menu display.
START FAN	Pushing this button starts the exhaust fan. <i>(Exception: AirVantage Installed)</i>
STOP FAN	Pushing this button stops the exhaust fan. <i>(Exception: AirVantage Installed)</i>
SYS OK	Pushing this button confirms system status.
RTN	Pushing this button takes you back to the previous display.
PREV	Pushing this button takes you back to the previous display.
QUIT	Pushing this button takes you back to the mode of operation the Command Center is currently in.
NEXT	Pushing this button takes you to the next display.
CHKSY	Pushing this button takes you to a display that checks either the Status of a UV system and/or a Pollution Control Unit.

Introduction – Cont.

Basic Touch Screen Button Functions – Cont.



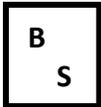
This is an enter button used to enter numbers.



This is an Escape button that takes you back to the previous menu.



This is a Clear button that clears the number just pushed to "0".



This is a Backspace button that removes the last number touched.

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C-7000A Command Center – Level 1, Operator Functions

Starting the Exhaust Fan - Manual Operation

Important Note: If the Ventilator is equipped with a Gaylord **AirVantage Demand Control Ventilation System**, manually starting and stopping the exhaust and Make-up Air fan(s) is controlled by the AirVantage System, not the C-7000A Command Center (Refer to Note 3, page 2-3). If equipped, the **START FAN** and **STOP FAN** buttons are not displayed on the screen (Refer to Figure 2-3-1 and 2-3-2). Refer to the **AirVantage Model “DCV-AV” Series Operators Manual** for complete operational information.

Caution: Always turn on the exhaust fan before turning on the cooking equipment.

Caution: The chemical fire extinguishing system may discharge if the exhaust fan is not on while the cooking equipment is on or still hot.

Caution: If the Ventilator is an ELX or ELXC Series, never operate without the XGS Extractor Grease Filters in place.

Before the exhaust fan is started, and if the Ventilator does not contain UV Lamps, the display will read as shown in Figure 2-1-1. If the Ventilator includes UV Lamps, the display screen will read as shown in Figure 2-1-2.

To start the exhaust fan push **START FAN** on the display screen. Both the exhaust fan and supply fan will start, and if the Ventilator does not include UV Lamps the display will read as shown in Figure 2-1-3 and if it does include UV Lamps the display will read as shown in Figure 2-1-4.



Figure 2-1-1



Figure 2-1-2



Figure 2-1-3



Figure 2-1-4

C-7000A Command Center – Level 1, Operator Functions - Cont.

Starting the Exhaust Fan - Manual Operation – Cont.

If the Ventilator includes UV Lamps and the **UV LAMPS ON** text does not come on, it typically means that a XGS Extractor Filter has been removed or a Ventilator access door or panel has been left open. Refer to the Troubleshooting section of this manual for details.

Note 1, Electric Dampers: The Ventilator may be equipped with a Gaylord Electric Balancing Damper, designated “GEBD” in the Ventilator model number or a Gaylord Fire/Balancing Damper designated “GFBD” in the model number. The Ventilator model number can be found on the Ventilator Nameplate (Refer to Page 3-9 for a sample of the Nameplate). If the Ventilator includes one of these dampers, when the **START FAN** button is pushed there is a 10 second delay before the exhaust fan starts to allow the damper to begin opening. The display will read as shown in Figure 2-2-1 with a countdown clock showing the number of seconds until the exhaust fan comes on. In Figure 2-2-1, the countdown clock is at 6 seconds. Once the exhaust fan comes on the display will read as shown in Figure 2-1-3 or 2-1-4. It takes approximately 45 seconds for the damper to move from the closed to open position and for the exhaust to come up to 100%.

Note 2, Autostart: Typically Ventilators installed in the United States are equipped with a Gaylord Autostart Controller that automatically turns on the exhaust fan if the temperature at the sensors mounted in the Ventilator canopy exceeds 90°F. If the fan was started by Autostart the display will read as shown in Figure 2-2-2. Once the temperature drops below 90°F., or the set point, the fan will continue to run for 15 minutes and then automatically shut off and the display will read as shown in Figure 2-1-1 or 2-1-2. In some instances Ventilators installed outside the United States will include and Autostart Control. Inclusion of an Autostart Control is designated by the suffix “AS” or “DCA” in the Ventilator model number (Refer to Page 3-9 for a sample nameplate).



Figure 2-2-1



Figure 2-2-2

Note 3, AirVantage Demand Ventilation Control System: If the Ventilator is equipped with a Gaylord **AirVantage Demand Control Ventilation System**, manually starting and stopping the fans is controlled by the AirVantage System, not the C-7000A Command Center, and the **START FAN** and **STOP FAN** buttons are not displayed on the screen (Refer to Figure 2-3-1 and 2-3-2). The AirVantage Command Center is mounted in a separate Control Cabinet and is typically located in the kitchen area near the C-7000A Command Center. Refer to Figure 1-8 for photo of typical AirVantage Command Center. Refer to **Air Vantage Model “DCV-AV” Series Operators Manual** for operating instructions.

C-7000A Command Center – Level 1, Operator Functions - Cont.

Starting the Exhaust Fan - Manual Operation – Cont.



Figure 2-3-1
No Start Fan Button



Figure 2-3-2
No Stop Fan Button

Note 4, Low Detergent: The Wash Control Cabinet has a Detergent Sensor that if the Detergent Container is low or if the Detergent Pump is not operating properly, the **COMMAND CENTER C-7000A** display at the top of the screen, will flash alternately between **COMMAND CENTER C-7000A** and **LOW DETERGENT** as shown in Figures 2-3-3 and 2-3-4. This signal is initiated only during a Wash Cycle, but will continue to flash alternately until the detergent container is filled or the pump repaired and then continue until the first Wash Cycle has washed for approximately 10 seconds.



Figure 2-3-3



Figure 2-3-4

Note 5, SYS OK and CHKSYS Button (System OK and Check System): While the exhaust fan is on, at the bottom of the display as shown in Figure 2-3-5 there is a button that reads **SYS OK**. If the system includes a UV System or if there is a PCU (Pollution Control Unit) on the system and the button reads **CHKSYS** as shown in Figure 2-3-6, it indicates there is a problem with one of both of the Systems. Pushing this button brings up screens that advises the status of the UV and PCU systems. Refer to Pages 2-13 and 2-14 for detailed information on the **CHKSYS** button.



Figure 2-3-5



Figure 2-3-6

C-7000A Command Center – Level 1, Operator Functions - Cont.

Starting the Exhaust Fan - Manual Operation – Cont.

Note 6, Extractor Wash Notification: While in a **FAN OFF** status, if the **EW** (Extractor Wash) box is highlighted and shown in Figure 2-4-1, it indicates that the number of **FAN ON** hours of operation for an Extractor Wash has been satisfied and that as soon as the exhaust fan is turned on an Extractor Wash Cycle will begin. Refer to information beginning on Page 2-10 for complete details and screen displays.

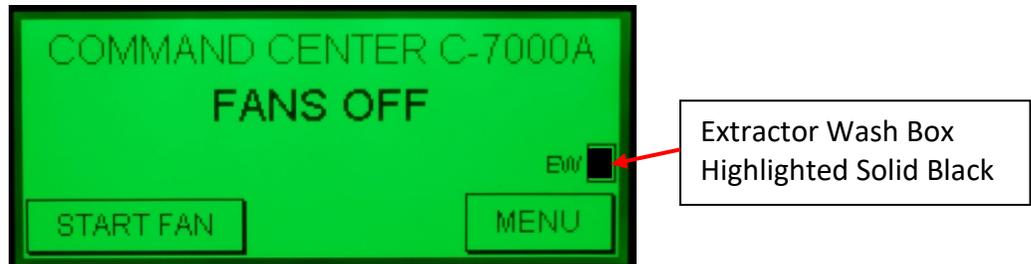


Figure 2-4-1

Stopping the Exhaust Fan – Manual Operation

Important Note: If the Ventilator is equipped with a Gaylord **AirVantage Demand Control Ventilation System**, manually starting and stopping the exhaust and Make-up Air fan(s) is controlled by the AirVantage System, not the C-7000A Command Center (Refer to Note 3). If equipped, the **START FAN** and **STOP FAN** buttons are not displayed on the screen (Refer to Figure 2-3-1 and 2-3-2). Refer to the **Air Vantage Model “DCV-AV” Series Operators Manual** for complete operational information.

Caution: Always turn off the cooking equipment and allow cooling before turning off the exhaust fan. The chemical fire extinguishing system may discharge if the cooking equipment is on or hot when the exhaust fan is off.

Before the exhaust fan is stopped, and if the Ventilator does not contain UV Lamps, the display will read as shown in Figure 2-4-2. If the Ventilator includes UV Lamps, the display screen will read as shown in Figure 2-4-3.

To stop the exhaust fan push **STOP FAN** on the display screen. Both the exhaust fan and supply fan will stop, and if the Ventilator does not include UV Lamps the display will read as shown in Figure 2-5-1 and if the Ventilator includes UV Lamps, the display screen will read as shown in Figure 2-5-2.



Figure 2-4-2



Figure 2-4-3

C-7000A Command Center – Level 1, Operator Functions - Cont.

Stopping the Exhaust Fan – Manual Operation – Cont.



Figure 2-5-1



Figure 2-5-2

Note 1, Electric Dampers: The Ventilator may be equipped with a Gaylord Electric Balancing Damper, designated “GEBD” in the Ventilator model number or a Gaylord Fire/Balancing Damper designated “GFBD” in the model number. The Ventilator model number can be found on the Ventilator Nameplate (Refer to Page 3-9 for a sample of the Nameplate). If the Ventilator includes one of these dampers, when the **STOP FAN** button is pushed the exhaust fan will go off and damper will begin closing. The display will read as shown in Figure 2-5-3 with a countdown clock showing the number of seconds until the damper closes. In Figure 2-5-3 the countdown clock is at 8 seconds. Once the damper closes the display as shown in Figure 2-5-1 or 2-5-2 will come up.



Figure 2-5-3



Figure 2-5-4

Note 2, Autostart Controller: Typically Ventilators installed in the United States are equipped with a Gaylord Autostart Controller that automatically turns on the exhaust fan if the temperature at the sensors mounted in the canopy of the Ventilator exceeds 90°F., or the set point. If the temperature was above 90°F., or the set point when the **STOP FAN** button was pushed the exhaust and supply fan will stay on and the display will read as shown in Figure 2-5-4. Once the temperature drops below 90°F., or the set point, the fan will continue to run for 15 minutes and then automatically shut off and the display will read as shown in Figure 2-5-1 or Figure 2-5-2.

C-7000A Command Center – Level 1, Operator Functions - Cont.

Stopping the Exhaust Fan – Manual Operation – Cont.

Note 3, Plenum Wash Notification: While in a **FAN ON** status, if the **PW** (Plenum Wash) box is highlighted and shown in Figure 2-6-1, it indicates that the number of **FAN ON** hours of operation for an Plenum Wash has been satisfied and that as soon as the exhaust fan is turned off a Plenum Wash Cycle will begin. Refer to information beginning on Page 2-6 for complete details and screen displays.



Figure 2-6-1

Wash Cycle Notification and Monitoring

Overview

The Wash Cycles for the Ventilator Extractor, Ventilator Plenum, Pollution Control Unit (PCU), and Duct Sump are programmed to come on based on the Cooking Equipment Duty. The programmed Cooking Equipment Duty dictates the number of hours of fan operation before the Wash Cycle comes on. Refer to Table T-3-1-1, Typical Example of Frequency and Length of Wash Cycles, on Page 3-1 for typical applications. Washing the Ventilator based on hours of operation for specific Cooking Equipment Duties provides the optimum in cleaning performance with the lowest possible water and detergent consumption.

Screen Display When in a Wash Cycle – ELXC Series Ventilator

The ELXC Ventilator has two Wash Cycles, the Plenum Wash and the Extractor Wash. The Plenum Wash only comes on when the exhaust fan is is off and the Extractor Wash only comes on when the exhaust fan is on. A Wash Cycle sequence is as follows:

Plenum Wash Cycle Notification and Monitoring

A Plenum Wash Cycle sequence is as follows:

1. While the exhaust fan is off, and when the hours of fan operation have been satisfied, as programmed by the Cooking Equipment Duty, the Plenum Wash will start and the display as shown on Figure 2-7-1 will come up.
2. The countdown clock shows the number of seconds left before the Wash Cycle turns off. The example in Figure 2-7-1 shows that Plenum Wash 1 is on and that there are 10 seconds left in the Wash Cycle.
3. Upon completion of the Plenum Wash, and if there are no additional Plenum Washes (Plenum 2, 3, 4 etc.) then the display as shown in Figure 2-7-2 or 2-7-3 will come up.

C-7000A Command Center – Level 1, Operator Functions - Cont.

Plenum Wash Cycle Notification and Monitoring – Cont.



Figure 2-7-1



Figure 2-7-2



Figure 2-7-3

Important Note: The Plenum Wash may be stopped at any time by pushing the **STOP WASH(S)** button as shown in Figure 2-7-1.

4. If there are additional Plenum Washes, and their fan operation hours have been satisfied, there is a delay before the next Plenum Wash begins. The length of the delay is programmed in the control. In this example there is a delay between Plenum Wash 1 and Plenum Wash 2 as shown in Figure 2-7-4.
5. The countdown clock shows the number of seconds left before the delay ends. The example in Figure 2-7-4 shows that Plenum Wash 1 Delay is on and that there are 5 seconds left in the Delay.



Figure 2-7-4



Figure 2-7-5

6. Upon completion of the Delay, Plenum Wash 2 will begin and the display as shown on Figure 2-7-5 will come up. The example in Figure 2-7-5 shows that Plenum Wash 2 is on and there are 2 seconds until the wash ends.

C-7000A Command Center – Level 1, Operator Functions - Cont.

Plenum Wash Cycle Notification and Monitoring – Cont.

7. Additional Plenum Washes, with a delay between each, would continue in the same sequence if the hours of fan operation have been satisfied.
8. Upon completion of all the Plenum Wash Cycles, the display as shown on Figure 2-5-1 or 2-5-2 will come up.

Plenum Wash for a Pollution Control Unit (PCU)

If the Command Center is controlling a PCU, Gaylord Model RSPC-ESP Series, the Command Center has been factory or Gaylord Service Agency programmed to recognize that a PCU is on the system. A PCU is always programmed to wash as the last Plenum Wash. The Wash Cycle sequence for a PCU is as follows:

1. Wash 1
2. Delay 1
3. Wash 2
4. Delay 2
5. Rinse
6. Wash Cycle Off

The following is a detailed sequence of the PCU Wash Cycles:

1. While the exhaust fan is off, and when the hours of fan operation have been satisfied as programmed by the Cooking Equipment Duty, the PCU Plenum Wash (the last Plenum Wash) will start and the display as shown on Figure 2-8-1 will come up. In this example Plenum 3 has been programmed for the PCU Wash.
2. The countdown clock shows the number of seconds left before the Wash #1 turns off. The example in Figure 2-8-1 shows that Plenum Wash 3, Wash Cycle 1, is on and that there are 7 seconds left in Wash #1.
3. Upon completion of PCU Wash #1 the display as shown on Figure 2-8-2 comes up. There is a delay, as programmed, before PCU Wash #2 begins and the countdown clock shows the number of seconds left before the Delay #1 ends. The example in Figure 2-8-2 shows that Plenum Wash 3, (PCU Wash #1) Delay is on and that there are 5 seconds left in the Delay.



Figure 2-8-1



Figure 2-8-2

C-7000A Command Center – Level 1, Operator Functions - Cont.

Plenum Wash for a Pollution Control Unit (PCU) – Cont.

4. Upon completion of Delay #1, the display as shown in Figure 2-9-1 comes up and Plenum Wash 3, PCU Wash #2 begins. The countdown clock shows the number of seconds left in PCU Wash #2, in this example 2 seconds.
5. Upon completion of PCU Wash #2 the display as shown on Figure 2-9-2 comes up. There is a delay, as programmed, before the Rinse Cycle begins and the countdown clock shows the number of seconds left before the Delay #2 ends, 4 seconds in this example.



Figure 2-9-1



Figure 2-9-2

6. Upon completion of Delay #2, the display as shown on Figure 2-9-3 comes and the Rinse Cycle begins and the countdown clock shows the number of seconds left before the Rinse Cycle ends, in this example 17 seconds.
7. Upon completion of the Rinse Cycle, if there are no additional PCU Plenum Washes (Plenum 2, 3, 4 etc) then the display as shown in Figure 2-9-4 will come up.



Figure 2-9-3



Figure 2-9-4

Important Note: The Plenum Wash may be stopped at any time by pushing the **STOP WASH(S)** as shown in Figure 2-10-1.

C-7000A Command Center – Level 1, Operator Functions - Cont.

Extractor Wash Cycle Notification and Monitoring

1. While the exhaust fan is on, and when the hours of fan operation have been satisfied as programmed by the Cooking Equipment Duty, the Extractor Wash will start and the display as shown on Figure 2-10-1 will come up.

Important Note: there is a 6 second delay between the moment the control was notified that the hours of fan operation have been satisfied and the actual start of the Extractor Wash. The reason for the delay is if the hours were satisfied while a given fan was off, when the fan is started the 6 seconds allows the fan to ramp up to speed before the Wash Cycle begins.

2. The countdown clock shows the number of seconds left before the Wash Cycle turns off. The example in Figure 2-10-1 shows that Extractor Wash 1 is on and that there are 24 seconds left in the Wash Cycle.
3. Upon completion of the Extractor Wash, and if there are no additional Extractor Washes (Extractor 2, 3, 4 etc.) then the display as shown in Figure 2-10-2 will come up.



Figure 2-10-1



Figure 2-10-2

4. If there are additional Extractor Washes, and their fan operation hours have been satisfied, the display as shown on Figure 2-10-1 will come up, and there is a delay, as programmed in the control, before the next Extractor Wash Cycle begins. The countdown clock shows the number of seconds left before the delay ends. The example in Figure 2-10-3 shows that Extractor Wash 1 Delay is on and that there is 0.6 minutes left in the Delay.



Figure 2-10-3



Figure 2-10-4

C-7000A Command Center – Level 1, Operator Functions - Cont.

Extractor Wash Cycle Notification and Monitoring – Cont.

5. Upon completion of the Delay, the next Extractor Wash will begin and the display as shown on Figure 2-10-4 will come up. The example in Figure 2-10-2 shows that Extractor Wash 2 is on and it will shut off in 20 seconds.
6. Additional Extractor Washes, and if the hours of fan operation have been satisfied, would continue in the same sequence.
7. Upon completion of all the Extractor Wash Cycles, the display as shown on Figure 2-11-3 or 2-11-4 will come up.



Figure 2-11-1



Figure 2-11-2

Important Note: The Extractor Wash may be stopped at any time by pushing the **STOP WASH(S)** as shown in Figure 2-10-3.



Figure 2-11-3



Figure 2-11-4

C-7000A Command Center – Level 1, Operator Functions - Cont.

UV System Monitoring

If the Ventilator includes UV Lamps the Command Center monitors the status of three Primary functions. They are:

1. **UV System Operating Properly.** While the exhaust fan is on, and if the UV system is operating properly the display will read as shown in Figure 2-12-1.
2. **UV Lamp Operation.** If one or more of the UV Lamps are not operating, the display will read as shown in Figure 2-12-2 with the exhaust fan on and Figure 2-12-3 with the exhaust fan off. Refer to the Operation, Maintenance, and installation Manual for the ELXC and ELXC-UVi Series Ventilators for troubleshooting.
3. **UV Safety Standby.** If one of the UV Safety Interlocks activates, typically because an access panel or door is left open, the control goes into a UV Standby mode and the display will read as shown in Figure 2-12-4 with the exhaust fan on. The UV bulbs turn off and will come back on once the problem has been corrected. The **UV STANDBY** text only displays while the exhaust fan in on, not while the exhaust fan is off. Refer to the Operation, Maintenance, and installation Manual for the ELXC and ELXC-UVi Series Ventilators for troubleshooting.



Figure 2-12-1



Figure 2-12-2



Figure 2-12-3



Figure 2-12-4

C-7000A Command Center – Level 1, Operator Functions - Cont.

UV System Monitoring – Cont.

The UV system may also be checked by using the Check System button. While the exhaust fan is on, at the bottom of the display as shown in Figure 2-13-1, the button in the center reads **SYSOK** which stands for System OK. If this button reads **CHKSYS**, which stands for Check System, as shown in Figure 2-13-2 it indicates there is a malfunction. When this button is pushed, a display as shown in Figure 2-13-3 will come up. Pushing the **UV CHECK STATUS BUTTON** the display will read as shown in Figure 2-13-4.



Figure 2-13-1



Figure 2-13-2



Figure 2-13-3



Figure 2-13-4

If text as shown in Figure 2-13-4 comes up, it means there is a major failure with the UV System and a Gaylord Service Agency must be called.

C-7000A Command Center – Level 1, Operator Functions - Cont.

PCU (Pollution Control Unit) Monitoring

If the Ventilator includes a Pollution Control System, Gaylord SPC Series (Smoke Pollution Control) or if there is a PCU (Pollution Control Unit) Gaylord Model RSPC-ESP Series, remote from the Ventilator, the Command Center monitors the status of two basic functions 1) The status of the ESP Cells and Power Pack (Electro Static Precipitator), and 2) if the system uses chemical to control the odor, the system notifies of a Low Odeur Control Chemical condition. To check the status, proceed as follows:

1. While the exhaust fan is on, at the bottom of the display as shown in Figure 2-14-1, the button in the center reads **SYSOK** which stands for System OK. If this button reads **CHKSYS**, which stands for Check System, as shown in Figure 2-14-2, it indicates there is a malfunction with the PCU. When this button is pushed, a display as shown in Figure 2-14-3 will come up.



Figure 2-14-1



Figure 2-14-2



Figure 2-14-3

Important Note: In reference to Figure 2-14-3, the text at the bottom left of the display indicates the status of the detergent for the Wash Cycle of the PCU. If the detergent pump is operating properly, and there is detergent in the Detergent Container, the text will read **DET OK** (Detergent OK) as shown in Figure 2-14-3. If the Detergent Pump is not operating properly and or there is no detergent in the Detergent Container, the text will read **NO DET** (No Detergent). In this case check the level of detergent in the Detergent Container and if full, refer to Page 6-2 for corrective action.

C-7000A Command Center – Level 1, Operator Functions - Cont.

PCU (Pollution Control Unit) Monitoring – Cont.

1. To check the detailed status, push the **ESP CHECK STATUS** button, as shown in Figure 2-14-3, and the display as shown in Figure 2-15-1 will come up if the system is operational or Figure 2-15-2 if there is a problem with the Cells or Power Pack. The “A” and the “B” squares indicate that there are two ESP Power Packs. Each Power Pack can serve up to 4 ESP Cells, so if there were 8 Cells there would be two lettered squares, as shown in Figures 2-15-1 and 2-15-2, 12 cells three lettered squares, and 16 Cells four lettered squares. If there are no problems with a Power Pack or associated Cells, the lettered squares will have a dark background as shown in Figure 2-15-1 and the text at the bottom will read **ESP OK**. If there is a problem with the ESP Cells or Power Pack(s), the display as shown in Figure 2-15-2 will come up and the text at the bottom will read **ESP FAULT**. In this example, the “A” Power Pack is operating properly and the “B” Power Pack has a problem.
2. If Spray Odor Control is used, and if there is chemical in the tank, the display will include the text **LOW ODOR CHEM OK** as shown in Figures 2-15-1 and 2-15-2. If the chemical tank is empty, the display will include the text **LOW ODOR CHEM LOW** as shown in Figure 2-15-3.

Important Note: The recommended spray odor control chemical is Gaylord Formula GS-710 and is available from the same Gaylord Distributor that provides Formula G-510EF used for the Ventilator Wash system. See page 2-19 for ordering information.

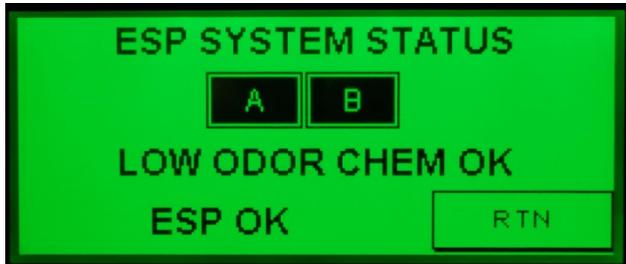


Figure 2-15-1



Figure 2-15-2

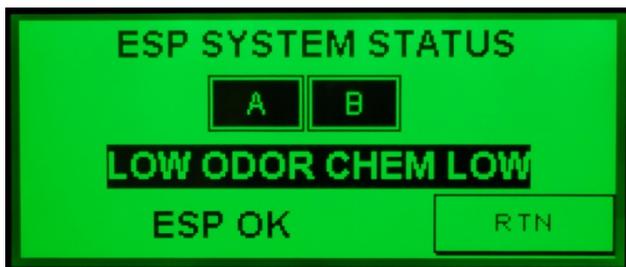


Figure 2-15-3



Figure 2-15-4

3. Push the **RTN** button (Return) twice to return to the main screen as shown in Figure 2-15-4.

C-7000A Command Center – Level 1, Operator Functions - Cont.

Fire Extinguishing System Monitoring (External Fire Mode)

If a Ventilator includes a Fire Extinguishing System, the Command Center interacts with the fire system and various building systems. This is referred to as an External Fire Mode. If the Fire Extinguishing System discharges, the Command Center reacts as follows:

1. The display as shown on Figure 2-16-1 comes up. This display will stay on until the fire system is reset.
Important Note: Some municipalities want the Plenum Wash to come on during an External Fire Mode. If this is desired, terminals 21 and 22 are jumped at the factory or at the site by a Gaylord Service Agency. When jumped, after a 60 second delay from activation of an External Fire Mode, the Plenum Wash will come on for the length of time programmed. The Plenum Wash will continue until the Fire Extinguishing System has been recharged. The water can be turned off manually by closing the water valve inside the Plumbing Compartment (Refer to Figure 6-2-1).
2. The protected cooking equipment and possibly other cooking equipment will shut off.
3. If the Fire Extinguishing System is wired to a building fire alarm system the alarm will activate.
4. If the Fire Extinguishing System is wired to a building management system (BMS) it will notify of a fire condition.
5. If the Fire Extinguishing System is wired to the Gaylord Command Center the following will occur:
 - a) If the exhaust and supply fan were on the exhaust fan would stay on and the supply fan would shut off. If the exhaust and supply fans were off, the exhaust fan would come on and the supply fan would stay off.
 - b) If the Ventilator Wash Cycle was on it would shut off.
 - c) If the Ventilator is equipped with a Gaylord Electric Balancing Damper (model GEBD) or a Gaylord Fire/Balancing Damper (model GFBD) the damper will open.
 - d) If the Ventilator is equipped with UV Lamps the Lamps will shut off.
6. After discharge, the Fire Extinguishing System must be recharged and once recharged the display as shown on Figure 2-16-2 will come up. The exhaust fan can now be started and the cooking equipment can be turned back on.



Figure 2-16-1



Figure 2-16-2

Important Note: Refer to the Ventilator Control Matrix on Page 3-7 for information on all the interactions with the building systems when the Ventilator Internal Fire Mode is activated (Fire Extinguishing System discharge).

C-7000A Command Center – Level 1, Operator Functions - Cont.

Ventilator Fire Mode Monitoring (Internal Fire Mode)

The ELXC Series Ventilator may be equipped with a combination Gaylord Fire/Balancing Damper, designated “GFBD” in the Ventilator model number. The Ventilator model is stamped on the Ventilator Nameplate (Refer to Page 3-9 for a sample Nameplate). If equipped, a thermostat will be mounted at the entrance of the exhaust duct collar. In the event of a fire, under or within the Ventilator, and if the thermostat reaches its set point, the following will occur:

1. The display as shown in Figure 2-17-1 will stay on for 5 seconds, then, the display as shown in Figure 2-17-2 will come up and stay on for 5 seconds, and then the display as shown on Figure 2-17-3 will come up.
2. The fire damper will close preventing fire from extending into the exhaust duct and fan.
3. The exhaust and supply fans will shut off.
4. If the Ventilator includes UV Lamps, the UV Lamps will shut off.
5. If the Ventilator was in a Wash Cycle it would shut off.
6. If the Command Center is wired to a building fire alarm system the alarm will activate.
7. If the Command Center is wired to a building management system it will notify of a fire condition.
8. Once the thermostat cools below its set point, the system goes into a 120 second cool down cycle and the display as shown in Figure 2-17-4 will come up. This display includes a countdown clock that shows the number of seconds (114 seconds in this example) until the **COOL DOWN CYCLE** ends and then goes back to the START FAN Screen.

Important Note: If the Command Center is controlling a CG3 Series Ventilator, and the thermostat reaches the its set point, the sequence of events is the same as shown above, numbers 1 -8.



Figure 2-17-1



Figure 2-17-2



Figure 2-17-3



Figure 2-17-4

C-7000A Command Center – Level 1, Operator Functions - Cont.

Ventilator Fire Mode Monitoring (Internal Fire Mode) – Cont.

9. Pushing the **CANCEL** button (Figure 2-17-4) returns you to the **START FAN** mode as shown on Figure 2-18-1.

Important Note: Refer to the Ventilator Control Matrix on Page 3-7 for information on all the interactions with the building systems when the Ventilator Internal Fire Mode is activated.



Figure 2-18-1

Service Information

The Operator may access Service Information by performing the following:

1. While the exhaust fan is either ON or OFF, push the **MENU** button as shown in Figure 2-18-2 and the display as shown in Figure 2-18-3 will come up.
2. Push the **SERVICE INFORMATION** button and the display as shown in Figure 2-18-4 will come up giving information on how to contact a Gaylord Service Agent.



Figure 2-18-2



Figure 2-18-3



Figure 2-18-4

C-7000A Command Center – Level 1, Operator Functions - Cont.

Detergent Ordering Information

The Operator may access Detergent Ordering Information by performing the following:

1. While the exhaust fan is either ON or OFF, push the **MENU** button and the display as shown in Figure 2-19-2 will come up.
2. Referring to Figure 2-19-2, push the **DETERGENT INFORMATION** button and the display as shown in Figure 2-19-3 will come up.

Important Note Regarding Detergent: Refer to Page 4-2 for detailed information on Gaylord Formula G510EF detergent. Model ELXC Series Ventilators must use Formula G510EF (or equivalent) Low Foaming Detergent. Failure to do so will result in foam being pulled up into the duct work during an Extractor Wash (fan on). While the exhaust duct should be grease and water tight, they often are not, and leak.

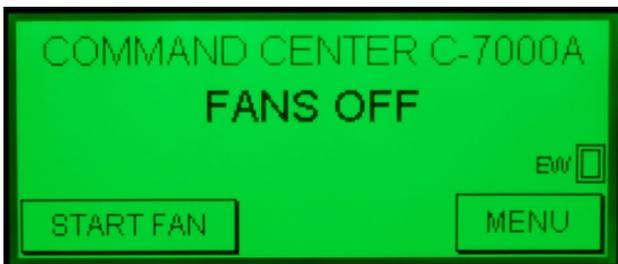


Figure 2-19-1



Figure 2-19-2

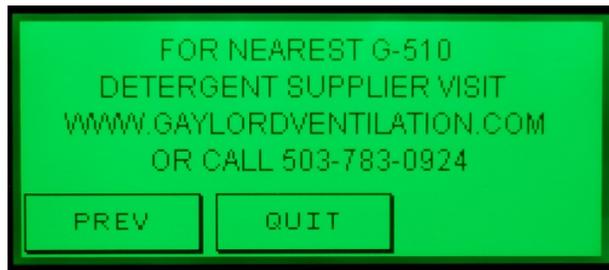


Figure 2-19-3

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C-7000A Command Center – Level 2, Owner Service Functions

Accessing Level 2 for the first time

To access Level 2 for the first time proceed as follows:

1. With the exhaust fan either on or off, push the **MENU** button as shown in Figure 2-21-1 and the display as shown in Figure 2-21-2 will come up.
2. Push the **NEXT** button and the display as shown in Figure 2-21-3 will come up.
3. Push the **OWNER SERVICE FUNC** button and the display as shown in Figure 2-21-4 will come up.
4. Push the “0” and the display as shown in Figure 2-21-5 will come up.



Figure 2-21-1



Figure 2-21-2



Figure 2-21-3



Figure 2-21-4

5. The Default Code is “1”. Push the number “1” button and the display will read as shown on Figure 2-21-6.
6. Then push the enter arrow and the first set of programming buttons will come up as shown in Figure 2-23-1.



Figure 2-21-5



Figure 2-21-6

C-7000A Command Center – Level 2, Owner Service Functions – Cont.

Accessing Level 2 for the First Time -Cont

7. From this display the Time and Day, and Wash Cycle Times can be programmed. Instructions for programming the Time and Day begins on page 2-24 and Wash Cycle Times on Page 2-26.
8. Pushing the **NEXT** button will take you to programming the **Delay Time BETWEEN WASHES** as shown on Figure 2-22-2.



Figure 2-22-1



Figure 2-22-2

9. Pushing **NEXT** again will take you to programming **SET FAN AUTO START-STOP**, checking **TOTAL COUNTS** and changing **PASSWORD** as shown on Figure 2-22-3. Instructions for **SET FAN AUTO START-STOP** begin on Page 2-32 Instructions for checking TOTAL COUNTS begin on Page 2-40. Instructions for changing level 2 PASSWORD begins on Page 2-23.
10. Pushing the **NEXT** button will take you to the **PLENUM WASH TEST** and **EXTRACTOR WASH TEST** functions as shown on Figure 2-22-4. Instructions for conducting these tests begin on Page 2-41.



Figure 2-22-3

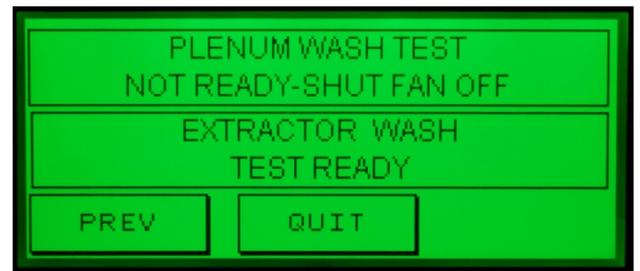


Figure 2-22-4

11. Pushing the **PREV** (Previous) button will take you back to the previous display.
12. Pushing the **QUIT** button will take you to the display for the mode of operation that the Command Center is currently in.

C-7000A Command Center – Level 2, Owner Service Functions – Cont.

Creating a New Level 2 Password

A Level 2 password is a single digit 1 through 9. To create a new Level 2 password, proceed as follows:

1. Once you have entered the Owner Service Function using the Default Code "1" as described in the preceding pages, continue pushing the **NEXT** button, as shown on Figure 2-23-1, until the **PASSWORD** button is displayed as shown in Figure 2-23-2.
2. Push the **PASSWORD** button and the display as shown in Figure 2-23-3 will come up.



Figure 2-23-1



Figure 2-23-2

3. Push the number **1** and the display as shown in Figure 2-23-4 will come up.
4. Push the new desired password, a single digit **1** through **9**, (5 in this example) and the display will read as shown in Figure 2-23-5 with the new password.



Figure 2-23-4



Figure 2-23-5

5. Push the enter arrow and the display as shown in Figure 2-23-6 will come up showing the new code you just entered. The new password is now programmed.

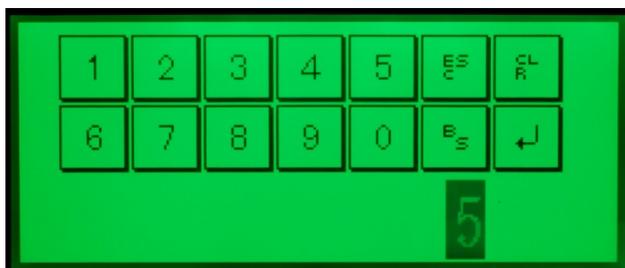


Figure 2-23-6



Figure 2-23-7

6. Push the **PREV** button once or multiple times to return to the desired display.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Time of Day and Day of Week

To set the time of day and day of week proceed as follows:

1. Enter Level 2 as described in the Accessing Level 2 section on the previous page. The display as shown on Figure 2-24-1 will come up.
2. Push the **SET TIME AND DAY** button and the display as shown in Figure 2-24-2 will come up.



Figure 2-24-1



Figure 2-24-2

3. First set the day of the week. The days are numbered 0 through 6, with "0" for Sunday, "1" for Monday, "2" for Tuesday etc., and ending with "6" for Saturday.
4. To set the Day of the Week press the number displayed to the far right of the **DAY OF WEEK** ("1" in this example) as shown in Figure 2-24-2 and the display as shown in Figure 2-24-3 will come up.
5. Push the appropriate number (0 through 6) for the current day of the week (5 in this example for Friday) and the display will read as shown in Figure 2-24-4.
6. Push the enter arrow button and the display as shown in Figure 2-25-1 will come up. The day of the week is now programmed.



Figure 2-24-3



Figure 2-24-4

7. Next set the Time of Day. The clock in the Command Center is a 24 hour (military) clock. The hour is set first and then the minutes and seconds.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Time of Day and Day of Week – Cont.



Figure 2-25-1



Figure 2-25-2

8. To set the hour push the number displayed next to **HOUR (24 HR CLOCK)** (13 in this example for 1:00 p.m.) as shown in Figure 2-25-1 and the display as shown in Figure 2-25-2 will come up.
9. Push the appropriate number for the current hour. Example: push number **9** for 9 a.m. or **14** for 2:00 p.m. or **24** for midnight. Once the numbers have been pushed (14 in this example) the display will read as shown in Figure 2-25-3.
10. Push the enter arrow button and the display as shown in Figure 2-25-4 will come up. The hour of day is now programmed.



Figure 2-25-3



Figure 2-25-4

11. To set the minutes and seconds push the number next to the **MINUTE-SECOND** text (3739 in this example), as shown in Figure 2-25-4 and the display as shown in Figure 2-26-1 will come up.
12. Push four numbers, the first two for the number of minutes past the hour and the second two for the number of seconds past the hour. Once the numbers have been pushed (**2250**, 10:30 and 50 seconds p.m., in this example) the display will read as shown if Figure 2-25-6.



Figure 2-25-5



Figure 2-25-6

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Time of Day and Day of Week – Cont.

13. Push the enter arrow button and the display as shown in Figure 2-26-1 will come up. The Minutes and Seconds of the day are now programmed.
14. Push the **PREV** button once of multiple times to return to the desired display.



Figure 2-26-1

The day of the week and time of day is now programmed. In this example, Figure 2-26-1, it is Friday, 2:22 and 50 seconds p.m. 1422 HRS and 50 Seconds.

Programming the Wash Cycles for Model ELXC Series Ventilators

Overview

The ELXC Series Ventilators have two wash manifolds, the Extractor Wash Manifold, to wash accumulated grease out of the Extractors, and the Plenum Wash Manifold to wash the accumulated grease out of the Plenum area. The manifolds are connected to the Wash Control Cabinet (Refer to Figure A-2-1).

The two wash manifolds operate independent of each other as the Extractor, Grease Canal and Grease Gutter typically need washing more frequently than the Plenum area. The Wash Timers in the Command Center are programmed to initiate either the Extractor Wash or Plenum Wash based on the number of hours the exhaust fan has been on. The frequency and the length of the Wash Cycle is determined by the type of cooking equipment involved; Light Duty, Light/Medium Duty, Medium Duty, Heavy Duty, and Extra Heavy Duty. This is referred to as the “Equipment Duty”. Refer to Table T-3-1-1, Typical Example of Frequency and Length of Wash Cycles, on Page 3-1 for typical application. Washing the Ventilator based on hours of operation for specific Duties of equipment provides the optimum in cleaning performance with the lowest possible water and detergent consumption.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Wash Cycles for Model ELXC Series Ventilators – Cont.

Frequency and Length of Wash

The frequency and the length of the Wash Cycles are primarily determined by the type of cooking equipment involved; Light Duty, Light/Medium, Medium Duty, Heavy Duty, and Extra Heavy Duty as shown Table T-3-1-1. The number of hours before the Wash Cycle starts and the length of the Wash Cycle, are based on average conditions. Table T-3-1-1 shows an example of typical frequencies and length of the wash times. Actual frequency and times necessary to adequately clean the Ventilator may vary depending on the following:

1. Actual amount of cooking within the hours of fan operation.
2. Type of food product being cooked and the appliance that it is cooked upon.
3. Water pressure. Required pressure is 40 psi Min. to 80 psi Max.
4. Water temperature. Required temperature is 140°F. Min. to 180°F. Max.
5. Type of detergent used. Refer to Page 4-2 for recommend detergent.
6. Ratio of detergent to water.

The number of Hours of Fan Operation and the Length of the Wash Cycle are programmed in the Command Center. The length of the Wash Cycle, for the Extractor and the Plenum, can be increased or decreased, independently, as needed to adequately clean the Ventilator. The minimum wash time is 3 minutes and the maximum is 10 minutes. The Hours of Fan Operation, before a wash begins, are factory set and cannot be changed however the Duty of the cooking equipment can be changed to either increase or decrease the Hours of Fan Operation before a Wash Cycle comes on. As an example, if you have Medium Duty equipment and the Ventilator is not washing adequately, the Command Center may be re-programmed, for either the Extractor Wash and/or Plenum Wash, to Heavy Duty, reducing the Hours of Fan Operation for the Extractor Wash from 12 hours to 4 hours and the Plenum Wash from 36 hours to 16 hours.

Wash Cycle Example

Extractor Wash Cycle – The Extractor Wash Cycle only comes on while the exhaust fan is on, typically during cooking. Using Table T-3-1-1 on page 3-1, if the cooking equipment under the Ventilator is Heavy Duty then the Extractor Wash would come on every 4 hours of fan operation, stay on for 3 minutes and then shut off.

Plenum Wash Cycle - The Plenum Wash Cycle only comes on while the exhaust fan is off. Using Table T-3-1-1 on page 3-1, if the cooking equipment under the Ventilator is Heavy Duty then the Plenum Wash would come on every 16 hours of exhaust fan operation, stay on for 3 minutes and then shut off. Typically the Plenum Wash Cycle will begin, if the number of fan on hours has been satisfied, immediately after the exhaust fan has been shut off.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Equipment Duty and the Length of the Wash Cycles

To set the Wash Cycle Times and Equipment Duty proceed as follows:

1. Enter Level 2 as described in the Accessing Level 2 section on Page 2-20. The display as shown on Figure 2-28-1 will come up.
2. Push the **SET WASH CYCLE TIMES** button and the display as shown in Figure 2-28-2 will come up.



Figure 2-28-1

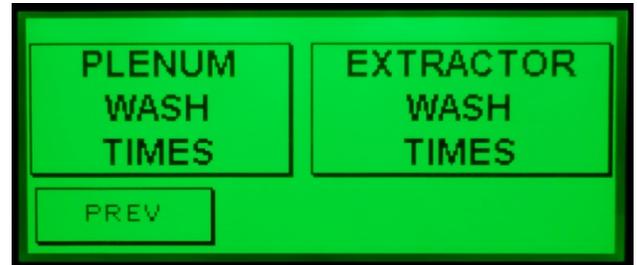


Figure 2-28-2

3. Push the **PLENUM WASH TIMES** button and the display as shown in Figure 2-28-3 will come up.
4. **PLENUM 1**, displayed in Figure 2-28-3 is for the Plenum Wash of Ventilator number 1. Push the **EQUIPMENT DUTY** button and then again continuing until the desired Equipment Duty is displayed, **LIGHT**, **LIGHT-MED**, **MEDIUM**, **HEAVY** or **EXTRA HEAVY**. The hours displayed below the **EQUIPMENT DUTY** button is the Duty and the number of hours of fan operation before the Wash Cycle begins (Refer to Figure 2-28-3, **MEDIUM** Duty with 36 HRS) was selected. Refer to Table T-T-3-1-1 on page 3-1 for guidance on the Wash Duty for specific cooking equipment.
5. Once the Wash Duty has been selected the length of the Plenum Wash Cycle needs to be programmed.

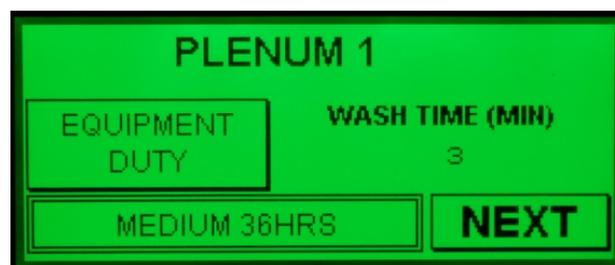


Figure 2-28-3

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Equipment Duty and the Length of the Wash Cycles – Cont.

6. To program the length of the Plenum Wash Cycle push the number below **WASH TIME (MIN)** text (**3** in this example, Figure 2-28-3), and the display as shown in Figure 2-29-1 will come up. The length of the Plenum Wash Cycle can be set from 3 to 10 minutes. Refer to Table T-3-1-1 for minimum suggested times. Push the appropriate numbers on the display for the desired length of the Plenum Wash Cycle (**5** in this example, Figure 2-29-2) and then push the enter arrow button and the display as shown in Figure 2-29-3 will come up.

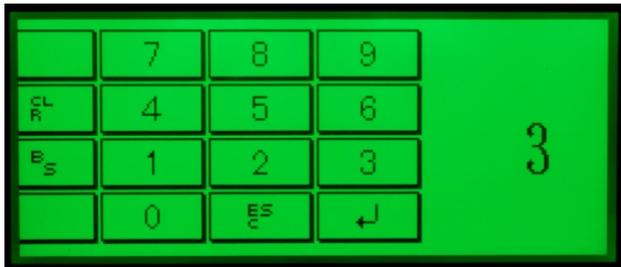


Figure 2-29-1

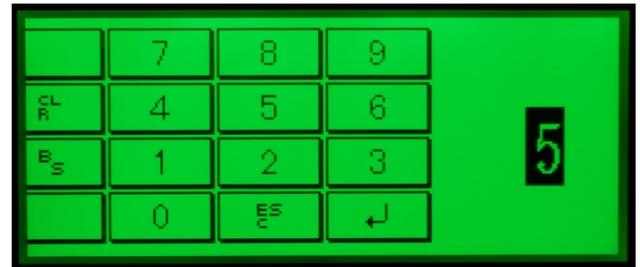


Figure 2-29-2

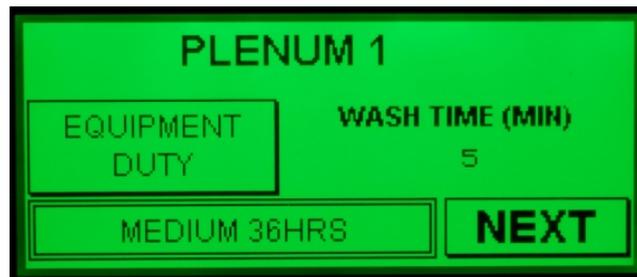


Figure 2-29-3

7. If there is only one Ventilator Section, programming the Equipment Duty and the Length of the Plenum Wash Cycle is complete. Proceed to Step 10.
8. If the Command Center is controlling two or more Ventilator sections, or a PCU or Duct Sump push the **NEXT** button and the display as shown in Figure 2-30-1 will come up. PCU's and Duct Sumps are always programmed as the last Plenum Wash.
9. Program **PLENUM 2**, for Ventilator number 2, (or PCU or Duct Sump) using the instructions number 4 through 7 above. After programming Plenum 2, continue by pushing the **NEXT** button to program any additional Plenums 3, 4, 5, etc., until all Plenums have been programmed.

Important Note: If the system includes a PCU (Pollution Control Unit) the Command Center has been factory programmed to recognize this system. The PCU's Wash Cycles are always programmed as the last Plenum Wash. Program the Equipment Duty and the Wash Time for the PCU appropriate for the cooking equipment involved. Refer to Table T-3-2-1 for minimum suggest times.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Equipment Duty and the Length of the Wash Cycles – Cont.

10. After programming the last Plenum Wash Cycle, pushing the **NEXT** button will bring up the display as shown in Figure 2-30-2.
11. The Ventilator Extractor Wash Cycle must now be programmed. Push the **SET WASH CYCLE TIMES** button and the display as shown in Figure 2-30-3 will come up.

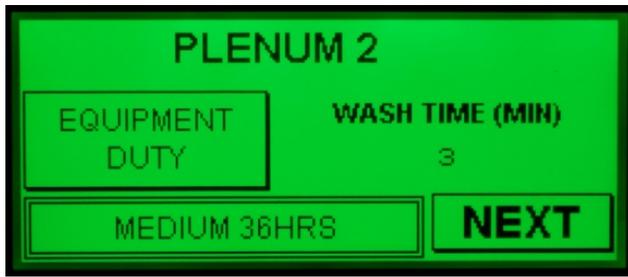


Figure 2-30-1



Figure 2-30-2

12. Push the **EXTRACTOR WASH TIMES** button and the display as shown in Figure 2-30-4 will come up.
13. **EXTRACTOR 1**, displayed in Figure 2-30-4, is for the Extractor Wash of Ventilator number 1. As with the Plenum Wash, push the **EQUIPMENT DUTY** button, and then again, continuing until the desired Equipment Duty is displayed, **LIGHT**, **LIGHT-MED**, **MEDIUIM**, **HEAVY** or **EXTRA HEAVY**. The hours displayed next to the duty of the equipment indicates the number of hours of fan operation before the Wash Cycle begins. (Refer to Figure 2-30-4 in this example MEDIUM Duty with 12 HRS was selected). Refer to Table T-3-1-1 on page 3-1 for guidance on the Wash Duty for specific cooking equipment.



Figure 2-30-3



Figure 2-30-4

14. Once the Wash Duty has been selected the length of the Extractor Wash Cycle needs to be programmed.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Equipment Duty and the Length of the Wash Cycles – Cont.

15. To program the length of the Extractor Wash Cycle push the number below the **WASH TIME (MIN)** text, (**3** in this example, Figure 2-30-4) and the display as shown in Figure 2-31-1 will come up. The length of the Extractor Wash Cycle can be set from 3 to 10 minutes. Refer to Table T-3-1-1 for minimum suggested times. Push the appropriate numbers on the display for the desired length of the Extractor Wash Cycle (**5** in this example, Figure 2-31-2) and then push the enter arrow button and the display as shown in Figure 2-31-3 will come up.

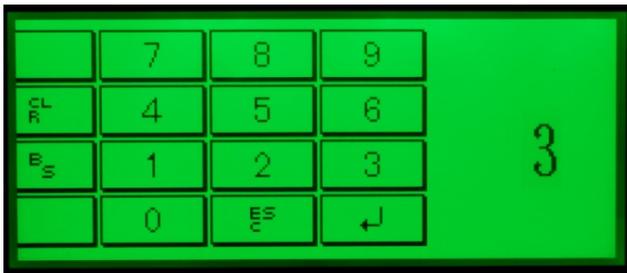


Figure 2-31-1

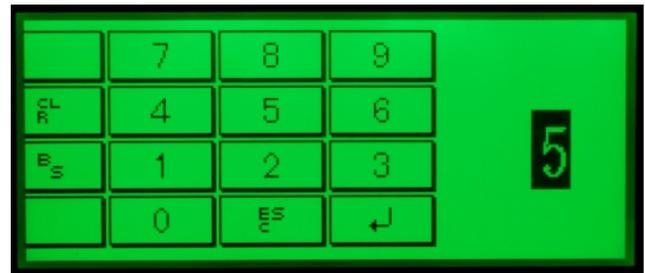


Figure 2-31-2



Figure 2-31-3

16. If there is only one Ventilator Section, programming the Equipment Duty and the Length of the Extractor Wash Cycle is complete.
17. If the Command Center is controlling two or more Ventilator sections push the **NEXT** button and the display as shown in Figure 2-32-1 will come up. Program **EXTRACTOR 2**, for Ventilator number 2, using the instructions number 11 through 15 above. After programming Extractor 2, continue by pushing the **NEXT** button to program any additional Extractors, 3, 4, 5, etc., until all Extractors have been programmed.
18. After programming the last Ventilator Extractor Wash Cycle, pushing the **NEXT** button will bring up the display as shown in Figure 2-32-2.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Equipment Duty and the Length of the Wash Cycles – Cont.

19. Programming the Equipment Duty and Wash Cycle Times for both the Plenum and Extractor Wash is now complete.
20. Push the **PREV** button and the display as shown in Figure 2-32-3 will come up.



Figure 2-32-1



Figure 2-32-2



Figure 2-32-3

Programming Automatic Start and Stop of the Exhaust Fan

Overview

The C-7000A Command Center may be easily programmed to stop and start the exhaust fan at the same time every day. It may also be programmed to start and stop the exhaust fan for a specific time of day, with each day being different or some days not start at all. For example, the control can be programmed for the fan to automatically start at 6:00 a.m. and shut off at 10:30 p.m. Monday through Friday, start at 7:00 a.m. and stop at 4:00 p.m. on Saturday, and Sunday not start and stop at all.

Note: If the control is programmed to automatically start and stop the exhaust fan, or if the Ventilator has AutoStart/DCA sensors, the fan may still be started and stopped manually by pushing the **START FAN** or **STOP FAN** buttons on the Command Center display.

C-7000A Command Center – Level 2, Owner Service Functions

Programming Automatic Stop and Start of the Exhaust Fan for the Same Time Everyday

To program proceed as follows:

1. Enter Level 2 as described in the Accessing Level 2 section on Page 2-20. The display as shown on Figure 2-33-1 will come up.
2. Push the **NEXT** button until the **SET FAN AUTO START-STOP** button is displayed as shown on Figure 2-33-2.



Figure 2-33-1



Figure 2-33-2

3. Push the **SET FAN AUTO START-STOP** button. The display as shown on Figure 2-33-3 will come up.
4. Push and toggle the top button until the button reads **FAN AUTO MODE ON** as shown in Figure 2-33-4.



Figure 2-33-3



Figure 2-33-4

5. Push the **SET ALL FAN TIMES SAME** button. The display as shown on Figure 2-33-5 will come up.
6. Push the **START FAN TIME** button and the display as shown on Figure 2-33-6 will come up.



Figure 2-33-5



Figure 2-33-6

C-7000A Command Center – Level 2, Owner Service Functions

Programming Automatic Stop and Start of the Exhaust Fan for the Same Time Everyday Cont.

7. The current Start Fan Time is shown in the upper left hand corner of the display. In the example, Figure 2-33-6, the Start Fan Time is programmed for 0530 (5:30 a.m.).
8. To program a new Start Fan Time push the numbers of the current Fan Start Time (0530 in this example) and the display as shown on Figure 2-34-1 will come up.
9. The clock in the Command Center is a 24 hour (military) clock. Push the appropriate numbers to set the time of day for the exhaust fan to start. Examples: If you wish the fan to start at 6:30 a.m., push the numbers 630. If you wish the fan to start at 10:30 a.m., push the numbers 1030.
10. Enter the desired Start Fan time, 0630 (6:30 a.m.) in this example, as shown in Figure 2-34-2, and once the time is displayed push the enter arrow button. The display as shown on Figure 2-34-3 will come up.

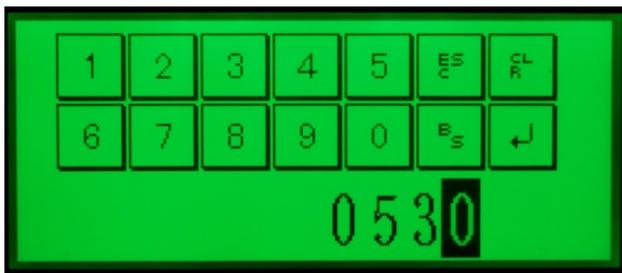


Figure 2-34-1



Figure 2-34-2



Figure 2-34-3

11. Push the **ENTER TIME THEN PRESS HERE TO SET** button. The Start Fan time for every day of the week is now programmed.

C-7000A Command Center – Level 2, Owner Service Functions

Programming Automatic Stop and Start of the Exhaust Fan for the Same Time Everyday – Cont.

12. Now set the Stop Fan time. Push the **PREV** button and the display as shown on Figure 2-35-1 will come up.
13. Push the **STOP FAN TIME** button and the display as shown on Figure 2-35-2 will come up.



Figure 2-35-1



Figure 2-35-2

14. The current Stop Fan Time is shown in the upper left hand corner of the display. In this example, Figure 2-35-2, the Stop Fan Time is programmed for 2200 (10:00 p.m.).
15. To program a new Stop Fan Time push numbers of the current Stop Fan Time (2200 in this example) and the display as shown on Figure 2-35-3 will come up.
16. The clock in the Command Center is a 24 hour (military) clock. Push the appropriate numbers to set the time of day for the exhaust fan to stop. Examples: If you wish the fan to stop at 9:00 p.m., push the numbers 2100. If you wish the fan to stop at 10:30 p.m., push the numbers 2230.
17. After the desired stop time is displayed as shown in Figure 2-35-4 (2300 hours in this example), push the enter arrow button and the display as shown on Figure 2-36-1 will come up.
18. Push the **ENTER TIME THEN PRESS HERE TO SET** button. The Stop Fan time for every day of the week is now programmed.

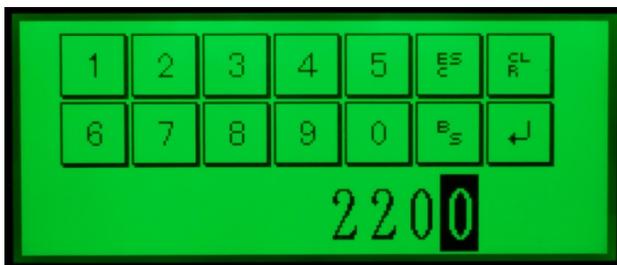


Figure 2-35-3



Figure 2-35-4

C-7000A Command Center – Level 2, Owner Service Functions

Programming Automatic Stop and Start of the Exhaust Fan for the Same Time Everyday – Cont.



Figure 2-36-1

19. The Command Center is now programmed to automatically start and stop at the same time every day. In this example the fan will start at 0630 hrs. (6:30 a.m.) , and stop at 2300 hrs. (11:00 p.m.). Push **PREV** and continue pushing until the desired display comes up.

Important Note: The automatic start and stop feature may be disabled, reverting back to manual operation, by toggling the **FAN AUTO MODE ON** button, Figure 2-33-3, to **FAN AUTO MODE OFF** Figure 2-33-4.

Programming Automatic Stop and Start of the Exhaust Fan for Different Times Each Day

To program proceed as follows:

1. Enter Level 2 as described in the Accessing Level 2 section on Page 2-20. The display as shown on Figure 2-36-2 will come up.
2. Push the **NEXT** button until the **SET FAN AUTO START-STOP** button is displayed as shown on Figure 2-36-3.



Figure 2-36-2



Figure 2-36-3

3. Push the **SET FAN AUTO START-STOP** button. The display as shown on Figure 2-37-1 will come up.

C-7000A Command Center – Level 2, Owner Service Functions

Programming Automatic Stop and Start of the Exhaust Fan for Different Times Each Day

4. Push and toggle the top button until the button reads **FAN AUTO MODE ON** as shown in Figure 2-37-2.



Figure 2-37-1



Figure 2-37-2

5. Push the **NEXT** button until the **SET ALL FAN TIMES DIFFERENT** is displayed as shown on Figure 2-37-3.



Figure 2-37-3



Figure 2-37-4

6. Push the **SUN** button. The display as shown on Figure 2-37-4 will come up.
7. The current Sunday Fan Times are shown in Figure 2-37-4. In this example times are set for Start Fan at 0530 hours (5:30 a.m.) and Stop Fan at 2200 hours (10:00 p.m.).
8. To change the Start Fan Time, push the current time displayed next to **START FAN** and the display as shown in Figure 2-37-5 will come up.



Figure 2-37-5

C-7000A Command Center – Level 2, Owner Service Functions

Programming Automatic Stop and Start of the Exhaust Fan for Different Times Each Day – Cont.

- Note: The clock in the Command Center is a 24 hour (military) clock. Push the appropriate numbers to set the time of day for the exhaust fan to start on Sunday. Examples: If you wish the fan to start Sunday morning at 6:30 a.m., push 0630. If you wish the fan to start Sunday morning at 10:30 a.m., push the numbers 1030.

Important Note: If the exhaust fan does not want to run on any specific day, program the Start Fan time for 0000 hours.

- After the desired start time is displayed, as shown in Figure 2-38-1 (0630 hours in this example), push the enter arrow button and the display as shown on Figure 2-38-2 will come up. The Start Fan time is now programmed for Sunday.



Figure 2-38-1



Figure 2-38-2

- Push the number displayed next to **STOP FAN** as shown in Figure 2-38-2 (2200 hours in this example) and the display as shown on Figure 2-38-3 will come up.
- Push the appropriate numbers to set the time of day for the exhaust fan to stop on Sunday. Examples: If you wish the fan to stop Sunday evening at 10:30 p.m., push the numbers 2230. If you wish the fan to stop Sunday at Midnight, push the numbers 2400.



Figure 2-38-3

- Once the desired stop time is displayed, Figure 2-39-1 (2300 in this example), push the enter arrow button. The display as shown on Figure 2-39-2 will come up.

C-7000A Command Center – Level 2, Owner Service Functions

Programming Automatic Stop and Start of the Exhaust Fan for Different Times Each Day – Cont.

14. The Start Fan and Stop Fan times are now programmed for Sunday. The remaining days now need to be programmed.

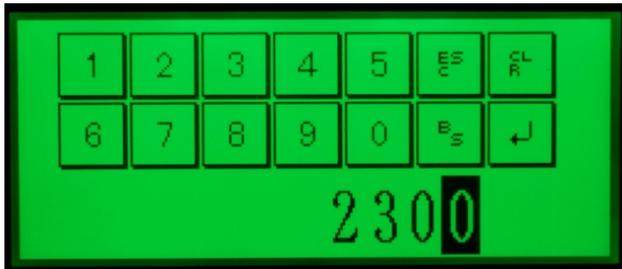


Figure 2-39-1



Figure 2-39-2

15. Push the **PREV** button and the display as shown on Figure 2-39-3 will come up.
 16. Push the **MON** button. The display as shown on Figure 2-39-4 will come up.
 17. Enter the Start and Stop fan times by repeating the entering processes as described in numbers 7 through 14 on the preceding pages.



Figure 2-39-3



Figure 2-39-4

18. Repeat the programming process for the remaining days of the week.
 19. Once Saturday Fan Times have been programmed push the **PREV** button and the display as shown in Figure 2-39-3 will come up.
 20. The fan Start and Stop times for each day may be checked by pushing the day of the week buttons **MON**, **TUE**, etc.,
 21. Once checked push the **PREV** button and then continue pushing the **PREV** or **NEXT** buttons until the desired display comes up.
 22. The Command Center will now Start and Stop the exhaust fan every day for the times programmed.

Important Note: The automatic start and stop feature may be disabled, reverting back to manual operation, by toggling the **FAN AUTO MODE ON** button, Figure 2-37-1 to **FAN AUTO MODE OFF** Figure 2-37-2.

C-7000A Command Center – Level 2, Owner Service Functions

Checking Total Counts (Tracking Critical Functions)

Overview

The C-7000A Command Center automatically tracks seven critical functions that can be used for troubleshooting and maintenance issues. They are:

1. Track the number of hours the UV Lamps have been on.
2. Track the number of times the Internal Fire Mode has activated.
3. Track the number of times the External Fire Mode has activated.
4. Track the number of times the Wash Cycle has been activated.
5. Track the total number of minutes the Wash Cycle has run.
6. Track the number of times the exhaust fan has come on.
7. Track the number of hours the exhaust fan has been on.

Checking the Total Counts

To check the Total Counts proceed as follows:

1. Enter Level 2 as described in the Accessing Level 2 section on Page 2-20. The display as shown on Figure 2-40-1 will come up.
2. Push the **NEXT** button until the **TOTAL COUNTS** button is displayed as shown in Figure 2-40-2.



Figure 2-40-1



Figure 2-40-2

3. Push the **TOTAL COUNTS** button. The display as shown on Figure 2-41-1 will come up. The following information can be obtained:
 - a) **UV LAMP RUN HRS** - The number of hours the UV Lamps have been on. This information may be useful in determining when to order new lamps as the lamps have a life expectancy of up to 13,000 hours. It may also be useful, if the lamps fail prematurely, in determining the cause of the failure.
 - b) **INT FIRE COUNT** - Tracks the number of times the Internal Fire Mode has activated. NOTE: Internal Fire Mode activation can only occur if the Ventilator is equipped with the optional fire thermostat (Refer to Page 2-17 for details).
 - c) **EXT FIRE COUNT** - Tracks the number of times the External Fire Mode has activated. The External Fire Mode monitors the number of times the Fire Extinguishing System discharges but may monitor other building fire systems if the C-7000A control is inter-wired with a Building Management System (BMS). Refer to Page 2-16 for details.

C-7000A Command Center – Level 2, Owner Service Functions

Checking Total Counts (Tracking Critical Functions) – Cont.



Figure 2-41-1



Figure 2-41-2

4. Push the **NEXT** button. The display as shown on Figure 2-41-2 will come up. The following information can be obtained:
 - a) **WASH COUNT** – The number of times the Wash Cycle has activated.
 - b) **WASH RUN MIN** - Tracks the total number of minutes the Wash Cycles have been on. This includes Plenum and Extractor Wash for and ELXC Series Ventilators, any Pollution Control Units, Duct Sumps, or a CG3 Series Ventilators.
 - c) **FAN COUNT** – Tracks the number of times the exhaust fan has started and stopped.
 - d) **FAN RUN HRS** – Tracks the total number of hours the exhaust fan has been on.

The total counts for any of the seven critical functions may be reset by zeroing them out. To zero out proceed as follows:

1. In either display, Figure 2-41-1 or Figure 2-41-2 above, push and hold for 10 seconds the number in the upper right hand corner, in the examples above either the number 0 or 2.
2. After the 10 seconds, push the first word of the line that wants to be zeroed out. Example: If the **FAN RUN HRS** wants to be reset, push and hold the word **FAN** until the associated number resets to "0".

Testing the Wash Cycles

Overview

Both the Extractor Wash and the Plenum Wash Cycles may be tested for proper operation. Typically a Wash Cycle test would be conducted to check the water pressure, water temperature, spray nozzles, detergent pump operation etc. The Extractor Wash can only be tested while the exhaust fan is on and the Plenum Wash can only be tested while the exhaust fan is off. To test the Wash Cycles proceed as follows:

C-7000A Command Center – Level 2, Owner Service Functions

Testing the Wash Cycles – Cont.

1. Enter Level 2 as described in the Accessing Level 2 section on Page 2-20. The display as shown on Figure 2-42-1 will come up.
2. Push the **NEXT** button until the **PLEMUN WASH TEST** and **EXTRACTOR WASH TEST** buttons are displayed as shown on Figure 2-42-2.



Figure 2-42-1

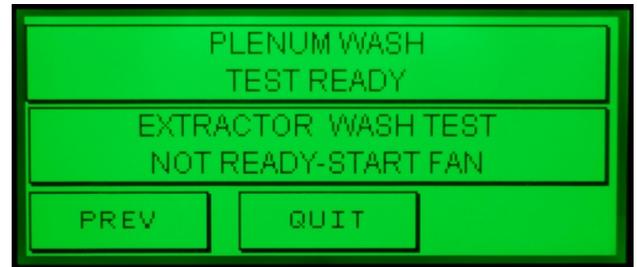


Figure 2-42-2

3. To test the Plenum Wash proceed as follows:

Important Note: The exhaust fan must be off to conduct the Plenum Wash Test.

- a) With the exhaust fan off, push the **PLENUM WASH TEST READY** button. The display as shown on Figure 2-42-3 will come up. Note: if the exhaust fan is not off the text in Figure 2-42-2 will read **PLENUM WASH NOT READY-SHUT OFF FAN**.
- b) Push the **START TEST** button. The display as shown on Figure 2-42-4 will come up and the Plenum Wash for Plenum number 1 will come on for 30 seconds and then shut off. The countdown clock, shown as **10** seconds in Figure 2-42-4, will count down the number of seconds left until Plenum Wash 1 stops. At the conclusion of the test, and if there are no other Plenums, the **START FAN** display as shown in Figure 2-43-3 will come up. If there are additional Plenums, the display as shown in Figure 2-43-1 will come up and there is a 15 second delay until the Wash Test for Plenum 2 begins. The countdown clock, shown as **5** seconds in Figure 2-43-1, will count down the number of seconds left until left until Plenum 2 wash begins. At the conclusion of the delay the display as shown on Figure 2-43-2 will come up and Plenum Wash 2 begins.

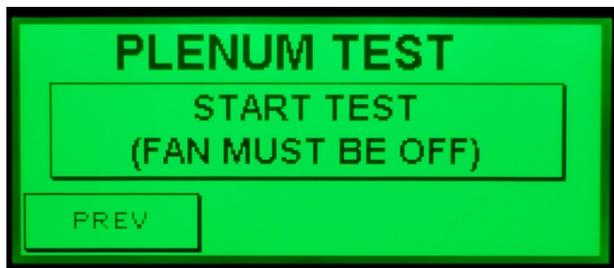


Figure 2-42-3

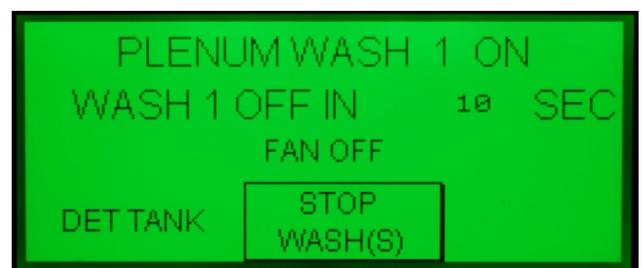


Figure 2-42-4

C-7000A Command Center – Level 2, Owner Service Functions

Testing the Wash Cycles – Cont.



Figure 2-43-1



Figure 2-43-2

- c) Upon conclusion of Plenum Wash 2 Test, and if there are more than two Plenums, Plenum Wash 3 would start. This sequence will continue until all the Plenum Wash Tests are complete.
- d) After the Plenum Wash tests are complete the display as shown in Figure 2-43-3 comes up.



Figure 2-43-3

Important Note: The Plenum Wash Test, regardless of the number of Plenums (1, 2, 3, etc.,) may be stopped at any time by pushing the **STOP WASH** button (Refer to Figure 2-43-3).

Important Note: The text in the bottom left corner of the display, during a Plenum Wash test, will read either **DET TANK** or **NO DET**. Refer to Figures 2-42-4 and 2-43-1. **DET TANK** indicates that there is Detergent in the Detergent Container and the Detergent Pump is operating properly. **NO DET** indicates that there is no Detergent in the Detergent Container and/or the Detergent Pump is not operating properly. Refer to Page 6-2 for troubleshooting and corrective action.

C-7000A Command Center – Level 2, Owner Service Functions

Testing the Wash Cycles – Cont.

4. To test the Extractor Wash proceed as follows:

Important Note: The exhaust fan must be on to conduct the Extractor Wash Test.

- a) Enter Level 2 as described in the Accessing Level 2 section on Page 2-20. The display as shown on Figure 2-44-1 will come up.
- b) Push the **NEXT** button until the **PLEMUN WASH TEST** and **EXTRACTOR WASH TEST** buttons are displayed as shown on Figure 2-44-2.



Figure 2-44-1

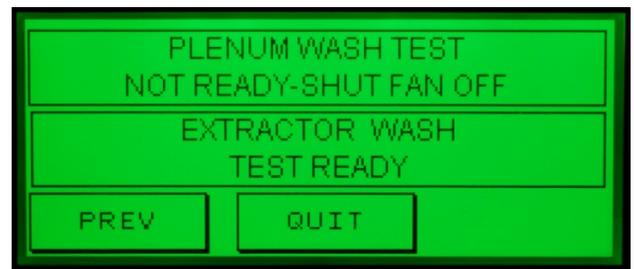


Figure 2-44-2

- e) With the exhaust fan on, push the **EXTRACTOR WASH TEST READY** button. The display as shown on Figure 2-44-3 will come up. Note: if the exhaust fan is not on the text will read **EXTRACTOR WASH NOT READY**.
- c) Push the **START TEST** button. The display as shown on Figure 2-44-4 will come up and the Extractor Wash for Extractor 1 will come on for 30 seconds and then shut off. The countdown clock, shown as 20 seconds in Figure 2-44-4, will count down the number of seconds left until the Extractor 1 Wash stops. At the conclusion of the test, and if there are no other Extractors, the display as shown in Figure 2-45-3 will come up. If there are additional Extractors, the display as shown in Figure 2-45-1 will come up and there is a 15 second delay until the Wash Test for Extractor 2 begins. The countdown clock, shown as 0 seconds in Figure 2-45-1, will count down the number of seconds left in the delay. At the conclusion of the delay the display as shown on Figure 2-45-2 will come up and Extractor Wash 2 begins.



Figure 2-44-3



Figure 2-44-4

C-7000A Command Center – Level 2, Owner Service Functions

Testing the Wash Cycles – Cont.



Figure 2-45-1



Figure 2-45-2

- d) Upon conclusion of Extractor Wash 2 Test, and if there are more than two Extractors, Extractor Wash 3 would start. This sequence will continue until all the Extractor Wash Tests are complete.
- e) After the Extractor Wash tests are complete the display as shown in Figure 2-45-3 comes up.



Figure 2-45-3

Important Note: The Extractor Wash Test, regardless of the number of Extractors (1, 2, 3, etc,) may be stopped at any time by pushing the **STOP WASH** button (refer to Figure 2-45-2).

C-7000A Command Center – Level 2, Owner Service Functions

Programming Delay Times Between Wash Cycles

Overview

The C-7000A Control has a built in minimum delay of 1 minute between Wash Cycles, however it may be programmed for a delay of between 2 to 99 minutes. Typically, longer delays may be required where multiple Ventilators are involved, and where the building's hot water system is not capable of supplying the required volume of hot water for continuous Wash Cycles. As an example, assume there are two Ventilators and the building's hot water system is only capable of washing one Ventilator at a time. Also assume that it takes one hour for the hot water system to regain. For this example the delay between Wash Cycles would be programmed for 1 hour and the Wash Cycles would operate as follows:

Extractor Wash: While the exhaust fan is on, and if the number of fan run hours is satisfied, the Extractor Wash would come on for Ventilator number 1 and run for the length of time programmed. There would then be a 1 hour delay, and if the number of fan run hours is satisfied for Ventilator number 2, the Extractor Wash would come on and run for the length of time programmed.

Plenum Wash: While the exhaust fan is off, and if the number of fan run hours is satisfied, the Plenum Wash would come on for Ventilator number 1 and run for the length of time programmed. There would then be a 1 hour delay, and if the number of fan run hours is satisfied for Ventilator number 2, the Plenum Wash would come on and run for the length of time programmed.

Note 1: The C-7000A control is capable of washing eight ELXC Series Ventilator sections. If there are between 2 and 8 Ventilator sections there would be a minimum 1 minute delay between Wash Cycles or a greater delay as programmed.

Note 2: For Ventilator Wash Cycle water consumption refer to Table T-3-5-2 on Page 3-5.

Programming Wash Delays

To program delays between Wash Cycles proceed as follows:

1. Enter Level 2 as described in the Accessing Level 2 section on Page 2-20. The display as shown on Figure 2-46-1 will come up.
2. Push the **NEXT** button the display as shown on Figure 2-46-2 will come up.



Figure 2-46-1



Figure 2-46-2

C-7000A Command Center – Level 2, Owner Service Functions

Programming Delay Times Between Wash Cycles – Cont.

3. The control defaults to a 1 minute delay as shown on Figure 2-47-1. Push the number **1**, or any other number that may have been programmed. The display as shown on Figure 2-47-2 will come up.
4. Push the appropriate buttons for the length of the desired delay between Wash Cycles, 2 to 99 minutes, (60 minutes in this example, Figure 2-47-2) and then push the enter arrow button and the display as shown in Figure 2-47-3 will come up.
5. The delay between Wash Cycles is now programmed (Refer to Figure 2-47-3).



Figure 2-47-1



Figure 2-47-2



Figure 2-47-3

Programming the Wash Cycle for Model CG3 Series Ventilators

Overview

The C-7000A Command Center is designed to be used as a retrofit for previous Gaylord controls such as the C-100, C-200, C-3000, C-4000, C-5000 and C-6000 series controls, typically used for Gaylord CG and CG3 series Ventilators. In a retrofit situation the C-7000A Command Center would typically be mounted in the existing Wash Control Cabinet, however a complete new GPC-7000A Command Center/Wash Control Cabinet could be used.

The CG3 Series Ventilators have up to two wash manifolds that are interconnected to wash the accumulated grease out of the extractor and plenum area simultaneously. This simultaneous wash is called a Plenum Wash. The manifolds are connected to the Wash Control Cabinet.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Wash Cycle for Model CG3 Series Ventilators – Cont.

Unlike the C-100 through C-6000 controls that automatically wash the Ventilator each time the exhaust fan is stopped, the Wash Timer in the C-7000A Command Center is programmed to initiate a Wash Cycle based on the number of hours the exhaust fan has been on. The frequency and the length of the Wash Cycle is determined by the type of cooking equipment involved; Light Duty, Light/Medium Duty, Medium Duty, Heavy Duty, and Extra Heavy Duty. This is referred to as the “Equipment Duty”. Refer to Table T-3-3-1, Typical Example of Frequency and Length of Wash Cycles for Model CG3 Series Ventilators, on page 3-3 for typical application. Washing the Ventilator based on hours of operation for specific Duties of equipment provides the optimum in cleaning performance with the lowest possible water and detergent consumption.

Frequency and Length of Wash

The frequency and the length of the Wash Cycles are primarily determined by the type of cooking equipment involved; Light Duty, Light/Medium, Medium Duty, Heavy Duty, and Extra Heavy Duty as shown Table T-3-3-1. The number of hours before the Wash Cycle starts, and the length of the Wash Cycle is based on average conditions. Table T-3-3-1 shows an example of typical frequencies and length of the wash times. Actual frequency and wash times necessary to adequately clean the Ventilator may vary depending on the following:

1. Actual amount of cooking within the hours of fan operation.
2. Type of food product being cooked and the type of appliance cooked upon.
3. Water pressure. Required pressure is 40 psi Min. to 80 psi Max.
4. Water temperature. Required temperature is 140°F. Min. to 180°F. Max.
5. Type of detergent. Refer to page 4-2 for recommend detergent.
6. Ratio of detergent to water.

The number of Hours of Fan Operation and the Length of the Wash Cycle are programmed in the Command Center. The length of the Wash Cycle can be increased or decreased as needed to adequately clean the Ventilator. The minimum wash time is 1 minute and maximum is 10 minutes. The Hours of Fan Operation are factory set and cannot be changed however the Duty of the cooking equipment can be changed to either increase or decrease the Hours of Fan Operation before a Wash Cycle comes on. As an example, if you have Medium Duty equipment and the Ventilator is not washing adequately, the Command Center may be re-programmed to Heavy Duty equipment, reducing the Hours of Fan Operation for the Extractor Wash from 12 hours to 4 hours and the Plenum Wash from 36 hours to 16 hours.

Wash Cycle Example

The Wash Cycle only comes on only while the exhaust fan is off. Using Table T-3-3-1 on page 3-3, if the cooking equipment under the Ventilator is Heavy Duty then the Wash Cycle would come on every 16 hours of exhaust fan operation, stay on for 3 minutes and then shut off. Typically the Wash Cycle will begin if the number of fan on hours has been satisfied, immediately after the exhaust fan has been shut off.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Length of the Wash Cycle and Equipment Duty for CG3 Series

If the Command Center is controlling a CG3 Series Ventilator it has been factory programmed to recognize the CG3 as a Plenum Wash. To set the Wash Cycle Times and Equipment Duty proceed as follows:

1. Enter Level 2 as described in the Accessing Level 2 section on Page 2-20 and the display as shown on Figure 2-49-1 will come up.
2. Push the **SET WASH CYCLE TIMES** button and display as shown in Figure 2-49-2 will come up. **Important Note:** If the display does not look like Figure 2-52-2 but instead looks like Figure 2-29-2-3, then the Command Center has not been programmed to recognize a CG3 Ventilator. Contact a Gaylord Service Agency to have programmed correctly.



Figure 2-49-1

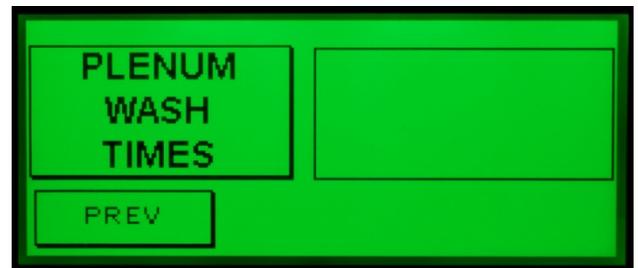


Figure 2-49-2

3. Push the **PLENUM WASH TIMES** button and the display as shown in Figure 2-49-3 will come up.
4. **PLENUM 1**, displayed in Figure 2-49-3, is for the Ventilator Wash Cycle. Push the **EQUIPMENT DUTY** button and then again continuing until the desired Wash Duty is displayed. The hours displayed next to the duty of the equipment indicates the number of hours of fan operation before the Wash Cycle begins (Refer to Figure 2-49-3, MEDIUM Duty with 36 HRS was selected). Refer to Table T-3-3-1 on page 3-3 for guidance on the Wash Duty for specific cooking equipment.



Figure 2-49-3

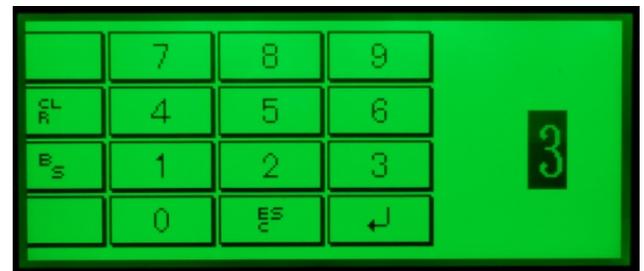


Figure 2-49-4

5. Once the Wash Duty has been selected the length of the Wash Cycle needs to be programmed.
6. The number displayed under the text **WASH TIME (MIN)** is the current length of the Wash Cycle.
7. To reprogram the length of the Wash Cycle push the number under **WASH TIME (MIN)** (3 in this example) and the display as shown in Figure 2-49-4 will come up.

C-7000A Command Center – Level 2, Owner Service Functions

Programming the Length of the Wash Cycle and Equipment Duty for CG3 Series – Cont.

8. The length of the Wash can be set from 3 to 10 minutes. Refer to Table T-3-3-1 for minimum suggested times. Push the appropriate buttons for the desired length of the Wash Cycle (5 minutes in this example, Figure 2-50-1) and then push the enter arrow button and the display as shown in Figure 2-50-2 will come up.

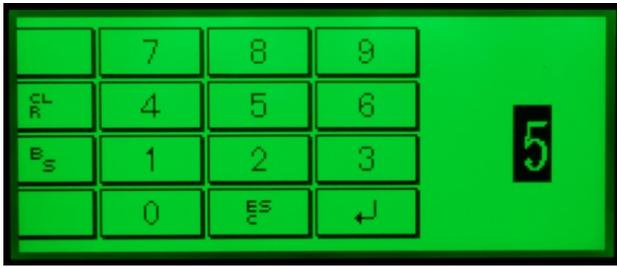


Figure 2-50-1



Figure 2-50-2

9. If there is only one Solenoid Valve in the Wash Control Cabinet programming the Equipment Duty and the Length of the Wash Cycle is complete. Push the **NEXT** button and the display as shown in Figure 2-50-4 will come up.
10. If the Wash Control Cabinet has two or more solenoid valves, the system is designed for sequenced Wash Cycles between Ventilators and the additional Plenum Washes (Ventilators) must be programmed. Push the **NEXT** button and **PLENUM 2** programming is displayed as shown in Figure 2-50-3. Continue programming the **WASH DUTY** and **WASH TIMES** for **PLENUMS 2, 3, 4** etc. as required, as described in number 4 through 8 above.
11. Once all the Ventilators Plenums (number of solenoid valves in the Wash Control Cabinet) are programmed pushing the **NEXT** button again the display as shown in Figure 2-50-4 will come up and programming the Wash Cycle Times are completed.

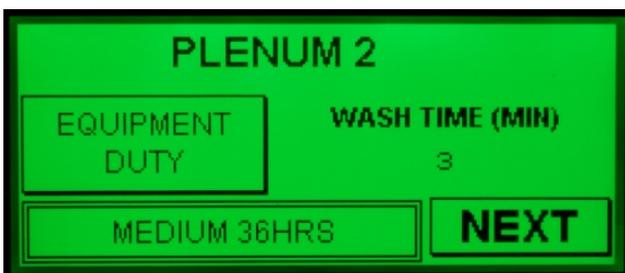


Figure 2-50-3



Figure 2-50-4

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Accessing Level 3

Access to Level 3 Gaylord Service Functions requires a 3 digit Gaylord Service Code only available to Gaylord Certified Service Agencies (CSA).

To access Level 3 proceed as follows:

1. Push the **MENU** button in any menu display, and continue pushing until the display as shown in Figure 2-51-1 comes up.
2. Push the **GAYLORD SERVICE FUNC** button and the display as shown in Figure 2-51-2 will come up.



Figure 2-51-1

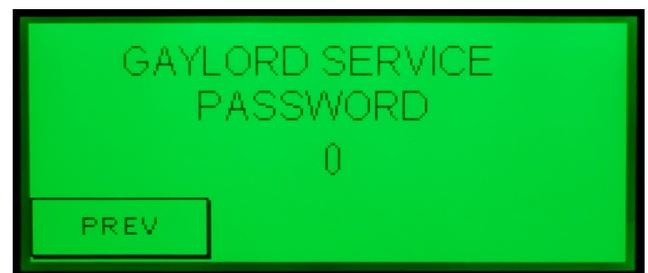


Figure 2-51-2

3. Push the "0" and the display as shown in Figure 2-51-3 will come up.
4. Push the three digit Gaylord Service Code, only available to Gaylord Certified Service Agencies, and then push the enter arrow and the first set of Programming buttons will come up as shown in Figure 2-51-4. You can now program the various functions as described further in this manual.

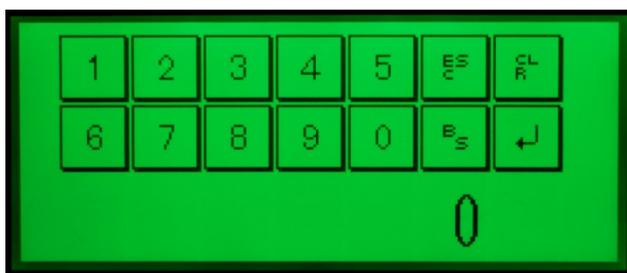


Figure 2-51-3



Figure 2-51-4

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Accessing Level 3 Cont.

5. Pushing the **NEXT** button will take you to the next set of programming buttons as shown on Figure 2-52-1.
6. Pushing the **NEXT** button again will take you to the next set of programming buttons as shown on Figure 2-52-2.



Figure 2-52-1

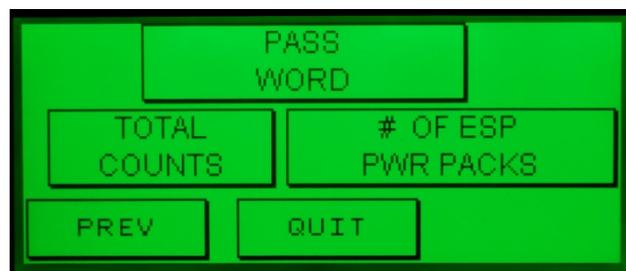


Figure 2-52-2

7. Pushing the **PREVIOUS** button will take you back to the previous display.
8. Pushing the **QUIT** button will take you to the **START FAN** or **STOP FAN** display.

Recommended Sequence of Programming

To make programming easier, it is recommended that the Command Center be programmed in the following sequence:

1. **AIR-VANTAGE ON/OFF**
2. **CG3 MODE ON / CG3 MODE OFF (See Note 1)**
3. **DAMPER DELAY ON / DAMPER DELAY OFF (See Note 1)**
4. **UV ON / UV OFF (See Note 1)**
5. **# OF WASHES (See Note 2)**
6. **PLENUM TYPE**
7. **AUTO START**
8. **DET PUMP**
9. **# OF ESP PWR PACKS (See Note 1)**

Note 1: Requires hardware modification as well if the control did not come with these features. Programming the software alone will not result in function ability of the control, even though it displays those functions.

Note 2: The basic control will operate 2 Plenum and 2 Extractor Washes. For additional Washes hardware must be added. Check the Model Number of the Command Center for what the control was provided for.

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming AirVantage

If the Ventilator includes an AirVantage Demand Control Ventilation System, the C-7000A must be programmed to accept the AirVantage System as the two systems are interfaced. To program proceed as follows:

1. Enter Level 3 as described in the Accessing Level 3 section on Page 2-51 and the display as shown on Figure 2-53-1 will come up.
2. Push the **NEXT** button once and the display as shown on Figure 2-53-2 will come up.
3. Push the **AIR-VANTAGE OFF** button and the text will read **AIR-VANTAGE ON** as shown on Figure 2-53-3.
4. You may now exit by pushing **PREV**, **QUIT**, or **NEXT** button as desired.



Figure 2-53-1



Figure 2-53-2



Figure 2-53-3

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming CG3 Mode

The C-7000A Command Center can control either ELXC Series or CG3 Series Ventilator. It is important the Command Center is programmed correctly as the CG3 Series Ventilator only has one Wash, called a Plenum Wash, compared to an ELXC Series Ventilator which has two Washes, Plenum Wash and Extractor Wash. To program for the appropriate series proceed as follows:

1. From the display as shown in Figure 2-54-1, push the **NEXT** button once and the display as shown in Figure 2-54-2 will come up.
2. If the Command Center is controlling ELXC Series Ventilators, the CG3 Mode button should say **CG3 MODE OFF** as shown in Figure 2-54-2. If the Command Center is controlling CG3 Series Ventilators, the CG3 button should say **CG3 MODE ON** as shown in Figure 2-54-3. Push the **CG3 MODE** button to toggle from one to the other. When the CG3 mode is on, it automatically turns off the Extractor Wash cycle mode.
3. The CG3 ON/OFF Mode is now programmed. Push the **PREV**, **QUIT** or **NEXT** button as desired.



Figure 2-54-1



Figure 2-54-2



Figure 2-54-3

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming Damper Delay Mode

If the C-7000A Command Center is controlling ELXC Series or CG3 Series Ventilators without an electric damper the Damper Delay should be set on **DAMPER DELAY OFF**. If the C-7000A Command Center is controlling an ELXC or CG3 Series Ventilators with electric dampers the Damper Delay must be set on **DAMPER DELAY ON**. This is important to program as Ventilators with electric dampers require a 10 second delay before the exhaust fan starts to allow the damper to begin opening. To program for an electric damper proceed as follows:

1. From the display as shown in Figure 2-55-1, push the **NEXT** button once and the display as shown in Figure 2-55-2 will come up.
2. If the Command Center is controlling an ELXC or CG3 Series Ventilator without an electric damper, the Damper Delay button should say **DAMPER DELAY OFF**, as shown on Figure 2-55-2. If the Command Center is controlling an ELXC or CG3 Series Ventilator with an electric damper, the Damper Delay button should say **DAMPER DELAY ON** as shown in Figure 2-55-3. Push the **DAMPER DELAY** button to toggle from one to the other.



Figure 2-55-1



Figure 2-55-2



Figure 2-55-3

3. The Damper Delay ON/OFF is now programmed. Push the **PREV**, **QUIT** or **NEXT** button as desired.

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming UV Mode

If the Ventilator incorporates UV Lamps, the Command Center must be programmed to include them. This is important to program as the Command Center monitors the UV system and will display the status of the system. To program proceed as follows:

1. From the display as shown in Figure 2-56-1, push the **NEXT** button once and the display as shown in Figure 2-56-2 will come up.
2. If the Command Center is controlling either an ELXC Series or CG3 Series Ventilator that do not include UV Lamps, the UV button must say **UV OFF** as shown in Figure 2-56-2. If the Command Center is controlling ELXC-UVi Series or CG3-UV Series Ventilators that include UV Lamps the UV button must say **UV ON** as shown on Figure 2-56-3. Push the **UV** button to toggle from one to the other.



Figure 2-56-1



Figure 2-56-2



Figure 2-56-3

1. The **UV ON/UV OFF** is now programmed. Push the **PREV**, **QUIT** or **NEXT** button as desired.

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming the Number of Washes

The Number of Washes refers to the number of individual Wash Cycles (number of Solenoid Valves) the Command Center is controlling. For example, if there is one ELXC Series Ventilator there would be two Wash Cycles (two solenoid valves), one Plenum Wash and one Extractor Wash. If there are two Ventilators there are four Wash Cycles (four solenoid valves), three Ventilators six Wash Cycles (six solenoid valves) etc. For CG3 Series Ventilators there is usually only one Solenoid Valve unless the Ventilator(s) is a CG3-SPC Series or multiple Ventilators are set up for sequenced Washing. If the system has a Pollution Control Unit (PCU) and/or a Duct Sump, additional Solenoid Valves are used and must be programmed. Refer to Pages 3-6 for charts showing typical number of Solenoid Valves for various models of Ventilators and Options.

To program the number of Washes for an ELXC Series Ventilator proceed as follows:

1. From the display as shown in Figure 2-57-1, push the **# OF WASHES** button and the display as shown in Figure 2-57-2 will come up. The number of Plenum Wash is programmed first.
2. Push the **PLENUM WASH** button and the display as shown in Figure 2-57-3 will come up.
Important Note: If the **CG3 ON/OFF** has been programmed **CG3 ON**, the **EXTRACTOR WASH** button would be blank.



Figure 2-57-1



Figure 2-57-2

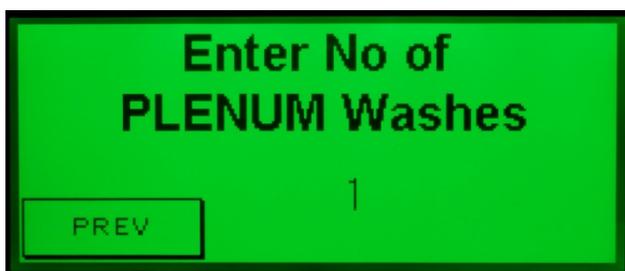


Figure 2-57-3

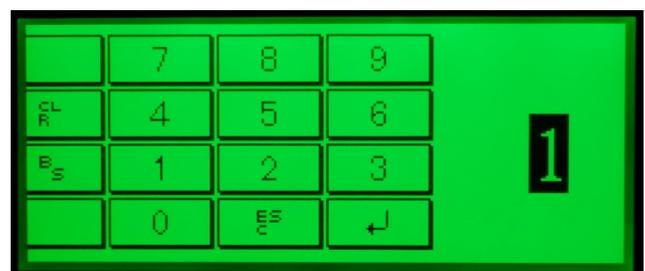


Figure 2-57-4

3. The number on the display indicates the current number of Plenum Washes programmed. To change the number of Plenum Washes, push the number (in this example 1) and the display as shown in Figure 2-57-4 will come up.

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming the Number of Washes – Cont.

4. Push the number(s) for the number of Plenum Washes on the system (**2** in this example shown in Figure 2-58-1) and push the enter arrow and the display as shown in Figure 2-58-2 will come up.
Example: if there are two ELXC Ventilator sections, there are two Plenum Wash Cycles (two Solenoid Valves) so the entry would be 2. If there are two ELXC Ventilator, one Duct Sump and one PCU, there would be four Plenum Wash Cycles (four solenoid valves) so the entry would be 4.

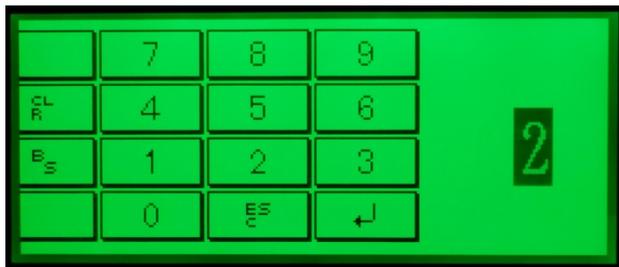


Figure 2-58-1

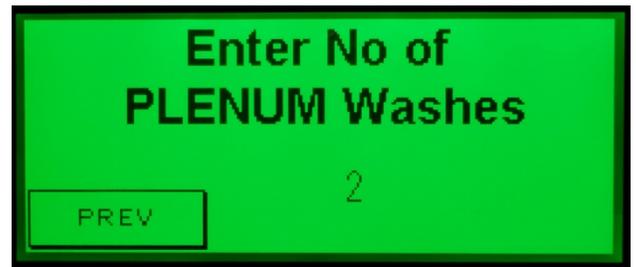


Figure 2-58-2

5. Push the **PREV** button and the display as shown in Figure 2-58-3 will come up.
6. Next push the **EXTRACTOR WASH** button and the display as shown in Figure 2-58-4 will come up. The number on the display indicates the current number of Extractor Washes programmed (1 in this example). To change the number of Extractor Washes push the displayed number (1 in this example shown on Figure 2-58-4) and the display as shown in Figure 2-58-5 will come up.



Figure 2-58-3

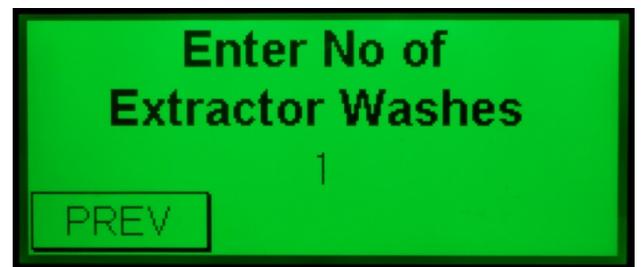


Figure 2-58-4



Figure 2-58-5

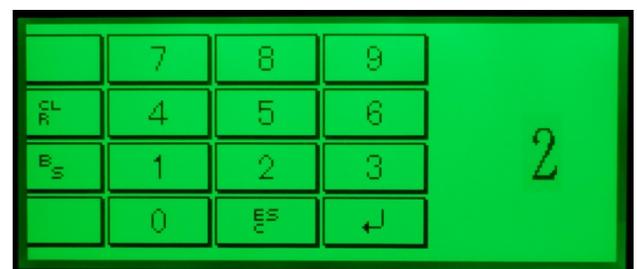


Figure 2-58-6

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming the Number of Washes – Cont.

- To change the number of Extractor Washes push the number(s) for the number of Extractor Washes on the system (2 in the example shown on Figure 2-58-6) push the enter arrow and the display as shown in Figure 2-59-1 will come up.

Example: if there are two ELXC Ventilator sections there are two Extractor Washes (two Solenoid Valves) so the entry would be 2.

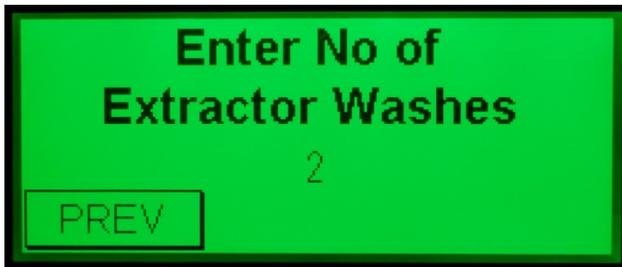


Figure 2-59-1



Figure 2-59-2

- Programming the number of Washes is now completed. Push **PREV** two times and the display as shown in Figure 2-59-2 will come up.

Very Important Note: If the Command Center is controlling Ventilators with a Duct Sump and/or a PCU additional **# OF WASHES** must be added. Duct Sumps and PCU's are always added as a Plenum Wash. So as an example if there are two ELXC Series Ventilators, one Duct Sump, and one PCU the number of Washes would be as follows:

Plenum Washes – Total 4, 2 for the ELXC Ventilator, 1 for the Duct Sump and 1 for the PCU (if PCU is less than 16 cells).

Refer to Page 3-6 for typical examples of the number of Washes for different applications.

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming the Plenum Type

It is necessary to program the Plenum Type for the Plenum Wash so the Command Center knows if a Solenoid Valve is serving a Ventilator, a Duct Sump, or a PCU. To Program proceed as follows:

1. From the display as shown in Figure 2-60-1, push the **PLENUM TYPE** button and the display as shown in Figure 2-60-2 will come up. This is the display for Plenum #1. Note: the program always looks for the number of Plenum Washes, not Extractor Washes. The Command Center always defaults to **SET AS A ELXC-CG3 HOOD PLENUM OR DUCT SUMP**.
2. If Plenum #1 is for a Ventilator or Duct Sump, leave the Program on **SET AS A ELXC-CG3 HOOD PLENUM OR DUCT SUMP**. Push the **NEXT** button and the display as shown on Figure 2-60-3 will come up.



Figure 2-60-1

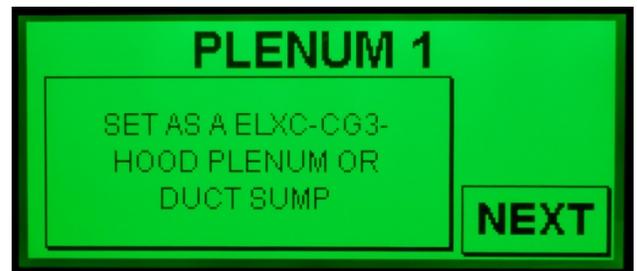


Figure 2-60-2

3. If Plenum #2 is for a Ventilator or Duct Sump, leave the Program on **SET AS A ELXC-CG3 HOOD PLENUM OR DUCT SUMP**. Push the **NEXT** button and the display as shown on Figure 2-60-4 will come up.
4. If, for example, Plenum #3 serves a PCU push the **SET AS A ELXC-CG3 HOOD PLENUM OR DUCT SUMP** button and it will toggle to **SET AS A PCU** as shown in Figure 2-61-1.

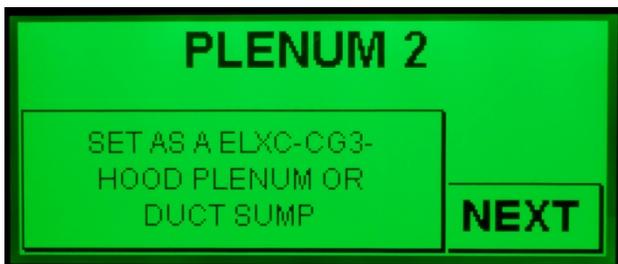


Figure 2-60-3

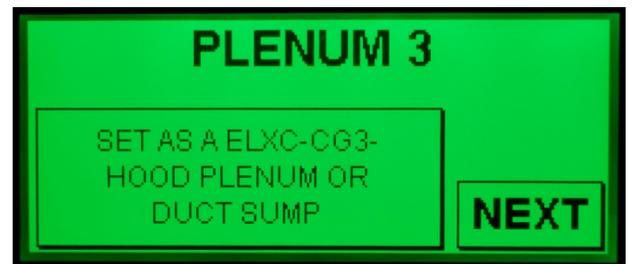


Figure 2-60-4

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming the Plenum Type – Cont.

5. If there are additional Plenums (Solenoid Valves) push the **NEXT** button and repeat the programming process as described in number 2 above.
6. After programming the last Plenum Type, push the **NEXT** button the display as shown in Figure 2-61-2 will come up.



Figure 2-61-1



Figure 2-61-2

Example of programming the Plenum Type: Assume that a system is comprised of two ELXC Ventilator sections and one Model RSPC-ESP Single Pass Pollution Control Unit (PCU) mounted on the roof. Since the number of Solenoid Valves has already been programmed, the Command Centers knows that, in this case, there are a total of three Plenum Types (Solenoid Valves), two for the two Ventilator sections and one for the PCU. Therefore Plenum # 1 and #2 would be programmed **SET AS A ELXC-CG3 HOOD PLENUM OR DUCT SUMP** and Plenum #3 would be programmed **SET AS A PCU**.

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming Autostart

Ventilators that include Autostart have an “AS” or “DCA” suffix in the Ventilator model number. The model number is stamped on the Ventilator Nameplate mounted on every Ventilator. Refer to Page 3-9 for a sample nameplate. If the Ventilator(s) includes Autostart there is an option of ignoring starting the exhaust fan by Autostart, immediately after a Wash Cycle, for a programmed amount of time, even if the temperature at the detector reaches 90°F., or its set point. This may be necessary because the 140°F to 180°F hot water from the Wash Cycle may heat the Autostart sensor above 90°F., or its set point, and the exhaust fan would restart. The delay after a Wash Cycle is programmable from 1 to 99 minutes. To program proceed as follows:

1. From the display as shown in Figure 2-62-1, push the **AUTO START** button and the display as shown in Figure 2-62-2 will come up. The Command Center always defaults to **AUTO-START ACTIVE IMMEDIATELY AFTER WASH**.
2. If a delay is desired after a Wash Cycle before Autostart can start the exhaust fan, push the **AUTO-START ACTIVE IMMEDIATELY AFTER WASH** button and it will toggle to **IGNORE AUTO START AFTER WASH** as shown in Figure 2-62-3.
3. To program the amount of time to delay, push the **ENTER AUTO-START NOT ACTIVE TIME** button and a display as shown in Figure 2-62-4 will come up. The number displayed is the amount of minutes currently programmed, in this example “0” (MIN).
4. Push the “0” and the display as shown in Figure 2-63-1 will come up.



Figure 2-62-1

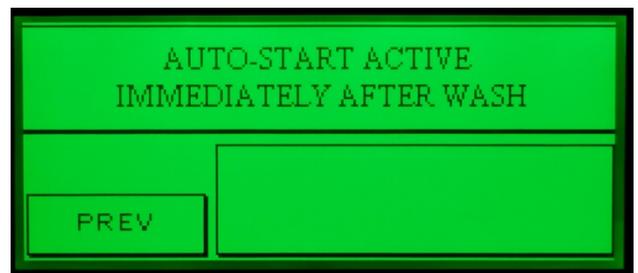


Figure 2-62-2



Figure 2-62-3



Figure 2-62-4

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming Autostart – Cont.



Figure 2-63-1

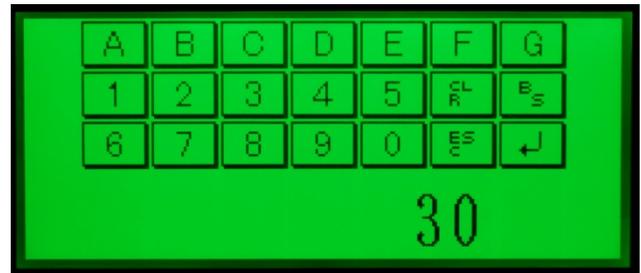


Figure 2-63-2

5. Push the numbers for the amount of minutes you want to delay, from 1 to 99 (30 minutes in this example, Figure 2-63-2), and then push the enter arrow and the display as shown in Figure 2-63-3 will come up.
6. Programming the Autostart delay is now completed. Push the **PREV** button twice to return to the display as shown in Figure 2-63-4.



Figure 2-63-3



Figure 2-63-4

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming Local / Remote Detergent Pump

If one or more Detergent Pumps are mounted remote from the Wash Control Cabinet, the Command Center must be programmed to include them. A Detergent Pump mounted in the Wash Control Cabinet that includes the Command Center is called a Local Detergent Pump and one not mounted in the Wash Control Cabinet that has the Command Center is called a Remote Detergent Pump. To program proceed as follows:

Example of programming the Detergent Pump Mode: Assume that a system is comprised of two ELXC Series Ventilator sections with a standard Wash Control Cabinet that includes a Detergent Pump. There is also one Model RSPC-ESP Single Pass Pollution Control Unit (PCU) mounted on the roof with the Detergent Pump in a cabinet mounted on the PCU. Since the number of Plenums (Solenoid Valves) and the Plenum Type has already been programmed, the Command Center knows that, in this case, there are a total of three Plenums (Solenoid Valves), two for the two Ventilator sections and one for the PCU. Therefore Plenums #1 and #2 would be programmed **LOCAL DET PUMP** and Plenum #3 would be programmed **REMOTE DET PUMP**. **Note:** See wiring diagrams in Chapter 8 for contact points.

The following instructions are based on the example above.

1. From the display as shown in Figure 2-64-1, push the **DET PUMP** button and the display as shown in Figure 2-64-2 will come up. This is the display for Plenum #1. Note: the program always looks for the number of Plenums for the Detergent Pump, not the number of Extractors. The Command Center knows how many Plenums are involved from previously programming the Plenum Type. The Command Center always defaults to **LOCAL DET PUMP**.
2. If the Detergent Pump for Plenum 1 is mounted in the Wash Control Cabinet the control should be programmed for **Local Det Pump** as shown in Figure 2-64-2. Note, if already programmed push the **NEXT** button and the display as shown in Figure 2-65-1 will come up. If it was already programmed for **REMOTE DET PUMP** push the **REMOTE DET PUMP** button and it will toggle back to **LOCAL DETERGENT PUMP**.



Figure 2-64-1

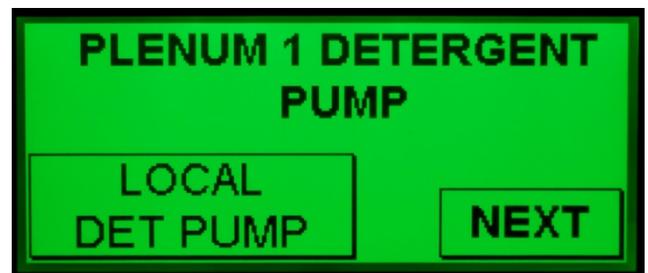


Figure 2-64-2

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming Local / Remote Detergent Pump – Cont.

3. Program Plenum 2 for **LOCAL DET PUMP**. Push the **NEXT** button and the display as shown in Figure 2-65-2 will come up.
4. Since in this example Plenum 3 is the PCU, and the Detergent Pump is mounted in the PCU cabinet, Plenum 3 must be programmed for a Remote Pump. Push the **LOCAL DET PUMP** button and it will toggle to **REMOTE DET PUMP** as shown in Figure 2-65-3.

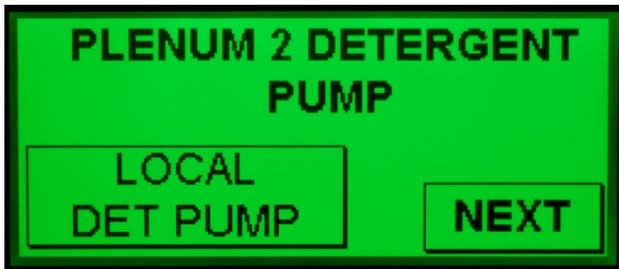


Figure 2-65-1

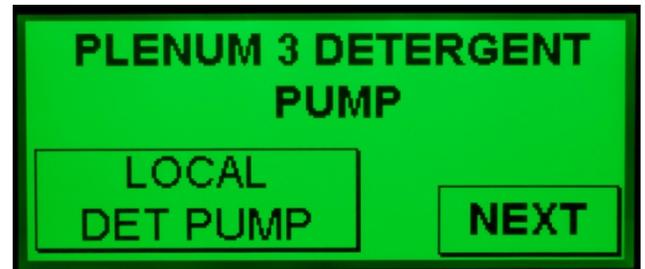


Figure 2-65-2

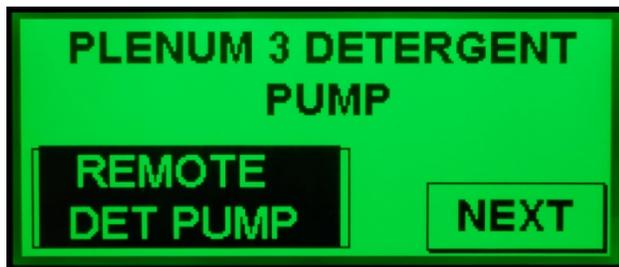


Figure 2-65-3



Figure 2-65-4

5. For this example programming the Detergent Pump is completed. Push the **NEXT** button and the display as shown in Figure 2-65-4 will come up.

Additional Plenums

6. If there are additional Plenums, push the **NEXT** button and continue programming for all the Plenums.
7. After programming the Detergent Pump for the last Plenum, push the **NEXT** button and the display as shown in Figure 2-65-4 will come up.

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Programming the Number of ESP Power Packs

If the Command Center is controlling a PCU, the control monitors the status of the ESP Power Packs and therefore the number of Power Packs must be programmed. If the Command Center is not controlling a PCU the number of Power Packs must be programmed for “0”. Power Packs supply high voltage to the Electrostatic Precipitator cells, and one Power Pack can serve up to four cells. The number of Power Packs may be determined by 1) referring to the Gaylord Wiring Diagrams, or 2) opening the Power Pack door and counting the number of Power Packs.

To program the number of Power Packs proceed as follows:

1. From the display as shown in Figure 2-66-1 push the **# OF ESP PWR PACKS** and the display as shown on Figure 2-66-2 will come up.
2. The number below the **# OF ESP POWER PACKS** (“0” in the example Figure 2-66-2) indicates the current number of Power Packs programmed.
3. To enter the number of desired Power Packs, push the **# OF ESP POWER PACKS** button once for each number of Power Packs desired. If there are two Power Packs the button would be pushed twice, and the display will read as shown in Figure 2-66-3.
4. The number of Power Packs is now programmed. Push the **PREV** button once to return to the display as shown in Figure 2-66-1.
5. To zero out the number of Power Packs continue pushing the **# OF ESP POWER PACKS** button, past **8**, the maximum number, and the next number will be “0”.

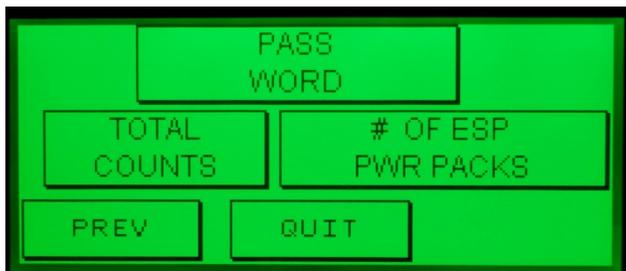


Figure 2-66-1



Figure 2-66-2



Figure 2-66-3

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Checking Total Counts (Tracking Critical Functions)

Overview

The C-7000A Command Center automatically tracks seven critical functions that can be used for troubleshooting and maintenance issues. They are:

1. Track the number of hours the UV Lamps have been on.
2. Track the number of times the Internal Fire Mode has activated.
3. Track the number of times the External Fire Mode has activated.
4. Track the number of times the Wash Cycle has been activated.
5. Track the total number of minutes the Wash Cycle has run.
6. Track the number of times the exhaust fan has come on.
7. Track the number of hours the exhaust fan has been on.

Checking the Total Counts

To check the Total Counts proceed as follows:

1. From the display as shown in Figure 2-67-1 push the **TOTAL COUNTS** button and the display as shown on Figure 2-67-2 will come up. The following information can be obtained:
 - a) **UV LAMP RUN HRS** - The number of hours the UV Lamps have been on. This information may be useful in determining when to order new lamps as the lamps have a life expectancy of up to 13,000 hours. It may also be useful, if the lamps fail prematurely, in determining the cause of the failure.
 - b) **INT FIRE COUNT** - Tracks the number of times the Internal Fire Mode has activated. NOTE: Internal Fire Mode activation can only occur if the Ventilator is equipped with the optional fire thermostat (Refer to Page 2-17 for details).
 - c) **EXT FIRE COUNT** - Tracks the number of times the External Fire Mode has activated. The External Fire Mode monitors the number of times the Fire Extinguishing System discharges but may monitor other building fire systems if the C-7000A control is inter-wired with a Building Management System (BMS) (Refer to Page 2-16 for details).

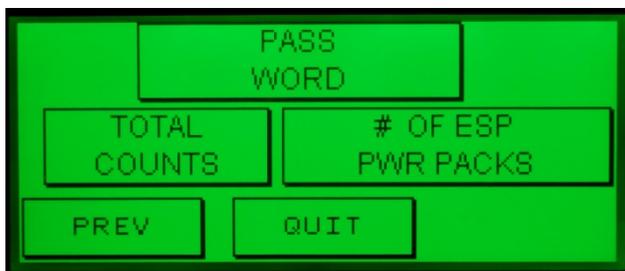


Figure 2-67-1



Figure 2-67-2

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Checking Total Counts (Tracking Critical Functions) – Cont.

2. Push the **NEXT** button. The display as shown on Figure 2-68-1 will come up. The following information can be obtained:
 - a) **WASH COUNT** – The number of times the Wash Cycle has activated.
 - b) **WASH RUN MIN** - Tracks the total number of minutes the Wash Cycles have been on. This includes Plenum and Extractor Wash for and ELXC Series Ventilators, any Pollution Control Units, Duct Sumps, or a CG3 Series Ventilators.
 - c) **FAN COUNT** – Tracks the number of times the exhaust fan has started and stopped.
 - d) **FAN RUN HRS** – Tracks the total number of hours the exhaust fan has been on.
3. Push the **PREV** button twice to return to programming screen as shown in Figure 2-68-2.

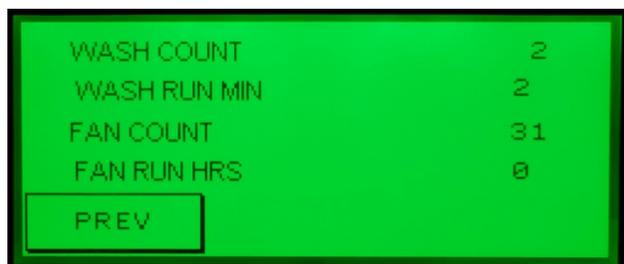


Figure 2-68-1

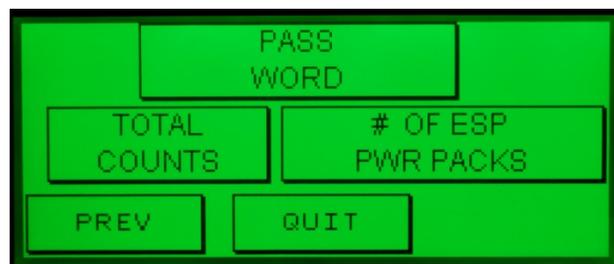


Figure 2-68-2

Zeroing Out the Total Counts

The total counts for any of the seven critical functions may be reset by zeroing them out. To zero out proceed as follows:

1. In either display, Figure 2-67-2 or Figure 2-68-1 above, push and hold for 10 seconds the number in the upper right hand corner, in the examples above either the number 0 or 2.
2. After the 10 seconds, push the first word of the line that wants to be zeroed out. Example: If the **FAN RUN HRS** wants to be reset, push and hold the word **FAN** until the associated number resets to "0".

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Changing the Owner Service Function Password

Changing the Owner Service Function Password feature allows the Gaylord Service Agency or Gaylord Authorized Representative to learn the Owners Password and change it if necessary.

It may be necessary for a Gaylord Service Agency to know the Owners Service Function Password as many functions of the Command Center, such as programming the length of a Wash Cycle, can only be accessed from Level 2, Owners Service Function.

There may be circumstances where it is necessary to change the Owners Password. An example would be if there was a change in the maintenance personnel and the new maintenance person was not given the Password or if the restaurant changed owners and the new owner was not given the Password.

To access the Owners Password and change if needed, proceed as follows:

1. From the display as shown in Figure 2-69-1 push the **PASSWORD** button and the display as shown on Figure 2-69-2 will come up.
2. The current Owners Password is "1" as shown on the example Figure 2-69-2.

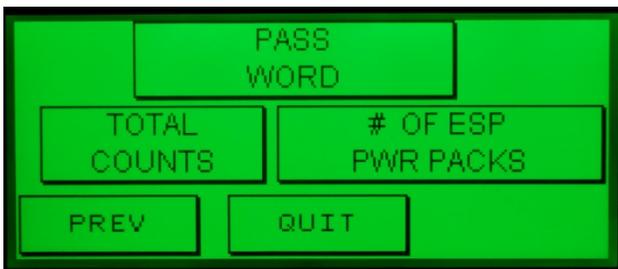


Figure 2-69-1



Figure 2-69-2

3. To change the Password push the number "1" button and the display as shown in Figure 2-69-3 will come up.
4. Push the new desired code, a single digit 1 through 9, (7 in this example) and the display as shown in Figure 2-69-4 will come up.



Figure 2-69-3



Figure 2-69-4

C-7000A Command Center – Level 3, Gaylord Certified Service Agent Functions

Changing the Owner Service Function Password – Cont.

5. Push the enter arrow and the display as shown in Figure 2-70-1 will come up showing the new Password just entered. The new Owners password is now programmed.
6. Push the **PREV** button once to return to programming screen as shown in Figure 2-70-2.



Figure 2-70-1

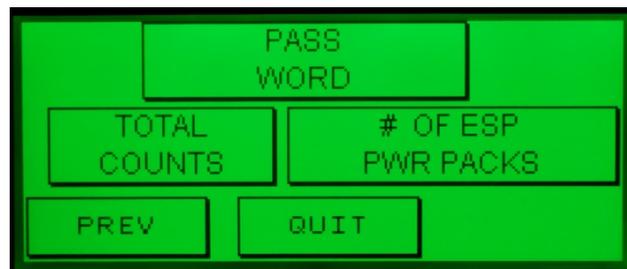


Figure 2-70-2

Overview

The Tables and Charts on the following pages are presented as a guideline for various Series of Gaylord Ventilators and Pollution Control Units to assist in setting up the Command Center for specific operations. The Control Matrix, shown on pages 3-7 and 3-8, shows the standard operation typical for most installations. However the operations may vary from that shown on the Control Matrix depending upon how the Command Center was interfaced with the building systems.

Table T-3-1-1

Model ELXC and ELXC-UVi Series Ventilators				
Typical Example				
Frequency and Length of Wash Cycles				
Cooking Equipment Duty	Extractor Wash		Plenum Wash	
	Hours of Fan Operation Before Wash Starts (Factory Set)	Length of Wash Cycle (in min.) (Note 1)	Hours of Fan Operation Before Wash Starts (Factory Set)	Length of Wash Cycle (in min.) (Note 1)
Light Duty Ovens, steamers and kettles	84	3	98	3
Light / Medium Duty Braising pans, tilting skillets, fryers, open burner ranges, hot top ranges, and conveyor ovens	42	3	72	3
Medium Duty Griddles, grooved griddles	12	3	36	3
Heavy Duty Gas and electric char broilers, upright broilers, woks and conveyor broilers	4	3	16	3
Extra Heavy Duty Solid fuel broilers	2	3	6	3

Note 1: The Wash Cycles may be programmed for between 3 and 10 minutes.

Table T-3-2-1

Models ELXC and ELXC-UVi with PCU (Pollution Control Unit) Gaylord Model RSPC-ESP										
Typical Example										
Frequency and Length of Wash Cycles										
Cooking Equipment Duty	Extractor Wash		Plenum Wash		RSPC Wash (Notes 6, 7, and 8)					
	Hours of Fan Operation Before Wash Starts	Length of Wash Cycle (in min.)	Hours of Fan Operation Before Wash Starts	Length of Wash Cycle (in min.)	RSPC with a single manifold washes in the following sequence. If the RSPC has two wash manifolds, the wash sequence repeats for manifold # 2.					
					Wash (in min)	Delay (in min)	Wash (in min)	Delay (in min)	Rinse (in min)	Delay (in min)
	(Factory Set)	(Note 1)	(Factory Set)	(Note 1)	(Note 1)	(Note 2)	(Note 1)	(Note 2)	(Note 3)	(Note 2)
Light Duty Ovens, steamers and kettles	84	3	98	3	3	10	3	10	3	10
Light / Medium Duty Braising pans, tilting skillets, fryers, open burner ranges, hot top ranges, and conveyor ovens	42	3	72	3	4	10	4	15	3	15
Medium Duty Griddles, grooved griddles	12	3	36	3	6	15	6	15	3	15
Heavy Duty Gas and electric char broilers, upright broilers, woks and conveyor broilers	4	3	16	3	8	15	8	15	3	15
Extra Heavy Duty Solid fuel broilers	2	3	6	3	10	15	10	15	3	15

Note 1: RSPC Wash Cycles may be programmed for between 3 and 10 minutes.

Note 2: The Delay period between Washes may be programmed for between 1 and 99 minutes.

Note 3: The Rinse Cycle is Factory set for 3 minutes and cannot be changed.

Note 4: The Ventilator Extractor and Plenum Washes may be programmed for between 3 and 10 minutes.

Note 5: All Washes and Delays may be programmed at the Owner/Maintenance Level 2.

Note 6: RSPC washes are always programmed as a Plenum.

Note 7: The wash frequency of the RSPC may be programmed as Light Duty, Light/Medium Duty, Medium Duty, Heavy Duty or Extra Heavy Duty.

Note 8: The RSPC wash should always be programmed as the last Plenum wash.

Table T-3-3-1

Model CG3, CG3-SPC, CG3-UVi and CG3-UVi-SPC (Smoke Pollution Control)								
Typical Example								
Frequency and Length of Wash Cycle Chart per Ventilator Group								
Cooking Equipment Duty	Hours of Fan Operation Before Wash Starts (Factory Set)	Wash Cycles in Minutes and Sequence (Note 5)						
		(If Equipped) Upper SPC Wash 1st., then Lower SPC Wash in the Following Sequence, then the Ventilator Plenum Wash						Ventilator Plenum (& UV Lamps if equipped)
		Wash (Note 1)	Delay (Note 2)	Wash (Note 1)	Delay (Note 2)	Rinse (Note 3)	Delay (Note 2)	Wash (Note 4)
Light Duty Ovens, steamers and kettles	84	3	10	3	10	3	10	3
Light / Medium Duty Braising pans, tilting skillets, fryers, open burner ranges, hot top ranges, and conveyor ovens	42	4	15	4	15	3	15	4
Medium Duty Griddles, grooved griddles	12	6	15	6	15	3	15	6
Heavy Duty Gas and electric char broilers, upright broilers, woks and conveyor broilers	4	8	15	8	15	3	15	8
Extra Heavy Duty Solid fuel broilers	2	10	15	10	15	3	15	10

Note 1: Upper and Lower SPC Wash Cycles may be programmed for between 3 and 10 minutes.

Note 2: The Delay period between Washes may be programmed for between 1 and 99 minutes.

Note 3: The Rinse Cycle is factory programmed for 3 and minutes.

Note 4: The Ventilator Plenum Wash may be programmed for between 3 and 10 minutes.

Note 5: All Washes, Rinses and Delays may be programmed by the Owner/Maintenance Level 2.

Table T-3-4-1

Model CG3, and CG3-UVi with PCU (Pollution Control Unit) Gaylord Model RSPC-ESP Typical Example Frequency and Length of Wash Cycle Chart per Ventilator Group									
Cooking Equipment Duty	Hours of Fan Operation Before Wash Starts (Factory Set)	Wash Cycles in Minutes and Sequence (Note 5)							
		RSPC with a single manifold Washes in the Following Sequence, then the Ventilator Plenum Wash. If the RSPC has two wash manifolds, the wash sequence repeats for manifold # 2 and then to the Plenum Wash.							Ventilator Plenum (& UV Lamps if equipped)
		Wash (Note 1)	Delay (Note 2)	Wash (Note 1)	Delay (Note 2)	Rinse (Note 3)	Delay (Note 2)	Wash (Note 4)	
Light Duty Ovens, steamers and kettles	84	3	10	3	10	3	10	3	
Light / Medium Duty Braising pans, tilting skillets, fryers, open burner ranges, hot top ranges, and conveyor ovens	42	4	15	4	15	3	15	4	
Medium Duty Griddles, grooved griddles	12	6	15	6	15	3	15	6	
Heavy Duty Gas and electric char broilers, upright broilers, woks and conveyor broilers	4	8	15	8	15	3	15	8	
Extra Heavy Duty Solid fuel broilers	2	10	15	10	15	3	15	10	

Note 1: RSPC Wash Cycles may be programmed for between 3 and 10 minutes.

Note 2: The Delay period between Washes may be programmed for between 1 and 99 minutes.

Note 3: The Rinse Cycle is factory programmed for 3 minutes.

Note 4: The Ventilator Plenum Wash may be programmed for between 3 and 10 minutes.

Note 5: All Washes, Rinses and Delays may be programmed at the Owner/Maintenance Level 2.

Table T-3-5-1

Detergent Consumption Chart								
Cam Setting	Oz. Per Minute at 40 PSI Water Pressure	Length of Wash Cycle						Ventilator Length Factory Settings Shown
		3 Minutes		5 Minutes		9 Minutes		
		Oz. Per Day	Gal. Per Month	Oz. Per Day	Gal. Per Month	Oz. Per Day	Gal. Per Month	
0	0	0	0	0	0	0	0	
1	0.85	2.6	0.6	5.1	1.2	7.7	1.8	4'-0" to 7'-11"
1.5	2.13	6.4	1.5	12.8	3.0	19.2	4.5	8'-0" to 11'-11"
2	3.27	9.8	2.3	16.4	3.8	29.4	6.9	12'-0" to 16'-0"
3	5.76	17.3	4.1	28.8	6.8	51.9	12.2	
4	7.25	21.8	5.1	36.3	8.5	65.3	15.3	
5	8.32	25.0	5.9	41.2	9.6	74.9	17.6	
6	8.74	26.2	6.1	43.7	10.2	78.7	18.4	

Table T-3-5-2

Model ELXC Series Ventilator Water Consumption Table		
Type of Wash	GPM Per Lineal Ft. of Ventilator	
	@40 PSI *	@80 PSI *
Extractor Wash	0.51	0.72
Plenum Wash	0.45	0.63
* All Pressures Measured at the Wash Control Cabinet with 1" pipe line between the Ventilator and Wash Control Cabinet		
Hot Water Requirements		
Water Temperature: 140 °F Min. to 180 °F Max.		
Flow Pressure: 40 PSI Min. - 80 PSI Max. at the Wash Control Cabinet while in a Wash Cycle		

Table T-3-6-1

Number of Washes (Solenoid Valves)								
Typical Example for								
ELXC Series With 3 Ventilator Sections and One PCU (Model RSPC-ESP)								
	Extractor Wash		Plenum Wash		If PCU Included			
Ventilator Section #	Number of Extractor Wash Solenoid Valves	Valve # Marked on PLC Control	Number of Plenum Wash Solenoid Valves	Valve # Marked on PLC Control	Single Pass	Valve # Marked on PLC Control	Double Pass, 4x2 and Larger	Valve # Marked on PLC Control
1	1	EW1	1	PW1	1	PW4	2	PW4,PW5
2	1	EW2	1	PW2				
3	1	EW3	1	PW3				

Table T-3-6-2

Number of Washes (Solenoid Valves)					
Typical Example for					
CG3-SPC Series					
Upper SPC Wash		Lower SPC Wash		Plenum Wash	
Number of SPC Wash Solenoid Valves	Valve # Marked on PLC Control	Number of SPC Wash Solenoid Valves	Valve # Marked on PLC Control	Number of Plenum Wash Solenoid Valves	Valve # Marked on PLC Control
1	PW1	1	PW2	1	PW3

Table T-3-6-3

Number of Washes (Solenoid Valves)					
Typical Example for					
CG3 Series with One PCU (Model RSPC-ESP)					
Plenum Wash		If PCU Included			
Number of Plenum Wash Solenoid Valves	Valve # Marked on PLC Control	Single Pass	Valve # Marked on PLC Control	Double Pass, 3x3 and Larger	Valve # Marked on PLC Control
1	PW1	1	PW2	2	PW2, PW3

Table T-3-7-1

Control Matrix - Model ELXC and ELXC-UVi Series Ventilators											
Action		Reaction									
1	2	3	4	5	6	7	8	9	10	11	12
Exhaust Fan	Supply Fan	Extractor Wash (front)	Plenum Wash (rear)	Gaylord Electric Balancing Damper Model GEED (optional equipment)	Gaylord Fire Balancing Damper Model GFBD (optional equipment)	UV Lamps	Green "UVi System On"	Yellow "UVi Lamp Failure"	Blue "UVi System Standby"	Building Fire Alarm	Command Center Display Will Read:
1 Start Fan Button is Pushed	ON	Note 1	OFF	OPEN	OPEN	ON	ON	OFF	OFF	OFF	FAN ON, UV ON, EXTRACTOR WASH ON
2 Stop Fan Button is Pushed	OFF	OFF	Note 2	CLOSED	CLOSED	OFF	OFF	OFF	OFF	OFF	FAN OFF, UV OFF, PLENUM WASH ON
3 Autostart Sensor Reaches 90° F. or set point	ON	Note 1	OFF	OPEN	OPEN	ON	ON	OFF	OFF	OFF	FAN ON, UV ON
4 Autostart Sensor Drops Below 90° or set point	Note 3	Note 3	OFF	Note 4	Note 4	Note 3	Note 3	OFF	OFF	OFF	Note 3
5 Extractor Wash Initiated as Programmed	ON	ON	OFF	OPEN	OPEN	ON	ON	OFF	OFF	OFF	EXTRACTOR WASH ON
6 Plenum Wash Initiated as Programmed	OFF	OFF	ON	CLOSED	CLOSED	OFF	OFF	OFF	OFF	OFF	PLENUM WASH ON
7 UV Safety Interlock Pressure Switch Activates	ON	Note 1	OFF	OPEN	OPEN	OFF	OFF	OFF	ON	OFF	FAN ON, UV STANDBY
8 UV Lamp Fails	ON	Note 1	OFF	OPEN	OPEN	Note 7	ON	ON	OFF	OFF	FAN ON, UV BULB BAD
9 Ballast Box High Temperature Shutdown Controller Activates	ON	Note 1	OFF	OPEN	OPEN	OFF	OFF	OFF	ON	OFF	FAN ON, UV STANDBY
10 Fire Thermostat Activates (see Note 8 and 12)	OFF	OFF	OFF	N/A	CLOSED	OFF	OFF	OFF	OFF	ON	FIRE IN HOOD, FAN OFF, NOTIFY FIRE DEPT
11 Chemical Fire System Discharges (Note 12)	Note 5	OFF	OFF	Note 6	CLOSED	OFF	OFF	OFF	OFF	ON	EXT. FIRE ACTIVE
12 Low Detergent Switch Activates	See Note 10										LOW DETERGENT
13 Wash Cycle Test Button Pushed	See Note 11										EXTRACTOR WASH ON or PLENUM WASH ON, OFF IN XX SECONDS

- Note 1:** The Extractor Wash may be on when the fan is on. The Extractor Wash comes on after a timed number of hours the exhaust fan is on. The Extractor Wash only comes on when the exhaust fan is on. It will not come on when the exhaust fan is off. Refer to the Typical Example of Frequency and Length of Wash Chart on page 2-16 for typical frequency and wash times of the wash cycles.
- Note 2:** The Plenum Wash may come when the exhaust fan is shut off. The Plenum Wash will come on after a timed number of hours the exhaust fan is on, but only when the exhaust fan is off. If the Plenum Wash is scheduled to come on, there is a 45 second delay after the exhaust fan shuts off before the Plenum Wash starts. Refer to the Recommended Wash Frequency and Length of Wash Chart on page xx for typical frequency and wash times of the wash cycles.
- Note 3:** The exhaust and supply fans and UV Lamps will continue to operate for a 15 minute cool down time and then shut off.
- Note 4:** The Gaylord Electric Balancing Damper or The Gaylord Fire Balancing Damper will close after the 15 minute cool down time. The Dampers are always open when the exhaust fan is on.
- Note 5:** Chemical Fire Extinguishing Systems are listed to extinguishing a fire with or without the exhaust fan on. The Gaylord Command Center may be intertwined with the Chemical Fire System for the exhaust fan to stay on or go off during a fire system discharge. However, typically the system is wired for the exhaust fan to stay on or come on, if the exhaust fan was off, and the supply fan to go off during a fire system discharge.
- Note 6:** If the Command Center is wired for the exhaust fan to stay on, the electric balancing damper will stay open. If the Command Center is wired for the exhaust fan to shut off, the electric balancing damper will close.
- Note 7:** If one or more UV Lamp fails the remaining stay on.
- Note 8:** The Fire Thermostat is only used when the Ventilator is equipped with a Gaylord Fire Balancing Damper Model GFBD.
- Note 9:** If the Wash Cycle is on it will automatically shut off.
- Note 10:** Low detergent notification occurs only when either the Extractor Wash or Plenum Wash is on.
- Note 11:** If there is more than one Ventilator section, when either the Extractor or Plenum Wash Test button is pushed, all the Ventilator sections Extractor or Plenum Washes would wash for approximately 18 seconds in sequence with a 30 second delay between them.

Table T-3-8-1

Control Matrix											
Model CG3, CG3-UVi, CG3-SPC, CG3-UVi-SPC (Smoke Pollution Control) Series Ventilators											
Action	Reaction										
	1	2	3	4	5	6	7	8	9	10	11
	Exhaust Fan	Supply Fan	Wash Cycle (Includes SPC or RSPC if Equipped)	Damper Position	UV Lamps	Green "UVi System On"	Yellow "UVi Lamp System Failure"	Blue "UVi System Standby"	SPC/RSPC ESP Cell Status	Building Fire Alarm	Command Center Display Will Read:
1 Start Fan Button is Pushed	ON	ON	OFF	OPEN	ON	ON	OFF	OFF	ON	OFF	FAN ON, UV LAMPS ON
2 Stop Fan Button is Pushed	OFF	OFF	Note 1	CLOSED TO WASH POSITION	OFF	OFF	OFF	OFF	OFF	OFF	FAN OFF, UV LAMPS OFF
3 Autostart Sensor Reaches set point	ON	ON	OFF	OPEN	ON	ON	OFF	OFF	ON	OFF	FAN AUTOSTARTED DUE TO HIGH TEMP IN HOOD
4 Autostart Sensor Drops Below set point	Note 2	Note 2	OFF	Note 3	Note 2	Note 2	OFF	OFF	Note 2	OFF	FANS OFF, UV LAMPS OFF
5 Wash Initiated as Programmed	OFF	OFF	ON	CLOSED TO WASH POSITION	OFF	OFF	OFF	OFF	OFF	OFF	PLENUM WASH 1 ON, WASH OFF IN XX SECONDS
6 UV Safety Interlock Pressure Switch Activates	ON	ON	OFF	OPEN	OFF	OFF	OFF	ON	OFF	OFF	FAN ON, UV STANDBY
7 UV Lamp Fails	ON	ON	OFF	OPEN	Note 6	ON	ON	OFF	ON	OFF	FAN ON, UV BULB BAD
8 Ballast Box High Temperature Shutdown Controller Activates	ON	ON	OFF	OPEN	OPEN	OFF	OFF	OFF	OFF	OFF	FAN ON, UV STANDBY
9 SPC Power Pack or Cell Access Door Open (with fan on)	ON	ON	OFF	OPEN	OFF	OFF	OFF	OFF	OFF	OFF	ESP SYSTEM STATUS
10 Fire Thermostat Activates or Remote Fire Switch pulled	OFF	OFF	OFF	CLOSED TO FIRE POSITION	OFF	OFF	OFF	OFF	OFF	ON	FIRE IN HOOD, FAN OFF, NOTIFY FIRE DEPT
11 Chemical Fire System (if equipped) Discharges	Note 4	OFF	Note 7	Note 5	OFF	OFF	OFF	OFF	OFF	ON	EXT. FIRE ACTIVE
12 Low Detergent Switch Activates	See Note 8	See Note 8								OFF	LOW DETERGENT
13 Low Odor Chemical Switch Activates	See Note 9	See Note 9								OFF	LOW ODOR CHEM LOW
11 Wash Cycle Test Button Pushed	See Note 10	See Note 10								OFF	PLENUM WASH ON, OFF IN XX SECONDS

Note 1: The Wash Cycle may come when the exhaust fan is shut off. The Wash Cycle will come on after a timed number of hours the exhaust fan is on, but only when the exhaust fan is off. If the Wash Cycle is scheduled to come on, there is a 45 second delay after the exhaust fan shuts off before the Wash starts. Refer to the Typical Example of Frequency and Length of Wash Cycles tables beginning on page 3-1.

Note 2: The exhaust and supply fans, and UV Lamps will continue to operate for a 15 minute cool down time and then shut off.

Note 3: The damper will close to the Wash position after the 15 minute cool down time.

Note 4: Chemical Fire Extinguishing Systems are listed to extinguishing a fire with or without the exhaust fan on. The Gaylord Command Center may be interwired with the Chemical Fire System for the exhaust fan to stay on or go off during a fire system discharge. However, typically the system is wired for the exhaust fan to stay on or come on, if the exhaust fan was off, and the supply fan to go off during a fire system discharge.

Note 5: If the Command Center is wired for the exhaust fan to stay on, the damper will stay open. If the Command Center is wired for the exhaust fan to shut off, the damper will close to the Fire position.

Note 6: If one or more UV Lamp fails the remaining stay on.

Note 7: If the Wash Cycle is on it will automatically shut off.

Note 8: Low detergent notification occurs only when the Wash Cycle is on.

Note 9: Does not effect any function.

Note 10: Abbreviated Wash Cycle begins.

Important Note: This label is mounted on the inside of the door of the Wash Control Cabinet. Reference the Model Number and Serial Number when ordering parts.



Figure 3-9-1
Command Center / Wash Control Cabinet Nameplate

EXHAUST HOOD WITH OR WITHOUT EXHAUST DAMPERS

THIS EXHAUST HOOD HAS BEEN TESTED TO STANDARD UL 710 "EXHAUST HOODS FOR COMMERCIAL COOKING EQUIPMENT, AND WHERE APPLICABLE TO UL 710C "ULTRAVIOLET LAMPS USED FOR REDUCTION OF GREASE LADEN VAPOR FROM COOKING EQUIPMENT".

THIS HOOD IS LISTED UNDER INTERTEK, ETL SEMKO REPORT NUMBER 3192993CRT-002, AND G100390446CRT-002 FOR ELXC MODELS CONTAINING INTERNAL WASH DOWN SYSTEMS.

ELXC MODEL HOOD FOR USE WITH LISTED SUB-ASSEMBLY CONTROL AND WASH DOWN CABINET MODEL GPC-7000.

THIS EXHAUST HOOD MEETS ALL REQUIREMENTS OF THE LATEST EDITION OF NFPA-96 AND THE IMC (INTERNATIONAL MECHANICAL CODE).

GAYLORD INDUSTRIES
10900 S.W. AVERY STREET
TUALATIN, OR 97062 USA
(800) 547-9696
EMAIL: info@gaylordusa.com
www.gaylordusa.com
PATENT PENDING

ELX0611 / 20137

ENGINEERING DATA

MODEL NO.			
SERIAL NO.			
1. MIN SUGGESTED TOTAL EXHAUST VOLUME FOR THIS SECTION	C.F.M.		
2. EXHAUST STATIC PRESSURE AT HOOD DUCT COLLAR	W.G.		

MAXIMUM COOKING SURFACE TEMPERATURE	400°F	600°F	700°F
	LISTED MIN VALUES IN CFM/LF OF HOOD		
CANOPY HT.	FACETED, CHAMFERED, OR GROUND FRONT		SQUARE FRONT WITH 6 TO 12 INCH SUPER GAP LIP
	HP-30 INCH MIN W/ REAR WALL	104	110
HP-30 INCH MIN NO REAR WALL	131	131	171
MP-24 INCH MIN W/ REAR WALL	137	151	178
MP-24 INCH MIN NO REAR WALL	137	144	184
LP-12 INCH MIN W/ REAR WALL	147	147	205
LP-12 INCH MIN NO REAR WALL	170	170	231
BBC-24/30 INCH MIN. ISLAND	127	127	202
BB-12 INCH MIN (DOUBLE, VALUE/SIDE)	170	170	231
BB-30 INCH MIN (DOUBLE, VALUE/SIDE)	131	131	171

- REFER TO GAYLORD VENTILATOR TECHNICAL MANUAL FOR METHOD(S) OF VERIFYING AIR VOLUMES.
- ELECTRICAL RATING OF LIGHT FIXTURES: 120 VOLT, 60HZ. OR 220 VOLT 50HZ OVERALL RATING - 12 AMPS OR LESS
- IF HOOD IS EQUIPPED WITH ULTRAVIOLET LAMP SYSTEM, CONSULT GAYLORD VENTILATOR TECHNICAL MANUAL FOR PROPER MAINTENANCE AND SAFETY PRECAUTIONS.
- FRONT OVERHANGS ARE 12"FRONT / 6"SIDE UNLESS OTHERWISE NOTED. BBC MODEL HOODS ARE 12"FRONT / 7.5"SIDE. (SEE LOCATION BELOW)

Figure 3-9-2
Ventilator Nameplate for ELXC Series Ventilators

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Preventive Maintenance

Overview

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

Weekly

The Detergent Container should be checked and kept full with detergent. Refer to Page 4-2 for recommended detergent.

Monthly

The detergent fittings should be checked. This is an airtight system and fittings should be tight.

Every Six Months

Clean the Detergent Container and Foot Valve.

Annually

1. Conduct a Plenum and an Extractor Wash Test and check for proper water pressure, water temperature, proper operation of the Detergent Pump, and that the Ventilator Spray Nozzles are spraying properly. Refer to Pages 2-43 for instructions.
2. Local jurisdictions typically require annual inspections and testing of the Backflow Preventer, located in the Wash Control Cabinet, by a company certified and licensed to perform such duties. Check with the local jurisdiction for such requirements. Refer to pages 6-10 for the name of your nearest certified company.

Recommended Detergent

Overview

Formula G-510EF is the only detergent recommended by Gaylord Industries for use in the wash down system of The Gaylord ClearAir Unit. Formula G-510EF is a concentrated colloid cleaner specially formulated to remove the daily accumulation of smoke and grease particles captured within the ESP Cells without damaging the aluminum in the Cells, or rubber and synthetic parts of the solenoid valves and the detergent pumping system. 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.

Formula G-510EF for the ClearAir Wash System

Pour FORMULA G-510EF directly into the detergent tank located inside the Wash Control Cabinet. The detergent pump injects the detergent into the Main Feed Line where it dilutes with the hot water at the proper ratio.

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.

Recommended Detergent – Cont.

Limited Warranty

2010 Products, Inc. warrants that Formula G-510EF will not cause cleansing agent damage to the ESP Cells, 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 G-510EF.

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

Gaylord Part Number:

Formula G-510EF GPN 23425 GL-G510EF 20L (5 Gallons)

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Troubleshooting

Using the Troubleshooting Charts

The following Troubleshooting Charts are designed to easily find common problems, the probable cause and guidance on corrective action. In some cases the Corrective Action column will reference the Testing and Repair section of this manual for additional guidance and actions.

WASH SYSTEM		
SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
1 The Wash Cycle is not adequately cleaning the Ventilator.	A. The water supply is turned off or partially off.	1 Check the hand valves inside the Wash Control Cabinet. Refer to Figure 7-2-1.
		2 Check any valves upstream of the Wash Control Cabinet.
	B. Low Water Pressure - Check the water pressure gauge inside the Command Center cabinet. Pressure should be 40 psi min. while the Ventilators are washing.	1 Check the hand valves inside the Wash Control Cabinet to make sure they are fully opened. Refer to Figure 7-2-1.
		2 Check any valves upstream of the Wash Control Cabinet to make sure they are fully opened.
		3 The Line Strainer inside the Wash Control Cabinet may be clogged. Refer to the Operation, Maintenance and Installation Manual for the Gaylord Command Center and Wash Control Cabinet for instructions on cleaning the Line Strainer.
	C. Low Water Temperature - Check the temperature gauge inside the Wash Control Cabinet. The temperature should be between 140 degrees F. to 180 degrees F.	1 If below temperature it must be increased at the hot water source.
	D. Inadequate Wash Cycle frequency.	1 Refer to page 2-27 for guidance.
E. Inadequate length of Wash Cycle.	1 Refer to page 2-27 for guidance.	
F. Detergent tank empty.	1 Check and fill the detergent tank at least weekly.	

Troubleshooting – Cont.

WASH SYSTEM - Cont.		
SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
1 Continued from the previous Page - The Wash Cycle is not adequately cleaning the Ventilator.	G. Improper detergent.	1 Refer to page 4-2 for recommended detergent.
	H. Detergent pump has lost its prime or is malfunctioning.	1 Refer to Page 6-2 for corrective action.
	I. Clogged Spray Nozzle(s).	1 Refer to the Operation, Maintenance, & Installation Manual for the Model ELXC Series, CG3 or the appropriate Series of Ventilators the Wash Control Cabinet is serving.
	J. Ratio of Detergent to water is too low.	1 Refer to Page 6-7 for corrective action.
2 Water Sprays, either the Extractor Wash sprays or the Plenum Wash sprays never come on.	A. Malfunctioning water solenoid valve.	1 Refer to the Operation, Maintenance, & Installation Manual for the Model ELXC Series, CG3 or the appropriate Series of Ventilators the Wash Control Cabinet is serving.
	B. Malfunction in PLC control in the C-7000A Command Center.	1 Check the Input Output lights on the PLC and compare them to the IO tables on Page 8-12 and 8-13. If they do not match the PLC Must be replaced.
3 Spray nozzles are spraying when the Command Center is <u>not</u> in a Wash Cycle.	A. Water Solenoid Valve is stuck in the open position.	1 Refer to the Operation, Maintenance, & Installation Manual for the Model ELXC Series, CG3 or the appropriate Series of Ventilators the Wash Control Cabinet is serving.
4 Plenum Wash comes on when fan is running.	A. Solenoid Valve for Plenum Wash is Wired to an Extractor Wash terminal.	1 Check wiring and move to correct terminal. All Plenum Solenoid Valves must be connected to PW terminals and all Extractor Solenoids must be connected to EW terminals.

Troubleshooting – Cont.

BACKFLOW PREVENTER		
SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
1 Intermittent discharge of water.	A. Intermittent discharge of water through the relief valve is fairly common and usually occurs if there is inlet pressure fluctuations of more than 3 psi and when the water solenoid valve closes to shut off the Wash Cycle	1 No action necessary.
2 Continuous discharge of water when the Ventilator is not in a Wash Cycle.	A. Foreign material in the check valve.	1 Leave the inlet hand valve open and close the outlet hand valve. If there is still continuous discharge it indicates that foreign material is preventing the a check valve from closing. If repeated Wash Cycle flushing's will not clear the check valve then the unit must be repaired by a Certified Service Company. Refer to pages 6-10 and 6-11 for contact information for the nearest Certified Service Company.
	B. Damaged parts within the Backflow Preventer.	

C-7000A COMMAND CENTER		
SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
1 There is no display on the display screen (HMI - Human Machine Interface)	A. Blown fuse on power supply.	1 Replace fuse on main board. Refer to Page 8-14 for fuse locations.
	B. Interface Cord from the display screen to the control board is defective.	1 Replace Interface Cord.
	C. Display screen (HMI) is defective.	1 Replace HMI.
2 Display screen operates and displays but various functions of the Ventilator are not operating properly.	A. Possible defective Programmable Logic Controller (PLC).	1 To check for proper operation refer to the PLC Input/Output tables on Page 8-12 and 8-13.
	B. Main fuse is blown. The power supply for the PLC is on a separate fuse at the power supply.	1 Replace fuse on main board. Refer to page 8-14 for fuse location.

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Wash Control Cabinet

Wash Control Cabinet

Water Pressure

For the Wash Cycle system to clean effectively the water flow pressure at the Wash Control Cabinet must be within the range of 40 psi minimum to 80 psi maximum.

To check the water pressure, place the Ventilators in a Wash Cycle by initiating either a Plenum Wash Test or an Extractor Wash Test. Refer to the instructions on Page 2-43 for initiating a Wash Test. While in a Wash Test open the Wash Control Cabinet door and read the pressure gauge (Refer to Fig 6-2-1). If the flow pressure is below 40 psi check the following:

1. There are two shut off valves in the control cabinet one on each side of the Reduced Pressure Principle Device backflow preventer. Check to make sure that both valves are fully open.
2. There is a line strainer installed in the Wash Control Cabinet (Refer to Fig 6-2-1). Remove the strainer screen, clean and replace (Refer to Page 6-9 for instructions).
3. If after checking "1" and "2" above and the water pressure is still low, it indicates the there is a valve closed upstream of the Wash Control Cabinet or the building has inadequate water supply.

If the flow pressure is above 80 psi corrective action must be taken upstream of the Wash Control Cabinet to reduce the pressure. The Detergent Pump cannot pump against a pressure above 80 psi. There is no device within the Wash Control Cabinet that can reduce the pressure.

Water Temperature

For the Wash Cycle system to clean effectively the water temperature at the Wash Control Cabinet must be within the range of 140°F minimum to 180°F maximum.

To check the water temperature, place the Ventilators in a Wash Cycle by initiating either a Plenum Wash Test or an Extractor Wash Test. Refer to the instructions on Page 2-43 for initiating a Wash Test. While in a Wash Test open the Wash Control Cabinet door, allow the water to run for 30 to 60 seconds and read the temperature gauge (Refer to Fig 6-2-1). If the temperature is not within the required range, corrective action must be taken at the source of the hot water, upstream of the Wash Control Cabinet. There is no device within the cabinet that can increase or decrease the water temperature.

Wash Control Cabinet – Cont.

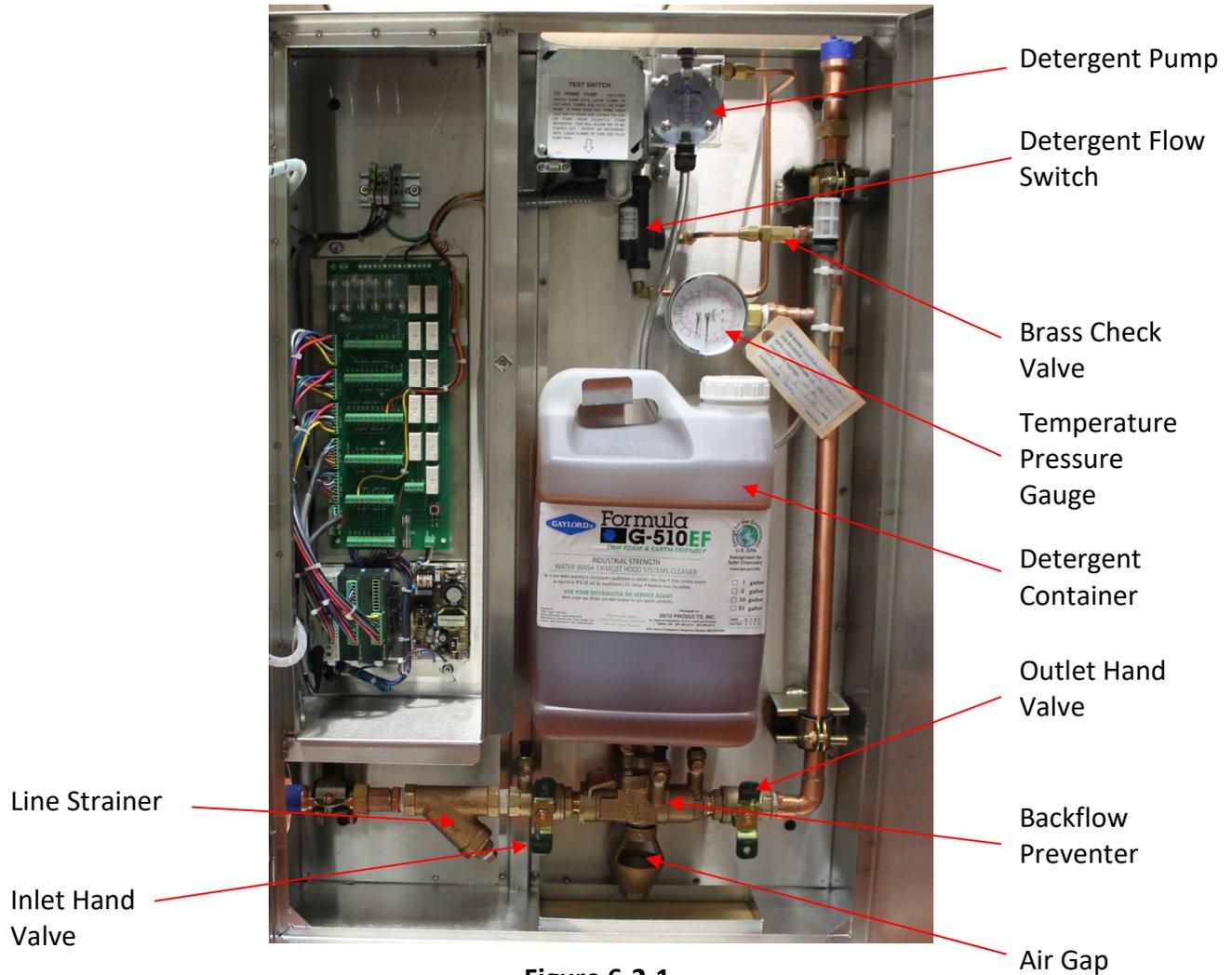


Figure 6-2-1
Wash Control Cabinet

Detergent Pump

Overview

The detergent pump is an integral part of the proper operation of the Ventilator Wash Cycle. The pump is located within the Wash Control Cabinet (Refer to Fig. 6-2-1). When the Wash Cycle begins, the pump is energized and draws detergent up from the detergent container, pushing it through the copper tubing, flow switch, brass check valve and into the hot water line.

Initial Operation

To prime and operate the pump for the first time, it is recommended that water be used instead of detergent to prevent detergent from spilling in case of leaks at the system's fittings.

The pump is operating properly when both upper and lower poppet checks in the pump head can be seen moving up and down slightly.

Wash Control Cabinet – Cont

Detergent Pump – Cont.

Initial Operation – Cont.

If the pump does not self-prime, an air lock may have developed within the pump head and the following action should be taken:

1. Hold down Pump Test switch, located on the bottom of the electrical junction box on the pump. Refer to Figure 6-3-1.
2. Loosen the Top Cap slightly to allow air to be pushed out and then retighten. Repeat as necessary until liquid climbs up the tube and fills Pump Head and both Poppet Checks are moving up and down slightly. Note: Be careful not to tighten to much as it will cut the “O” ring.
3. Check all fittings to ensure an airtight system.

If the pump still does not work properly, check and rebuild or replace the Foot Valve, Pump Head, and/or Brass Check Valve in the following order:

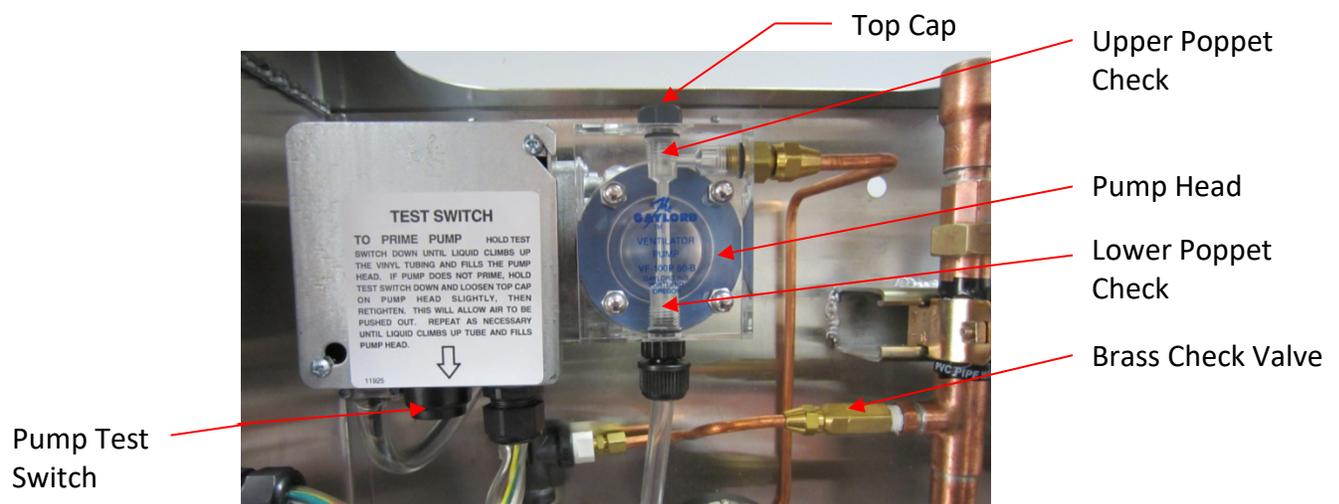


Figure 6-3-1
Detergent Pump

1. Foot Valve (Refer to Figure 6-4-1 and Figure 6-4-2)
 - a) The Foot Valve should be clean and immersed in the detergent.
 - b) To clean the Foot Valve proceed as follows:
 - 1) Remove Tubing and Foot Valve from the Detergent Reservoir.
 - 2) Slide the stainless steel tube away from the Foot Valve.
 - 3) Pull the vinyl tubing off the Foot Valve.
 - 4) Unscrew the Screen from the Valve Base.
 - 5) Remove the Ball Check and the “O” Ring from the Screen.
 - 6) Clean the entire assembly and reassemble.

Wash Control Cabinet – Cont.

Detergent Pump – Cont.

- 7) Replace Foot Valve and test.
- c) If the Foot Valve does not operate properly after cleaning replace with a new one.



Figure 6-4-1
Foot Valve

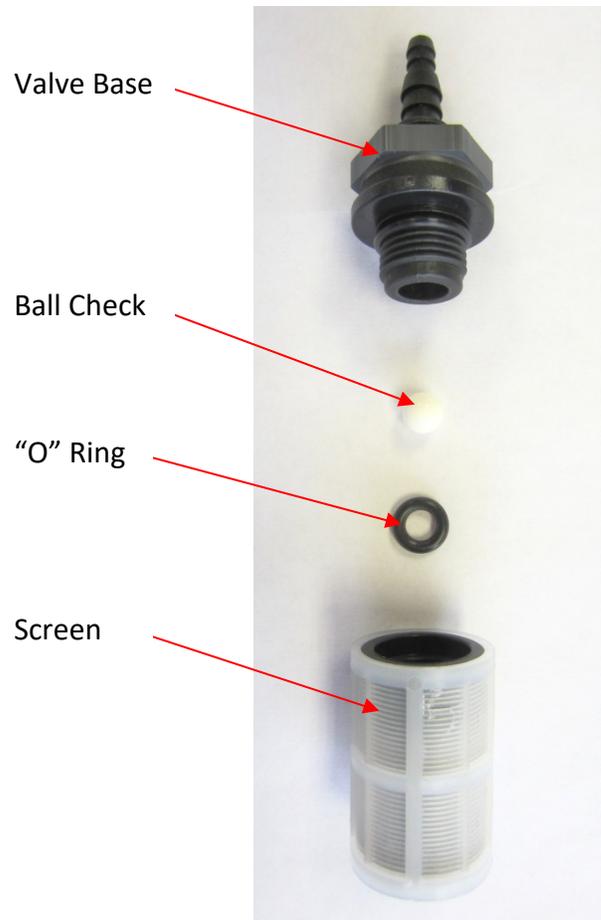


Figure 6-4-2
Foot Valve Exploded View

2. Pump Head (Refer to Figure 6-3-1 and Figure 6-6-1)

- a) Remove, check and the clean the Pump Head as follows:
 - 1) Disconnect the vinyl tubing coming into the bottom of the head.
 - 2) Disconnect the copper tubing coming out the right top of the head
 - 3) Remove the four mounting screws (Figure 6-6-1, Pc. 5) and remove the head from the Pump Head Base.

Wash Control Cabinet – Cont.

Detergent Pump – Cont.

- 4) Remove the Top Cap (Figure 6-6-1, Pc. 21) and then remove the Spring (Figure 6-6-1, Pc 11) and the Poppet Check (Figure 6-6-1, Pc. 12). Repeat this procedure for the Bottom Adaptor (Figure 6-6-1, Pc.10)
 - 5) Inspect the Pump Head for cracks and replace with a complete new Pump Head if necessary.
 - 6) If the Pump Head is not cracked, insert new Poppet Checks and reassemble.
 - 7) Before remounting the Pump Head, inspect the Diaphragm (Figure 6-6-1, Pc. 18) for cracks or holes. Replace if necessary. To remove the Diaphragm unscrew counter clockwise.
 - 8) Mount Pump head to Pump Bracket.
 - 9) Reattach the vinyl and copper tubing.
- b) If the Pump Head does not operate properly after cleaning, replace with a Pump Head Kit (Refer to page 7-3 for parts).
3. Brass Check Valve (Refer to Figure 6-3-1 and Figure 6-6-1, Pc. 15).
- a) Remove, check and clean Brass Check Valve as follows:
 - 1) Turn off water at the Outlet Hand Valve that is part of the Backflow Preventer (Refer to Figure 6-3-1).
 - 2) Disconnect the copper tubing coming from the Detergent Flow Switch
 - 3) Remove the entire Brass Check Valve from the tee. **Caution:** Have a container ready to catch the water that will come out the pipe tee when the valve is removed.
 - 4) Inspect the valve for deterioration and small holes and replace, if necessary, with a new Brass Check Valve.
 - 5) To clean the Check Valve separate the two half's of the body.
 - 6) Remove the Poppet Check and clean the valve body.
 - 7) Reassemble the check valve and reinstall in the tee.
 - 8) Reattach the copper tubing.
 - b) If the Brass Check Valve does not operate properly after cleaning, replace with new one.

Wash Control Cabinet – Cont.

Detergent Pump – Cont.

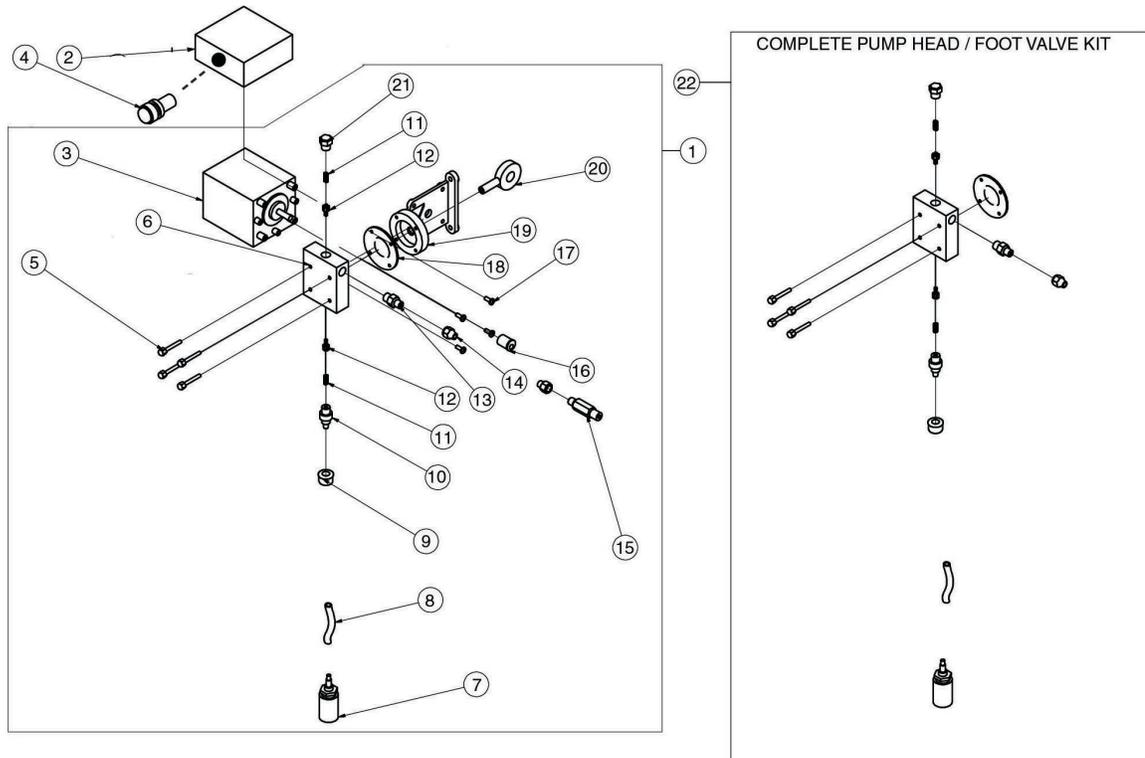


Figure 6-6-1
Detergent Pump Exploded View

Detergent Pump Motor

If it is determined that the pump motor is burned out the entire Detergent Pump must be replaced. To remove the entire pump, proceed as follows:

1. Shut off power to the Wash Control Cabinet pump junction box.
2. Disconnect the electrical conduit and wiring from the pump junction box.
3. Disconnect the vinyl tubing coming up from the Detergent Tank.
4. Disconnect the copper tubing coming out the right top of the pump head.
5. Remove the two nuts at the pump mounting bracket and remove the pump.
6. Mount new pump.
7. Reconnect the vinyl and copper tubing line.
8. Reconnect the wiring and conduit.
9. Turn on power.
10. Test the pump.

Wash Control Cabinet – Cont.

Detergent Pump – Cont.

Detergent Flow Ratio

The Detergent to water ratio is determined by the setting on the Adjustable Cam located on the end of the motor shaft (Refer to Figure 6-7-1). The Adjustable Cam may be adjusted from “0” to “6” with “0” being no detergent pumping, “1” the lowest ratio of Detergent to water and “6” the highest ratio. The pump comes from the factory set at either number “1”, “1.5” or the “2” position depending upon the total length of Ventilator, in feet, the pump is serving. Refer to Table T-6-8-1 for detergent consumption and factory settings. Generally, the factory setting will be correct to provide efficient cleaning of the Ventilator; however, adequate cleaning is dependent upon a number of factors:

1. Actual amount on cooking within the hours of fan operation.
2. Type of food product being cooked.
3. Water pressure. Required pressure is 40 psi Min. to 80 psi Max.
4. Water temperature. Required temperature is 140°F. Min. to 180°F. Max.
5. Daily grease accumulation
6. Length of Wash Cycle
7. Frequency of Wash Cycle
8. Type of detergent. Refer to page 4-2 for recommended detergent.
9. Ratio of detergent to water.

If it is determined that more detergent is being used than necessary, or that a higher ratio of detergent to water is required, the ratio may be changed by re-setting the Adjustable Cam to a lower or higher position. To change the cam setting, proceed as follows (Refer to Fig. 6-7-1):

1. Remove the plastic Protective Cover (not shown), that covers the Adjustable Cam Assembly, by removing the cover screw.
2. Loosen the Wing Nut approximately 1/8”.
3. Turn the Adjuster Ring until the Pointer lines up with the desired number, or a point between the numbers.
4. While holding the Adjuster Ring tighten the Wing Nut.

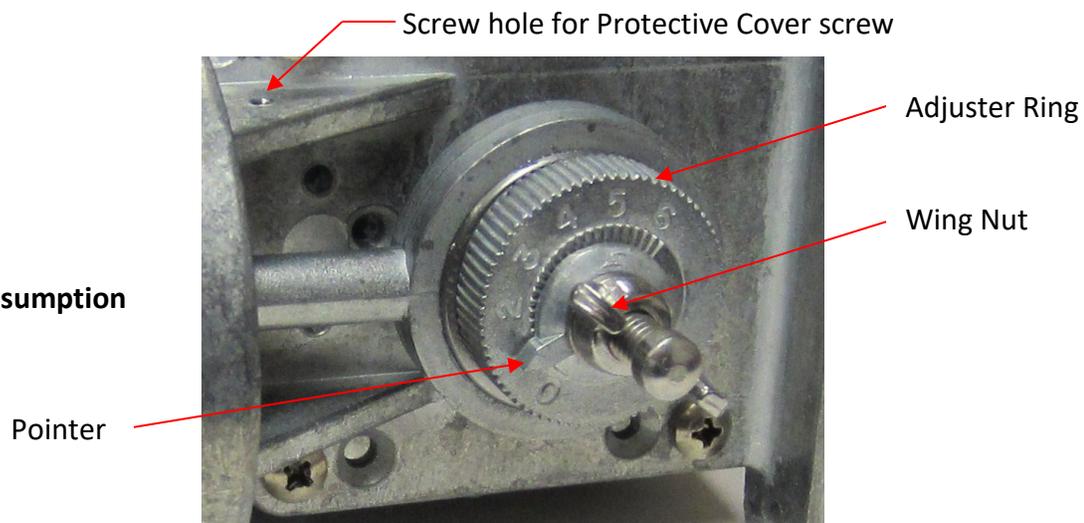


Figure 6-7-1
Detergent Consumption
Adjustment

Wash Control Cabinet – Cont.

Detergent Pump – Cont.

The following Detergent Consumption Chart shows the approximate amount of detergent used with different Cam Settings with the pump pumping against a water pressure of 40 psi.

Table T-6-8-1

Detergent Consumption Chart								
Cam Setting	Oz. Per Minute at 40 PSI Water Pressure	Length of Wash Cycle						Ventilator Length Factory Settings Shown
		3 Minutes		5 Minutes		9 Minutes		
		Oz. Per Day	Gal. Per Month	Oz. Per Day	Gal. Per Month	Oz. Per Day	Gal. Per Month	
0	0	0	0	0	0	0	0	
1	0.85	2.6	0.6	5.1	1.2	7.7	1.8	4'-0" to 7'-11"
1.5	2.13	6.4	1.5	12.8	3.0	19.2	4.5	8'-0" to 11'-11"
2	3.27	9.8	2.3	16.4	3.8	29.4	6.9	12'-0" to 16'-0"
3	5.76	17.3	4.1	28.8	6.8	51.9	12.2	
4	7.25	21.8	5.1	36.3	8.5	65.3	15.3	
5	8.32	25.0	5.9	41.2	9.6	74.9	17.6	
6	8.74	26.2	6.1	43.7	10.2	78.7	18.4	

Important Note: Changing the Cam Setting to a higher level from the factor setting should only be done after all other measures such as increasing the length of the Wash Cycle and or Frequency, and increasing the temperature of the water have been made as the detergent is the largest cost of operating the Wash System.

Detergent Flow Switch

The Detergent Flow Switch (Refer to Figure 5-2-1) is a sealed unit and cannot be repaired. If determined that the Flow Switch is faulty replace as follows:

1. Turn off power to the Command Center.
2. Disconnect the wiring from the pump junction box.
3. Disconnect the copper tubing on both sides of the switch.
4. Install a new Flow Switch.

Figure 6-8-1
Detergent Flow Switch



Wash Control Cabinet – Cont.

Line Strainer

The Line Strainer (Refer to Figure 6-2-1 and 6-9-1) prevents foreign material from going downstream and causing the Reduced Pressure Principle Device, Solenoid Valves and Ventilator spray nozzles to malfunction. If it is determined that foreign material is flowing downstream of the Line Strainer, the strainer screen must be removed and cleaned. To clean proceed as follows:

1. Turn off the hot water supply upstream of the Line strainer.
2. Using a wrench, slowly unscrew the Screen Plug. **Caution:** The water may still be under pressure causing the Screen Plug to blow off and water to discharge rapidly.
3. Remove the Screen.
4. Using a wire brush and hot detergent water, clean the screen.
5. Replace the Screen, Screen Plug and tighten thoroughly.
6. Test for leaks.



Figure 6-9-1
Line Strainer



Figure 6-9-2
Line Strainer – Screen Removed

Backflow Preventer (Reduced Pressure Principle Device)

Overview

A Backflow Preventer is mounted within the Wash Control Cabinet and is required by code to prevent contaminated water (water with detergent) from back-flowing upstream to potable water (Refer to Figure 6-2-1, 6-11-1 and 6-13-1). The Backflow Preventer is manufactured by the Watts Regulator Company.

Backflow Preventer (Refer to Figures 6-10-1)

The Backflow Preventer consists of two Check Module Assemblies with spring loaded check valves and one Relief Valve Assembly with a spring loaded relief valve. There is a shut off valve on the inlet and outlet sides of the unit to allow servicing. This device prevents backflow by opening and closing the check valves if the pressure from the inlet side to the outlet side of the device varies.

Wash Control Cabinet – Cont.

Backflow Preventer – Cont. (Refer to Figures 6-10-1)

Initial Start-Up

To avoid water hammer or shock damage, perform the following initial start-up procedures:

1. Close the Outlet Hand Valve.
2. Open the Inlet Hand Valve slowly, fill the valve and bleed the air through test cock number 2, 3, and 4.
3. When the valve is filled, open the Outlet Hand Valve slowly and fill the remaining water supply system. The initial start-up procedure is now complete.

Intermittent Discharge

Intermittent discharge of water through the relief valve is fairly common and usually occurs if there are inlet pressure fluctuations of more than 3 psi and when a solenoid valve closes after a Wash Cycle.

Continuous Discharge

If there is continuous discharge or rapid spitting of water out the relief valve when the Ventilator is not in a Wash Cycle, contact the Watts Regulator Company for service.

Caution: In no case should the relief valve outlet port be plugged, closed off or restricted.

Note: Local jurisdictions typically require annual inspections and testing by a company certified and licensed to perform such duties. For the name of your nearest certified company, call Watts Regulator, 815 Chestnut St., at 978-688-1811.

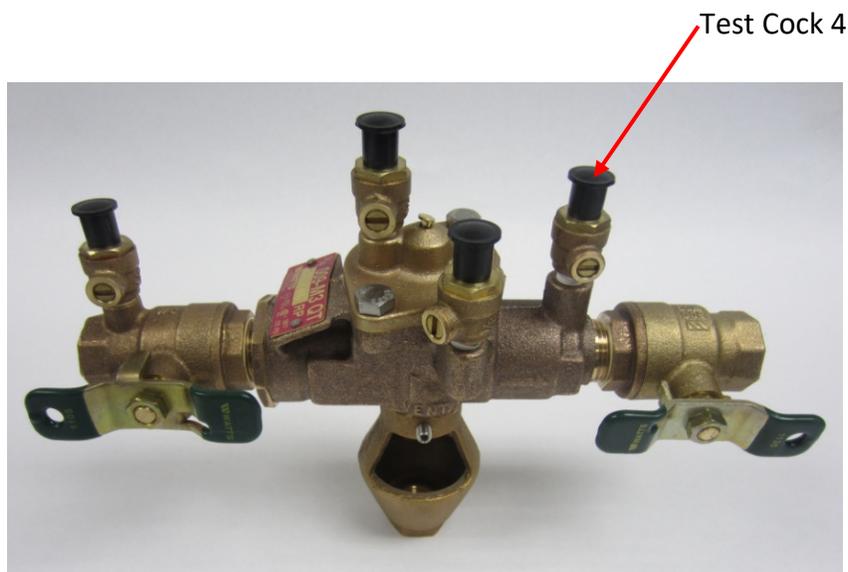


Figure 6-10-1
Backflow Preventer

C-7000A Command Center

Testing Internal Fire Mode

The ELXC Series Ventilator may be equipped with a combination Gaylord Fire/Balancing Damper, designated “GFBD” in the Ventilator model number. The Ventilator model is stamped on the Ventilator Nameplate (Refer to Page 3-9 for a sample Nameplate). If equipped, a thermostat will be mounted at the entrance of the exhaust duct collar. In the event of a fire, under or within the Ventilator, and if the thermostat reaches its set point, the Internal Fire Mode will activate. Refer to Page 2-17 for details on what the Internal Fire Mode initiates, or refer to the ELXC Series Control Matrix on Page 3-7.

The Internal Fire Mode may be tested by pushing the INTERNAL FIRE MODE TEST SW located on the bottom right corner of the Command Center circuit board (Refer to Figure 6-11-1). Pushing this button duplicates the action of thermostat activation. Typically the Internal Fire Mode would be tested to insure that the Ventilator Fire/Balancing Damper closes, the exhaust and supply fans shut off, the building fire alarm activates and other functions as described on Page 2-17 and 3-7.

Extreme Caution: Before conducting an Internal Fire Test, disable the building fire alarm, the inter action with the Building Management and or notify the building authorities and Fire Department that an Internal Fire Test is being conducted.

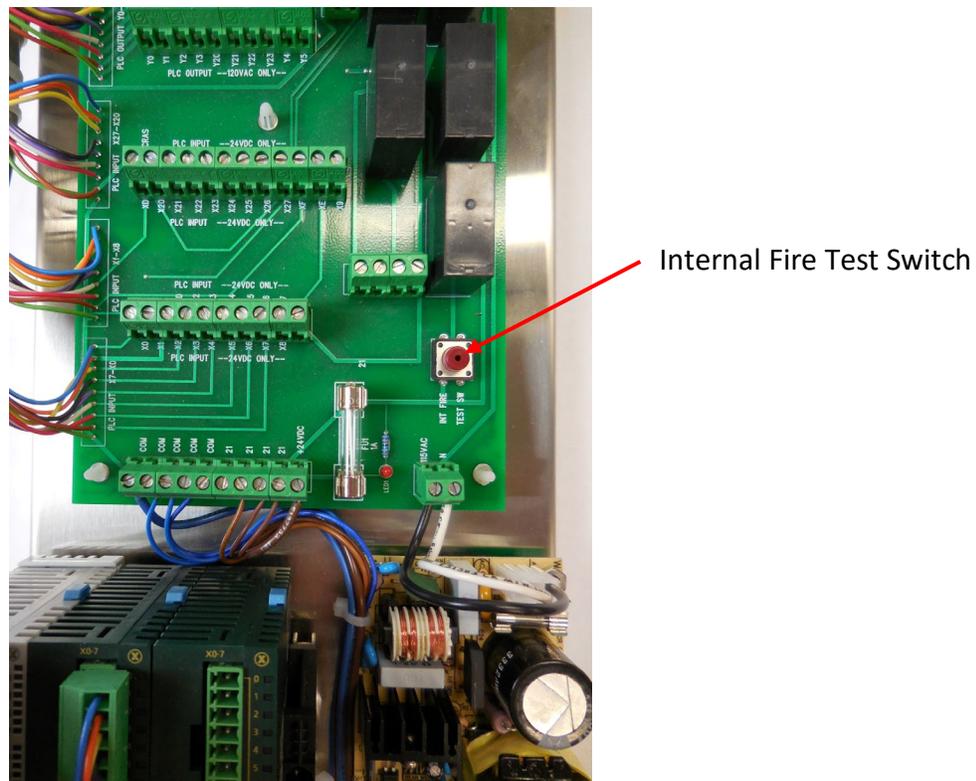


Figure 6-11-1

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Parts - C-7000A Command

Table T-7-1-1

Model C-7000A Series Command Center Parts List			
PC #	Description	Gaylord Part #	Photo
1	C-7000A HMI (Human Machine Interface)	20527	
2	HMI to PLC Interface Cable	30880	
3	C-7000A PLC (Programmable Logic Controller)	20526	
4	Expansion Module	18867	
5	Power Supply	18863	

Parts – Wash Control Cabinet – Plumbing

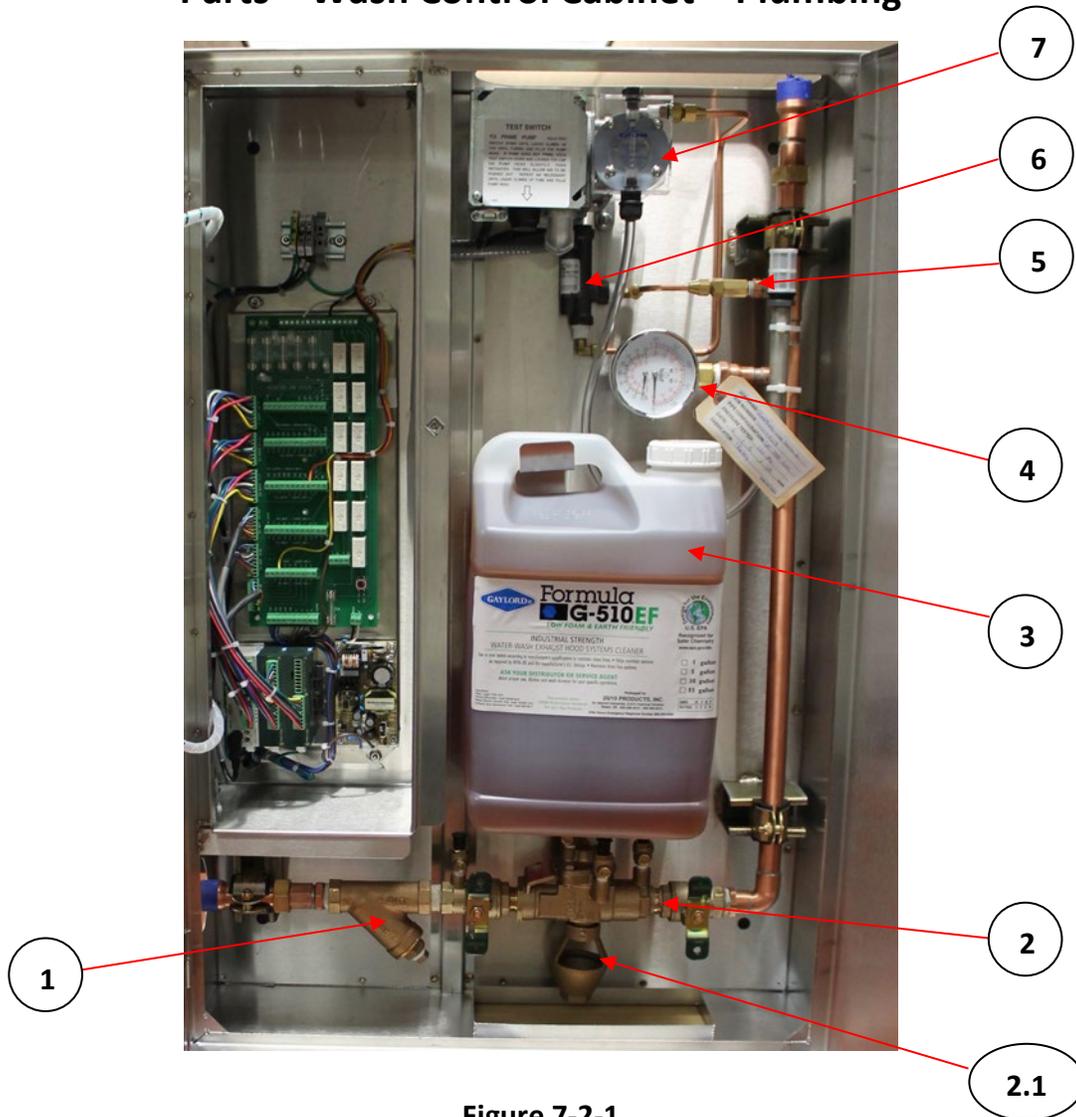


Figure 7-2-1

Table T-7-2-1

Wash Control Cabinet Plumbing Parts List		
PC #	Description	Gaylord Part #
1	Line Strainer - .75"	17138
	Line Strainer – 1.25"	17140
2	Reduced Pressure Principle Backflow Preventer - .75"	11317
	Reduced Pressure Principle Backflow Preventer – 1.25"	11319
2.1	Air Gap assembly for Backflow Preventer – For .75" and 1.25"	50287
3	Detergent Container	19793
4	Pressure - Temperature Gauge	10175
5	Detergent Check Valve - Brass .25"	10264
6	Detergent Flow Switch	16892
7	Detergent Pump	10222
8	Command Center Guard (not shown - package of 2)	75587
9	Door Latch (not shown)	19351

Parts - Wash Control Cabinet – Detergent Pump

Figure 7-3-1
Detergent
Pump

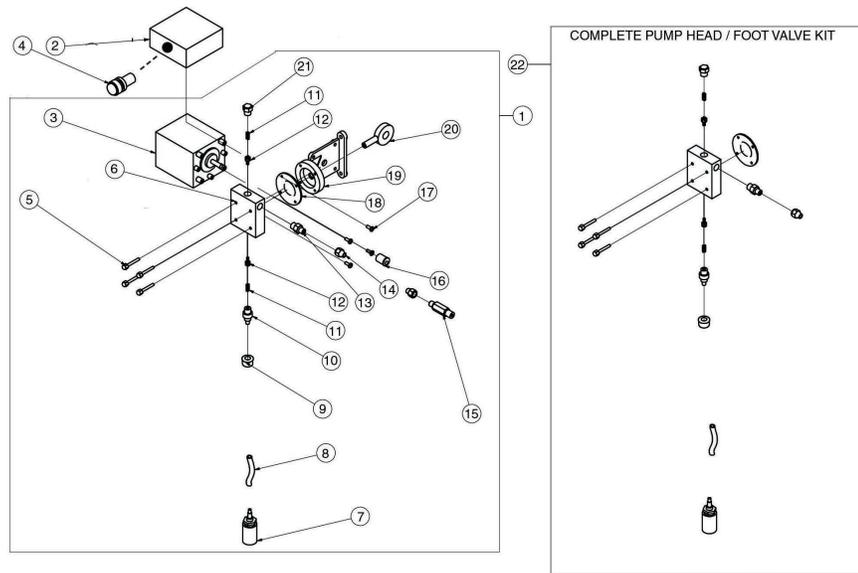
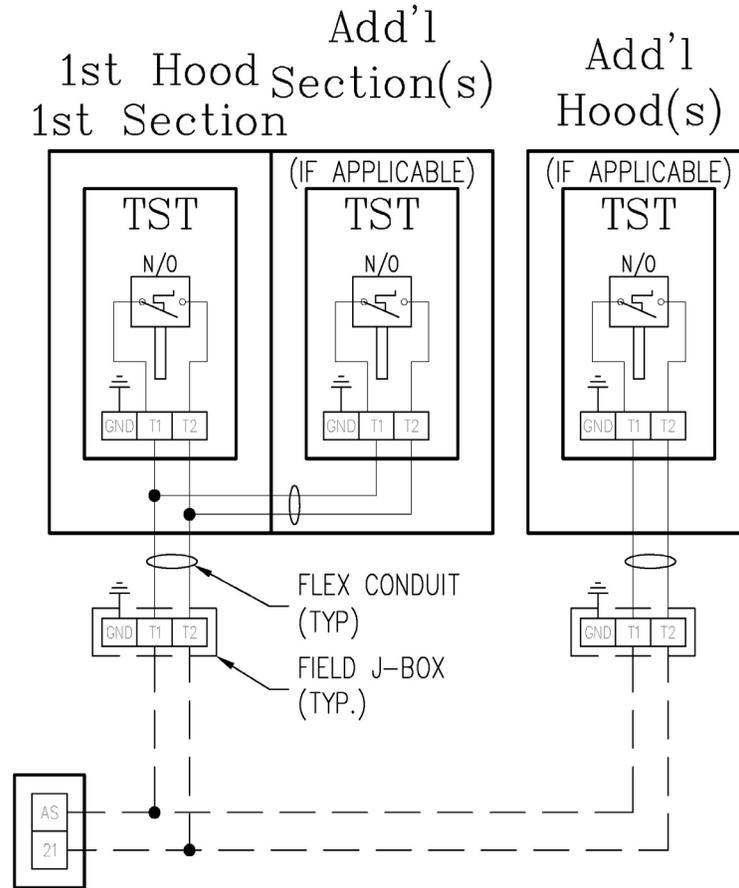


Table T-7-3-1

Detergent Pump Parts List			
Pc #	DECRPTION	QTY	GAYLORD PART NO.
1	Detergent Pump - Complete	1	10222
2	Electrical J-Box (not sold separately)	1	n/a
3	Pump Motor (not sold separately)	1	n/a
4	Detergent Pump Test Switch	1	10238
5	Pump Head Screws (sold with Kit Part No. 10275)	4	n/a
6	Pump Head, Sold as a Kit. (See Part No 10275)	1	n/a
7	Foot Valve	1	10269
8	Vinyl Tubing 22" Long	1	10272
9	Tube Nut (not sold with Kit Part No. 10275)	1	n/a
10	Bottom Adaptor with "O" Ring (sold with Kit Part No. 10275)	1	n/a
11	Spring (sold with Kit Part No. 10275)	1	n/a
12	Poppet Check (sold with Kit Part No. 10257)	2	n/a
13	Brass Outlet (sold with Kit Part No. 10275)	1	n/a
14	Tube Nut - Brass (sold with Kit Part No. 10275)	1	n/a
15	Check Valve - Brass	1	10265
16	Adjustable Cam Assembly	1	20466
17	Bracket Motor Mounting Screws (not sold separately)	4	n/a
18	Diaphragm (sold with Kit Part No. 10275)	1	n/a
19	Pump Bracket (not sold separately)	1	n/a
20	Yoke and Bearing Assembly	1	n/a
21	Top Cap (sold with Kit Part No. 10275)	1	n/a
22	Complete Pump Head / Foot Valve Kit	1	10275

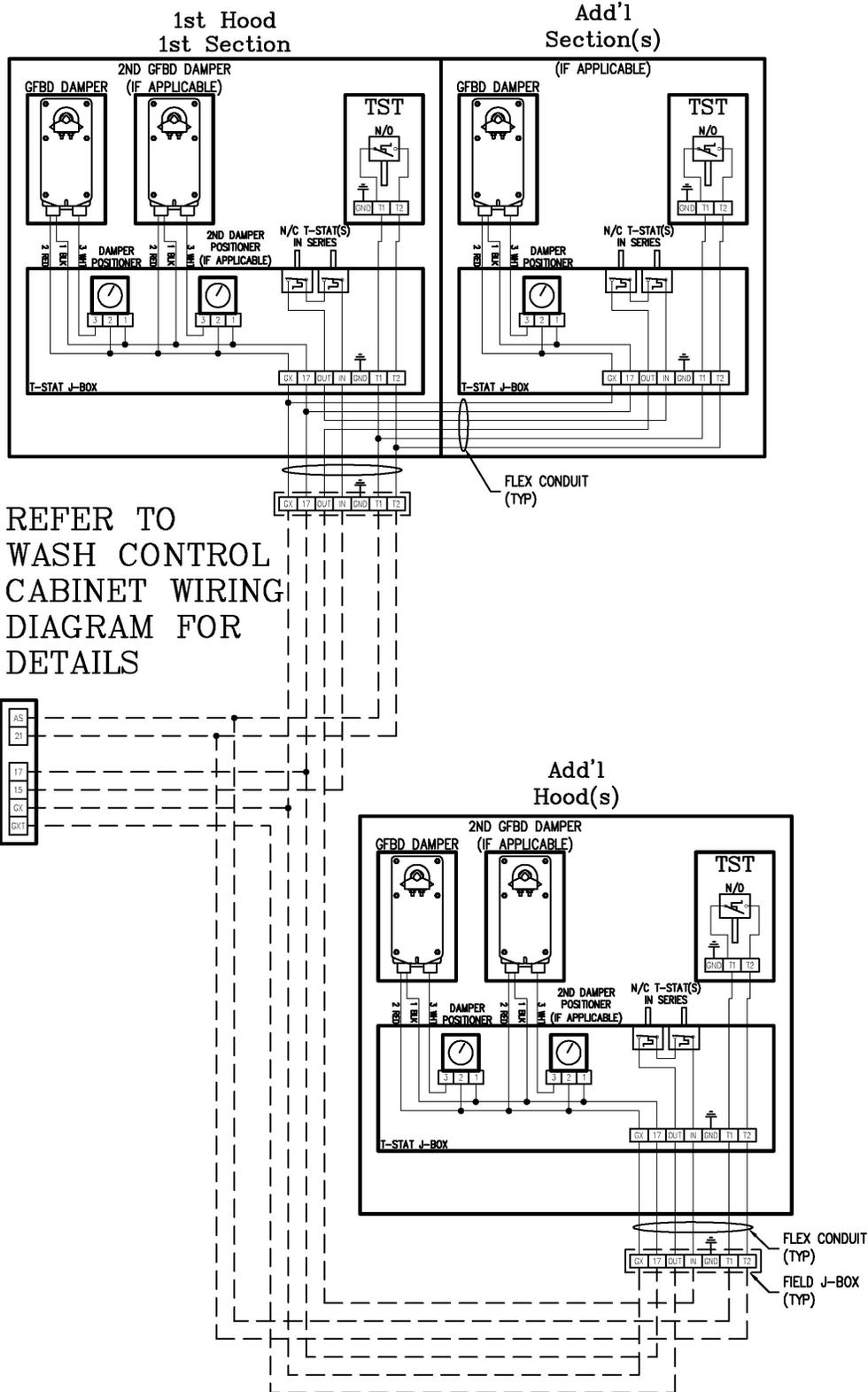
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Wiring Diagram – Ventilator With Autostart

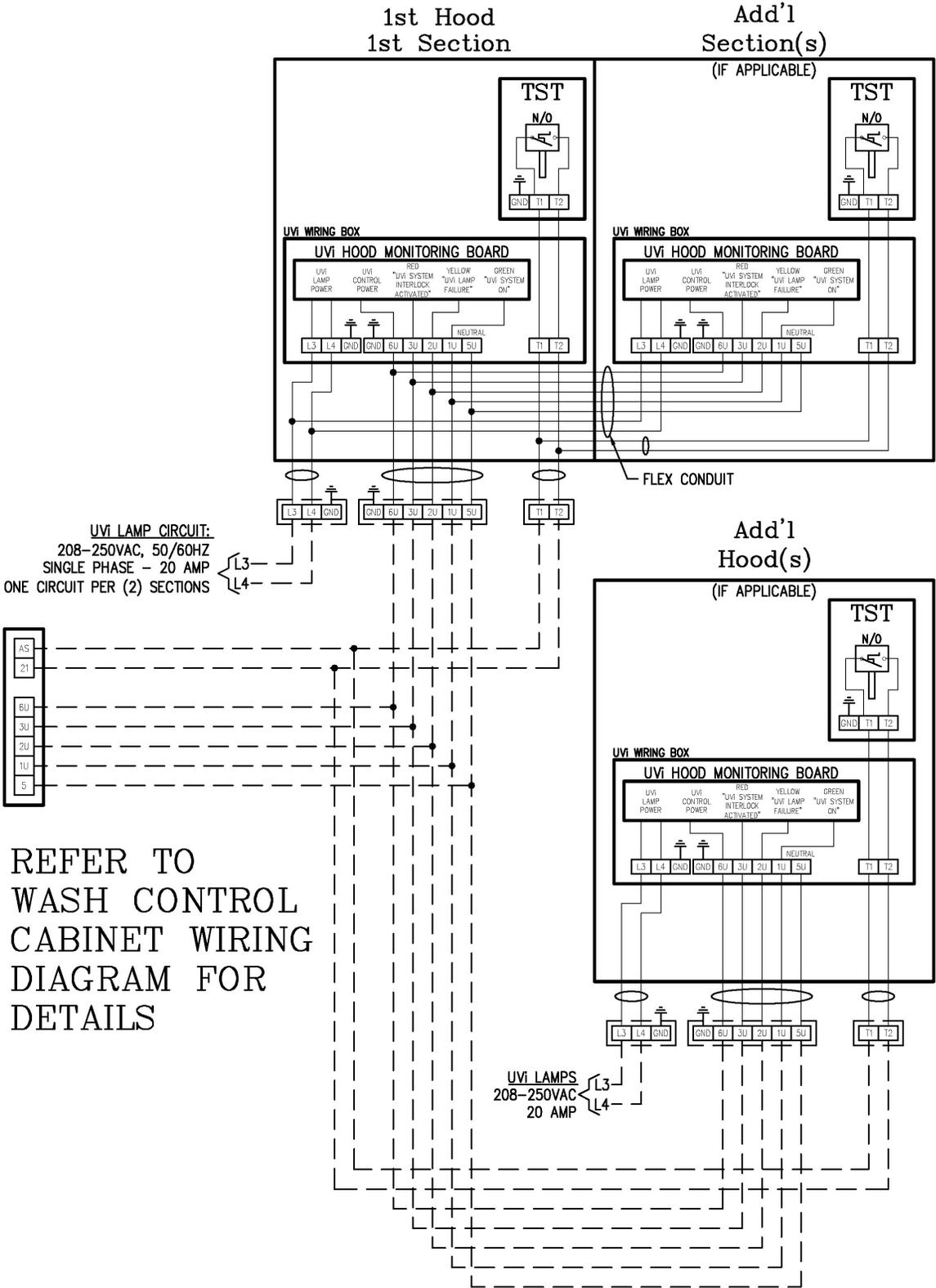


REFER TO
WASH CONTROL
CABINET WIRING
DIAGRAM FOR
DETAILS

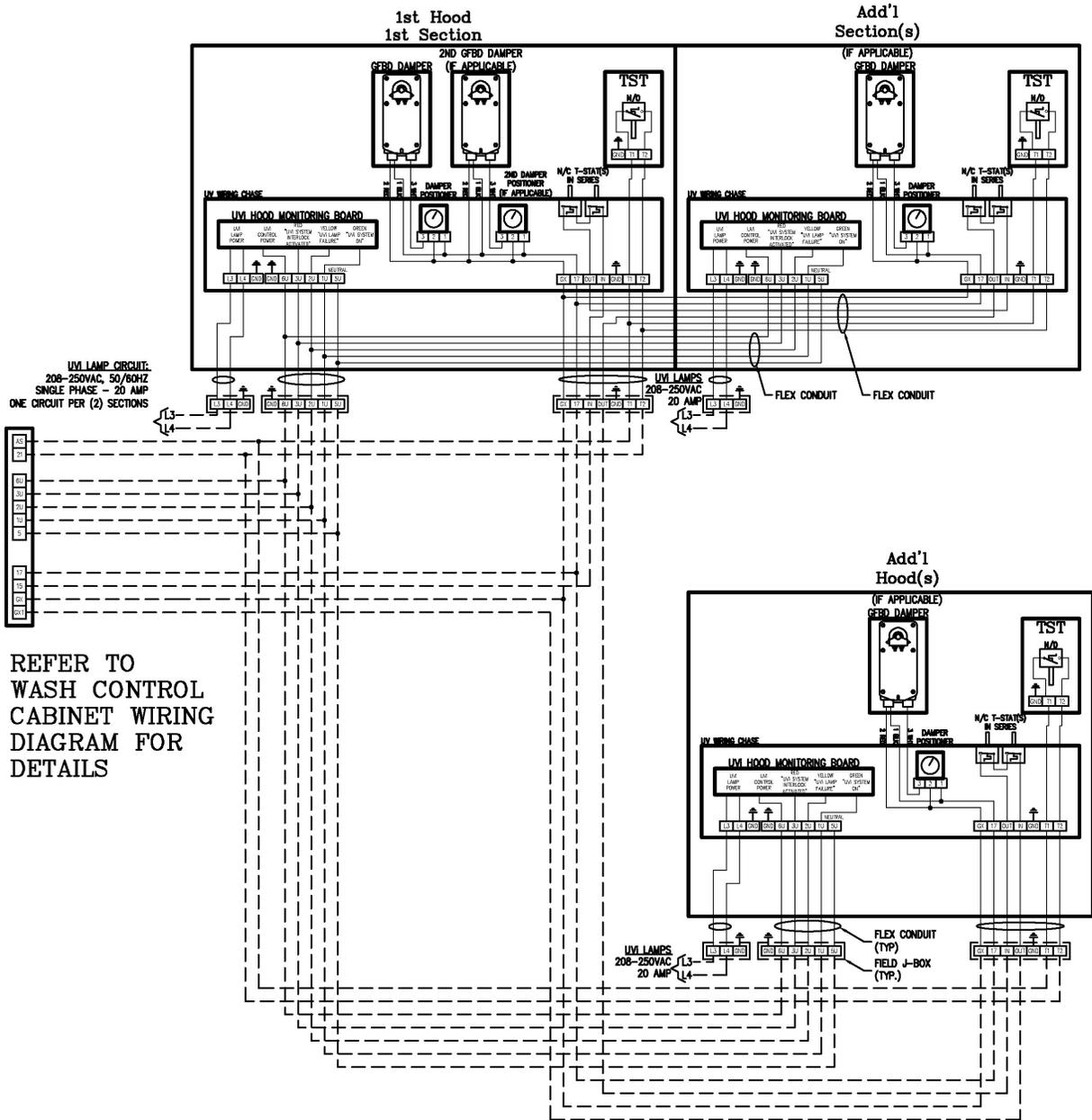
Wiring Diagram – Ventilator with Autostart and GFBD



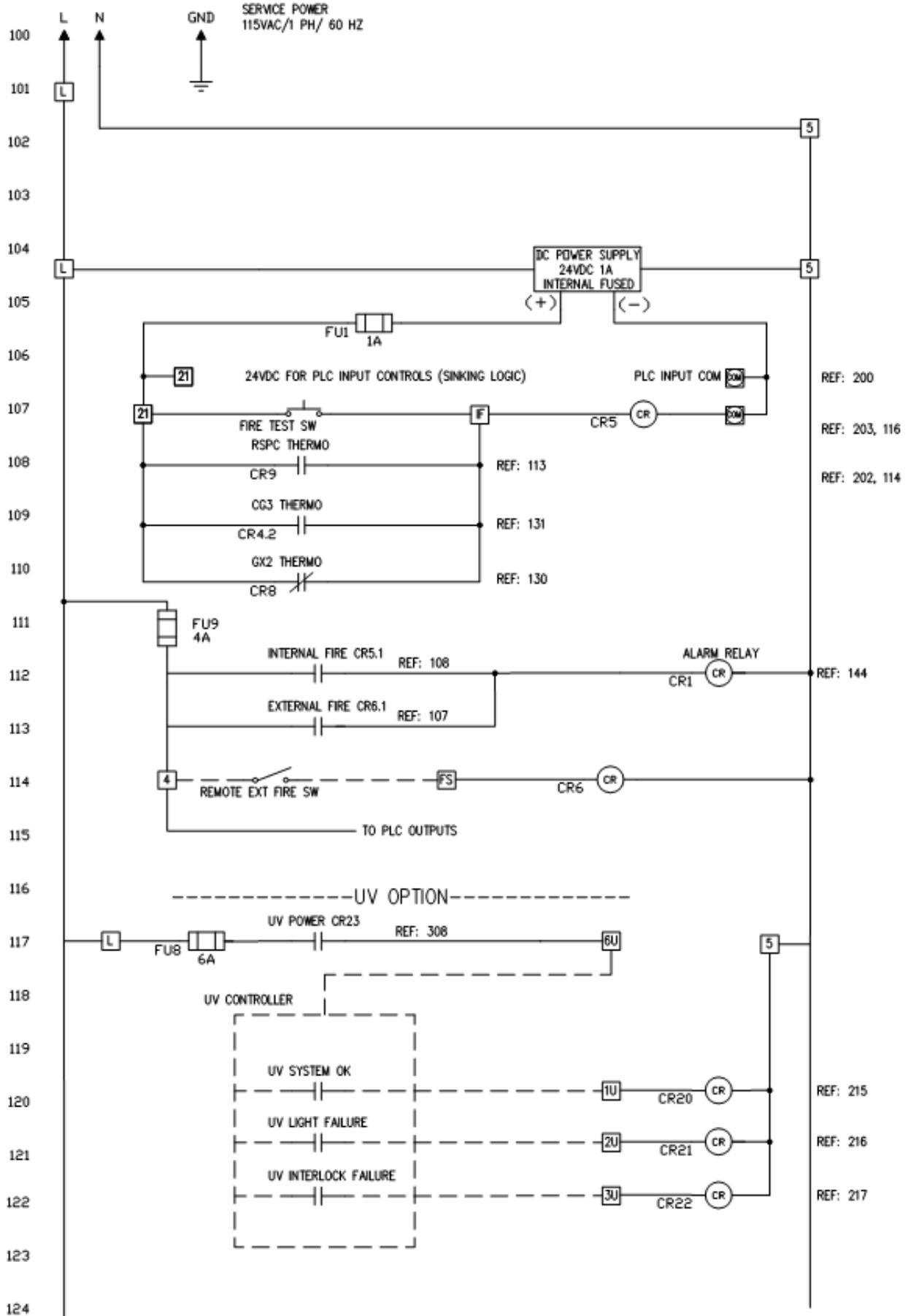
Wiring Diagram – Ventilator with Autostart and UVI



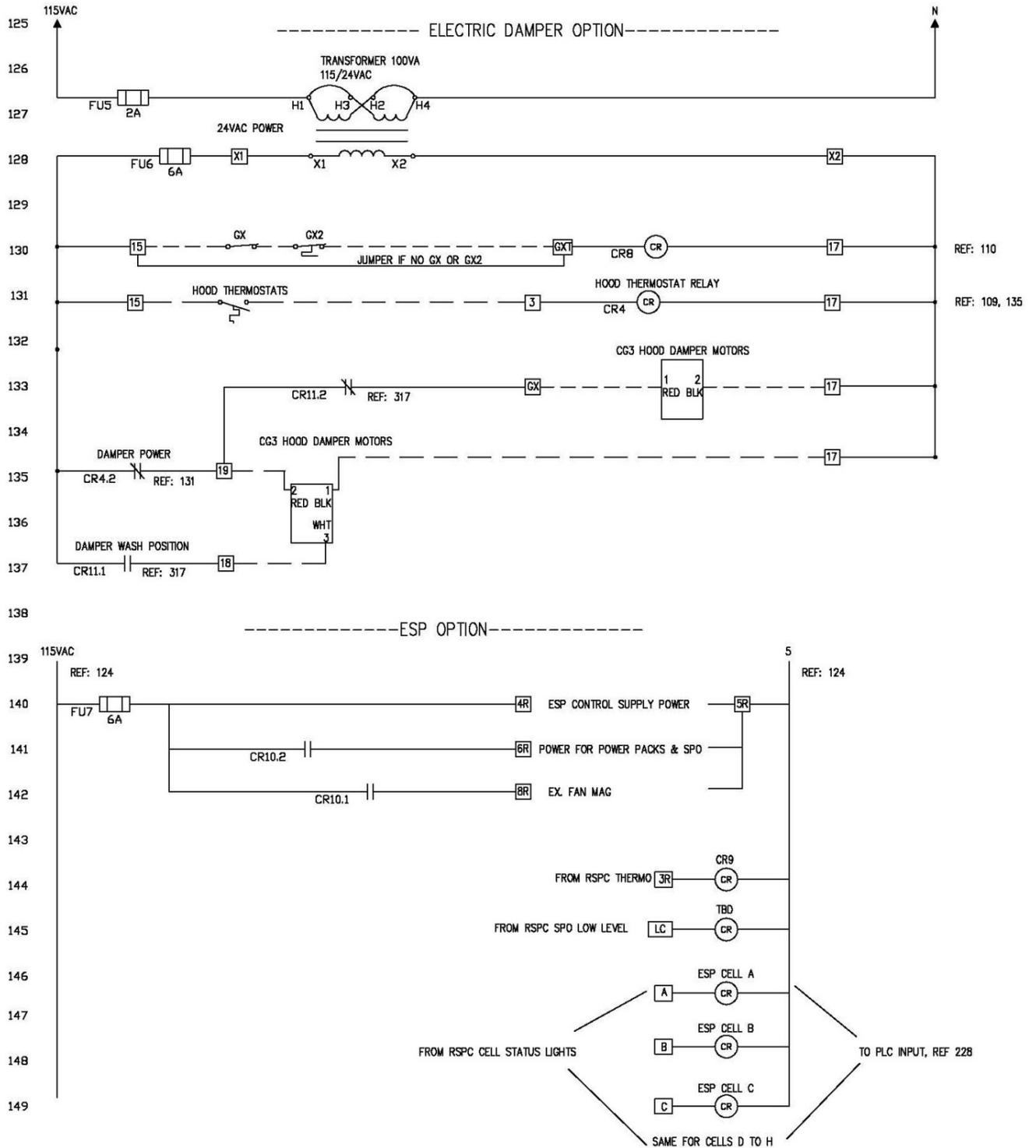
Wiring Diagram – Ventilator with Autostart, UVi and GFBD



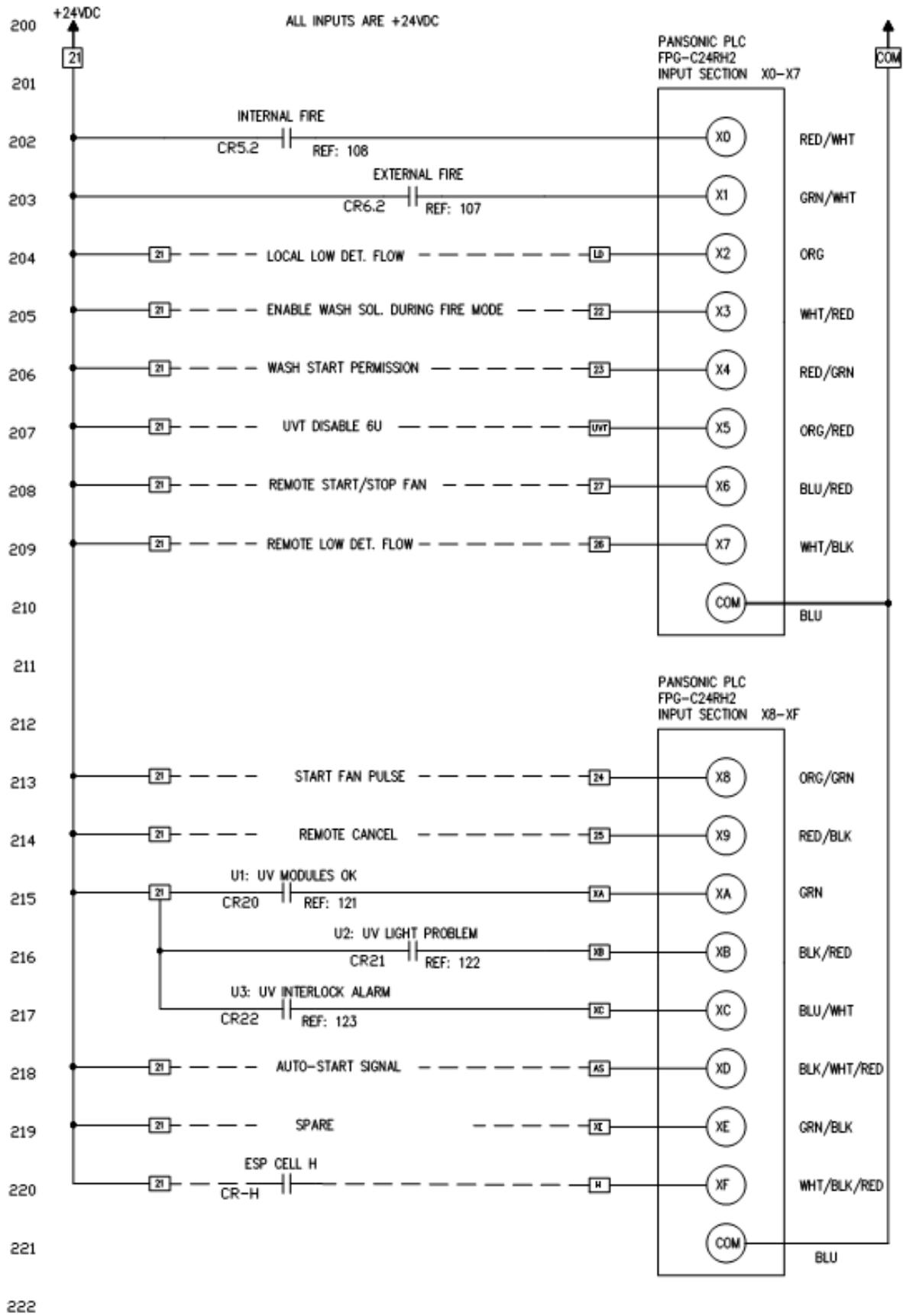
Wiring Diagram – C-7000A Command Center



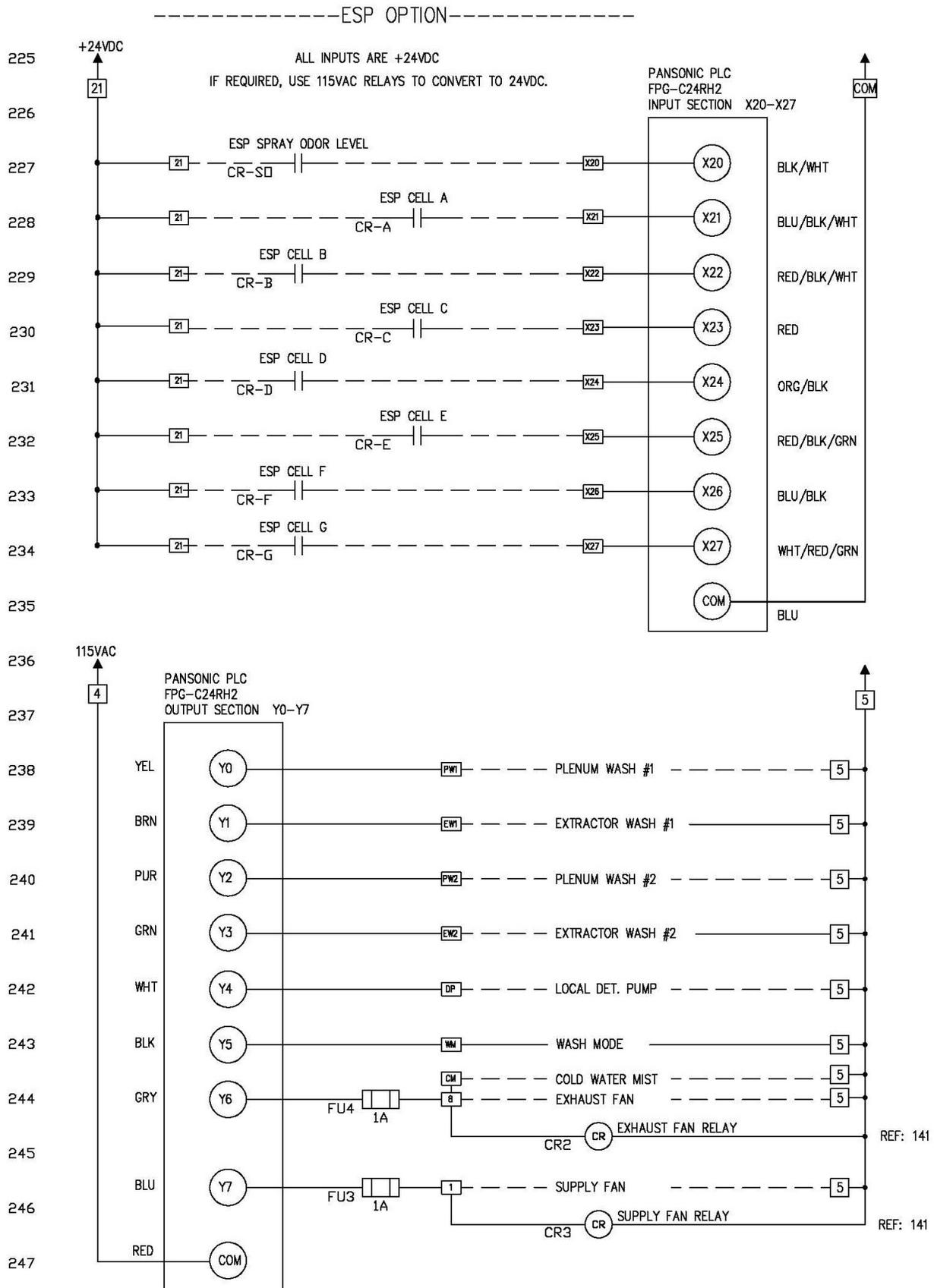
Wiring Diagram – C-7000A Command Center



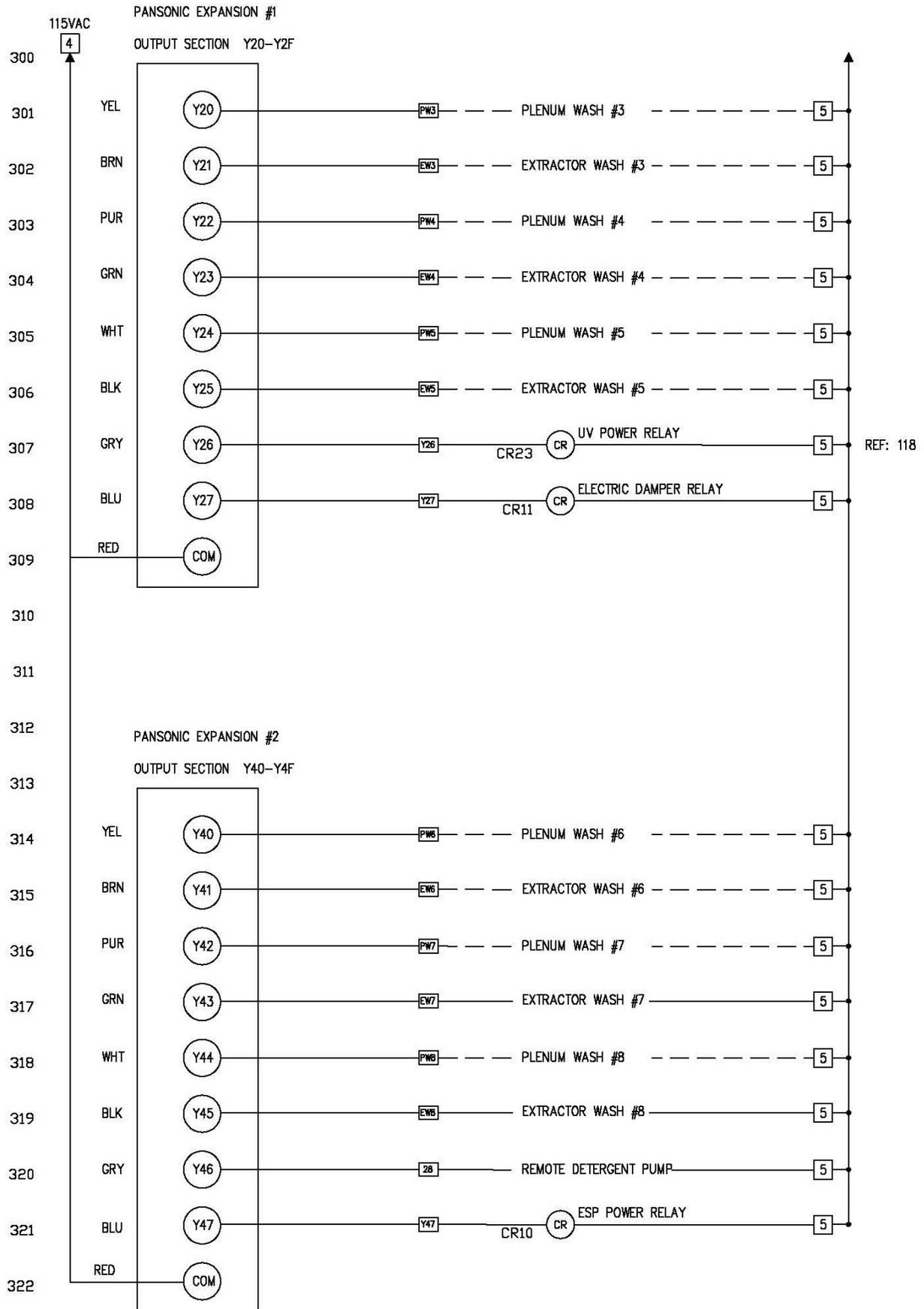
Wiring Diagram – C-7000A Command Center



Wiring Diagram C-7000A Command Center

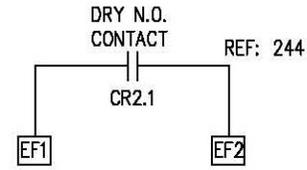


Wiring Diagram – C-7000A Command Center

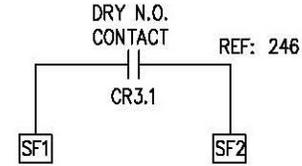


Wiring Diagram – C-7000A Command Center

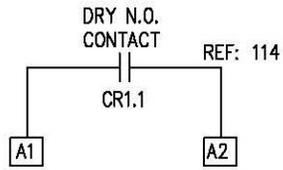
-----DRY CONTACTS-----



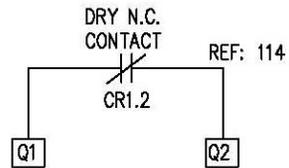
EXHAUST FAN DRY CONTACTS



SUPPLY FAN DRY CONTACTS



ALARM SIGNAL



GAS SIGNAL

C-7000A Command Center Terminal Schedules

EXP
MOD
#1

TRM	TERMINATION SCHEDULE	TYPE
PW3	OUTPUT – PLENUM WASH SOLENOID #3	120VAC
EW3	OUTPUT – EXTRACTOR WASH SOLENOID #3	120VAC
PW4	OUTPUT – PLENUM WASH SOLENOID #4	120VAC
EW4	OUTPUT – EXTRACTOR WASH SOLENOID #4	120VAC
PW5	OUTPUT – PLENUM WASH SOLENOID #5	120VAC
EW5	OUTPUT – EXTRACTOR WASH SOLENOID #5	120VAC
	OUTPUT – CR23 UV POWER RELAY	120VAC
	OUTPUT – CR11 ELEC DAMPER RELAY	

EXP
MOD
#2

TRM	TERMINATION SCHEDULE	TYPE
PW6	OUTPUT – PLENUM WASH SOLENOID #6	120VAC
EW6	OUTPUT – EXTRACTOR WASH SOLENOID #6	120VAC
PW7	OUTPUT – PLENUM WASH SOLENOID #7	120VAC
EW7	OUTPUT – EXTRACTOR WASH SOLENOID #7	120VAC
PW8	OUTPUT – PLENUM WASH SOLENOID #8	120VAC
PW6	OUTPUT – EXTRACTOR WASH SOLENOID #8	120VAC
28	OUTPUT – REMOTE DETERGENT PUMP	120VAC
	CR10 ESP POWER RELAY	120VAC

ED

TRM	TERMINATION SCHEDULE	TYPE
15	OUTPUT – THERMOSTAT(S)	24VAC
17	24VAC COMMON	0 V
18	OUTPUT – <u>CG3</u> DAMPER DRIVE SIGNAL	0–24VAC
19	OUTPUT – <u>CG3</u> DAMPER MOTOR POWER	24VAC
GX	OUTPUT – <u>GX2</u> DAMPER MOTOR POWER	24VAC
GXT	INPUT – THERMO RETURN FOR <u>GX2</u> HOODS	24VAC

UV

TRM	TERMINATION SCHEDULE	TYPE
1U	INPUT – "UV SYSTEM ON" (GREEN)	120VAC
2U	INPUT – "UV LAMP FAILURE" (AMBER)	120VAC
3U	INPUT – "UV SAFETY INTERLOCK" (RED)	120VAC
6U	OUTPUT – UV LAMPS CONTACTOR	120VAC

ESP

TRM	TERMINATION SCHEDULE	TYPE
3R	INPUT – THERMOSTAT RETURN – PCU	120VAC
4R	FUSED SUPPLY – PCU	120VAC
6R	OUTPUT – POWER FOR PCU POWER PACKS	120VAC
8R	OUTPUT – EX. FAN MAG STARTER	120VAC
SPO	INPUT – SPRAY ODOR – LOW CHEMICAL	120VAC
A	INPUT – CELL STATUS LIGHT	120VAC
B	INPUT – CELL STATUS LIGHT	120VAC
C	INPUT – CELL STATUS LIGHT	120VAC
D	INPUT – CELL STATUS LIGHT	120VAC
E	INPUT – CELL STATUS LIGHT	120VAC
F	INPUT – CELL STATUS LIGHT	120VAC
G	INPUT – CELL STATUS LIGHT	120VAC
H	INPUT – CELL STATUS LIGHT	120VAC

C-7000A Command Center PLC Inputs

Table T-8-12-1

PLC I/O TABLE		
X's	<u>PLC INPUTS</u>	TYPE
0	INT FIRE	24VDC
1	EXT FIRE	24VDC
2	LOCAL LOW DET	24VDC
3	ENABLE WASH SOL DURING FIRE MODE	24VDC
4	WASH START PERMISSION	24VDC
5	REMOTE START FAN	24VDC
6	SPARE	24VDC
7	REMOTE LOW DET	24VDC
8	SPARE	24VDC
9	REMOTE STOP FAN	24VDC
A	1U-UV ON	24VDC
B	2U-UV BAD LAMP	24VDC
C	3U-UV SAFETY INTERLOCK	24VDC
D	AUTO-START	24VDC
E	SPARE	24VDC
F	ESP CELL H	24VDC
20	ESP SPRAY ODOR	24VDC
21	ESP CELL A	24VDC
22	ESP CELL B	24VDC
23	ESP CELL C	24VDC
24	ESP CELL D	24VDC
25	ESP CELL E	24VDC
26	ESP CELL F	24VDC
27	ESP CELL G	24VDC

C-7000A Command Center PLC Outputs

Table T-8-13-1

PLC I/O TABLE		
Y's	PLC OUTPUTS	TYPE
0	PW 1	120VAC
1	EW 1	120VAC
2	PW 2	120VAC
3	EW 2	120VAC
4	LOCAL DET PUMP	120VAC
5	WASH MODE	120VAC
6	EXHAUST FAN/COLD WATER MIST	120VAC
7	SUPPLY FAN	120VAC
20	PW 3	120VAC
21	EW 3	120VAC
22	PW 4	120VAC
23	EW 4	120VAC
24	PW 5	120VAC
25	EW 5	120VAC
26	UV POWER RELAY	120VAC
27	ELECT DAMPER RELAY	120VAC
40	PW 6	120VAC
41	EW 6	120VAC
42	PW 7	120VAC
43	EW 7	120VAC
44	PW 8	120VAC
45	EW 8	120VAC
46	UV POWER RELAY	120VAC
47	ESP POWER RELAY	120VAC

C-7000A Command Center Fuses

Table T-8-14-1
Fuse Table

Pc #	Fuse #	Amp	Description
1	FU1	1	24 VDC
2	FU2	2	PLC Common
3	FU3	1	Exhaust Fan
4	FU4	1	Supply Fan
5	FU8	4	UV Power
6	FU9	4	TB 4
7	PS1	2.5	Power Supply

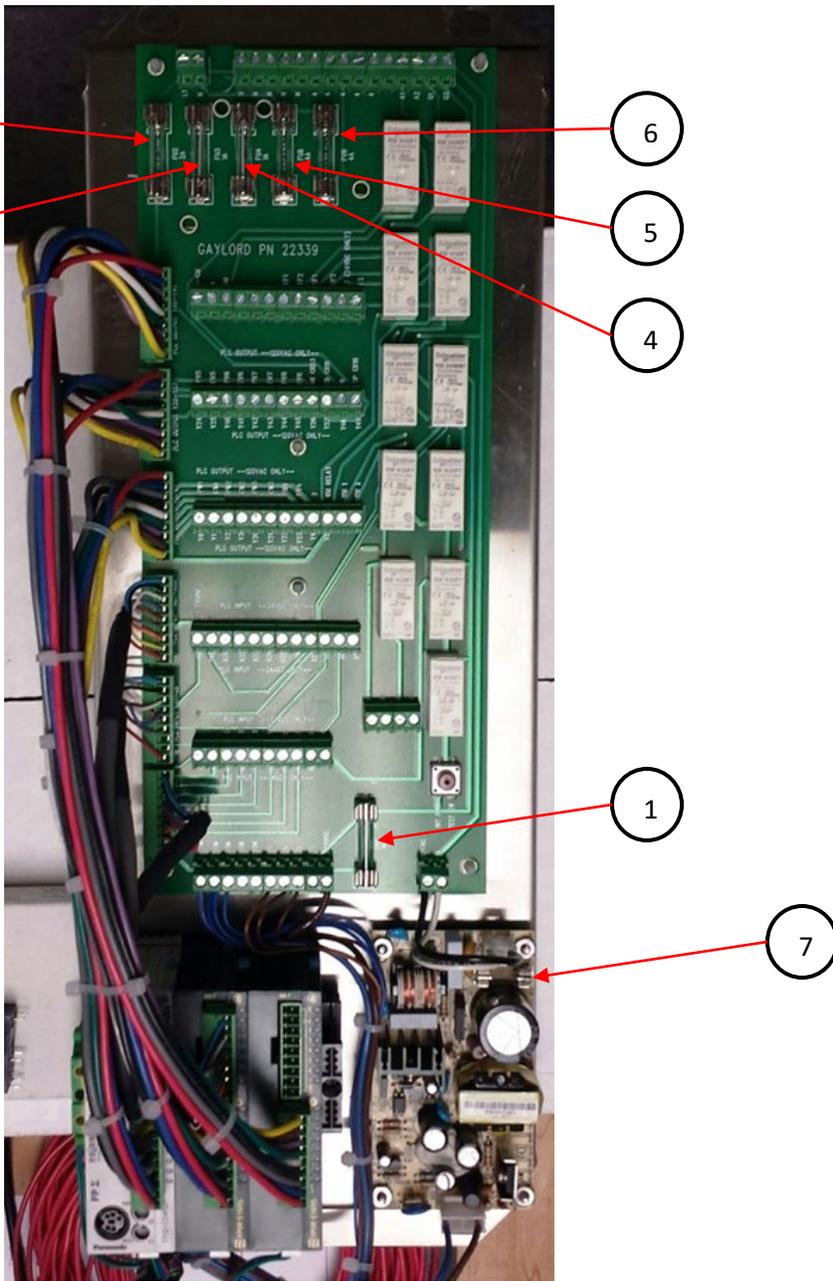


Figure 8-14-1

Installation

Overview

Figure A-2-1 shows a typical example of an installation of a Command Center/Wash Control Cabinet, Model GPC-7000A Series, controlling two sections of Gaylord ELXC Series Ventilators. Use this illustration as a guideline to install the cabinet and connecting the plumbing and electrical services.

Installation Guidelines

Install as follows:

Mounting

1. The Wash Control Cabinet should be located in the building in accordance with the Kitchen Equipment Plans.
2. Unless otherwise shown on the Kitchen Equipment Plans, locate the cabinet 18" from the floor as show on Figure A-2-1.
3. Attached to the building structure, through the four mounting holes in the back of the cabinet, with appropriate fasteners.

Plumbing

1. Connect a 1" hot water line, from the building's hot water system, to the inlet connection at the bottom left of the cabinet. **Important Note:** water temperature requirements 140°F. Min. to 180°F. Max., water pressure requirements 40 psi Min. to 80 psi Max.
2. Connect a 1" pipe from the outlet connection at the top right of the cabinet to the inlet connections of each Ventilator section.
3. Connect the Air Gap Assembly, provided loose in the cabinet, to the outlet of the Backflow preventer.
4. Connect a ½" pipe to the Air Gap assembly and run to a floor drain or direct connect, as specified.

Electrical

Note: Refer to the wiring diagrams on the Gaylord Submittal Drawings for specific wiring interconnections.

1. Provide a 120 Volt 20 amp service to the appropriate terminals in the command center. Optional 220 volt 50/60 Hz. if specified. Refer to the Gaylord wiring diagrams.
2. Wire the Command Center to the designated flex conduit(s) at one end of each Ventilator section in accordance with the electrical diagram.
3. Wire the Command Center to the exhaust and supply fan(s).
4. If the Ventilator is built in multiple sections, and if they contain electric dampers, or thermostats, reconnect the flex conduit provided at the Ventilator section breaks. The electrical contractor is responsible for making these connections.
5. If the Ventilator is provided with light fixtures, provide a separate 120 volt lighting circuit from the light switch to one of the light J-boxes on the top of the Ventilator. The Command Center/Wash Control cabinet may include a light switch as an option or the Ventilator may be equipped with built-in light switch as an option. **Important Note:** Light bulbs are not provided by Gaylord Industries.
6. Ventilators built in multiple sections have a flex conduit at the Ventilator section breaks for interconnecting the light fixture J-boxes. The electrical contractor is responsible for making these connections.

Installation – Cont.

Electrical – Cont.

7. If the Ventilator is equipped with Autostart, wire the system in accordance with the wiring diagrams.

Additional Electrical for Ventilators with a UV System

Refer to the wiring diagrams on the Gaylord Submittal Drawings for specific wiring interconnections.

1. The UV Lamp Modules are shipped with the Ventilator. They are installed and tested by a Gaylord Certified Representative at the time of initial Start Up and Demonstration. They must be stored in a clean, dry environment where they will not be damaged by lift trucks, falling objects, etc.
2. Provide 208–250 VAC, 50/60HZ, Single Phase, 20AMP service to the marked j-box on the top of each Ventilator section to power the UV Lamp Modules.
3. Ventilators built in no more than two sections have a flex conduit to interconnect the two UV Ballast Boxes. The electrical contractor is responsible for making this reconnection.

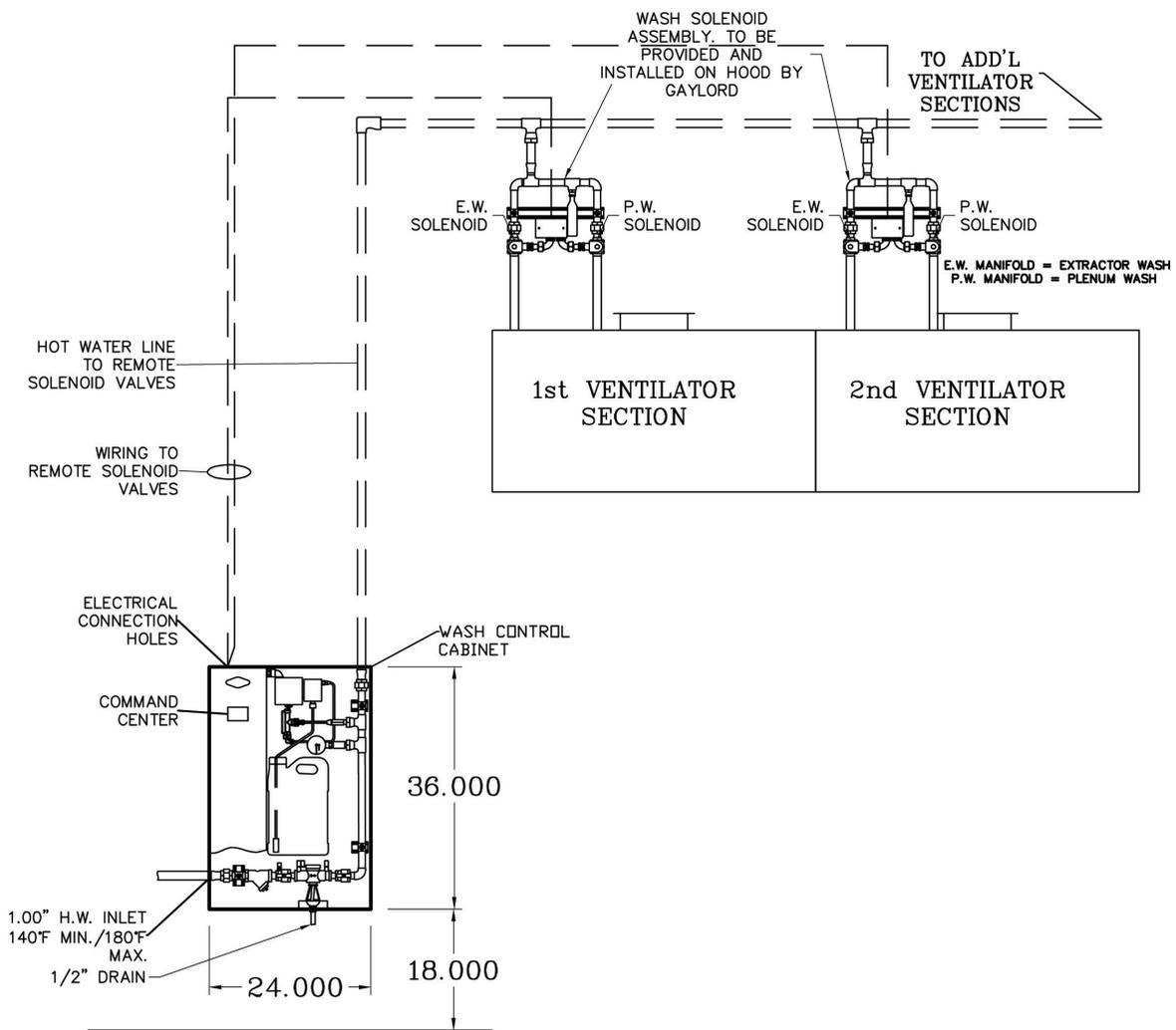


Figure A-2-1
Typical Installation

The Gaylord Model GPC- 7000A Series Command Center / Wash Control Cabinet

Limited Warranty Effective February 17, 2012

The Gaylord Command Center/Wash Control Cabinet is warranted to be free from defects of material and workmanship under normal use when installed, operated and serviced in accordance with factory recommendation. Rubber and synthetic rubber parts such as "O" rings, diaphragms and poppet checks are perishable when caustic cleaning solutions are used and, therefore, are not covered by this warranty.

The Manufacturer's obligation under this warranty and any warranties implied by law shall be limited to repairing or replacing at its option any part of said equipment when either Gaylord Industries, or the Licensed Gaylord Manufacturer's examination shall disclose to its satisfaction to be thus defective, for a period of one (1) year from the date of beneficial use, or eighteen months from date of shipment, whichever occurs first, provided proper and acceptable evidence of such is recorded at the factory. GAYLORD INDUSTRIES AND THE LICENSED GAYLORD MANUFACTURER SHALL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM A BREACH OF THIS WARRANTY.

In the United States, the labor required to make repairs and replacements under this warranty shall be furnished by Gaylord Industries or the Licensed Gaylord Manufacturer or its authorized representative. Such labor shall only be provided Mondays through Fridays during the hours between 8 a.m. and 4 p.m. Requests for repairs or replacement parts should be made to GAYLORD INDUSTRIES, 10900 SW AVERY STREET, TUALATIN, OR 97062, USA.

Outside the United States, all replacement parts furnished under this warranty shall be F.O.B. Gaylord Industries, Tualatin, Oregon U.S.A. The owner shall pay the necessary freight delivery charges, and necessary labor for removal and installation of parts, and any tariffs, duties or all taxes.

Component parts not manufactured by Gaylord Industries such as electrical switches, relays, solenoid coils, etc., shall be warranted under the terms and conditions of the warranty that is published by the manufacturer of said component parts.

This warranty does not cover routine maintenance such as detergent replacement, light bulbs and UV lamp replacement, and inspection of the cleaning system as spelled out in The Gaylord Ventilator Technical Manual. This warranty also does not cover malfunctions or improper operation caused by inadequate hot water, low water pressure, fluctuating electrical power or power surges, waste stoppages, and improper exhaust fan operation.

This is the sole warranty with respect to the aforesaid items. NEITHER GAYLORD INDUSTRIES OR THE GAYLORD LICENSED MANUFACTURER OR ANY OTHER PARTY MAKES ANY 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 OBLIGATIONS ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS AGREEMENT.

Service and Warranty Policies

1. No warranty work shall be performed on the product without a Purchase Order from Gaylord Industries, if financial reimbursement is to be requested.
2. No warranty shall be provided on equipment that has been started up and in operation for more the 90 days unless, a product maintenance schedule has been created and performed per the requirements of this technical manual.
3. Any, and all, wearable parts are not to be considered warranty items, regardless of installation date, unless previously authorized by the factory.



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