Preventive Maintenance HANDBOOK

(updated 9 March 2020)
RECORD OF CHANGES

July 2013:
1. Replace cover sheet with new update.
2. Add the Record of Changes sheet behind cover sheet.
3. Add new parts: ACPKG, AUTOGATE, CISTERNSYS, DMP/LOUV MISC, ERU, HVAC, MISC, ODORUNIT, RWOZONESYS, and SSFILSYS.
4. Replace AHU standards with update.

November 2019:
1. Add new part Makeup Air Unit.
2. Add AHU Monthly (M) task that are duplicate for Seasonal Monthly March – September (SMMS) and Seasonal Monthly Weekly March – May (SMWMM).
3. Add ACSPLIT Monthly (M) and Seasonal Monthly March – September (SMMS) PM task.
4. Add EVAPCOOL Quarterly (Q) and Monthly (M) task.
5. Add Monthly (M) PM Task for ACPKG, FILTDTDF, and TU3.
6. Add ERU Monthly (M) PM task for Seasonal Monthly Weekly March – May (SMWMM) PM task.
7. Add DTCLSYS Weekly (W) PM task that is generated monthly using phases for each week. (ex. Phase 001 – Week #1, Phase 002 – Week #2, Phase 003 – Week #3, Phase 004 – Week #4 (& If needed week #5)). The reason for combing week #4 and week #5 with Phase 4 is because there are only 4 to 5 months a year with 5 weeks.

March 2020:
1. Updated ACPKG, ACSPLIT, AHU, ERU, EVAPCOOL, FAN, and TU3 Monthly (M) task with IMPORTANT NOTE.
2. Updated DTCLSYS Weekly (W) and Monthly (M) task with IMPORTANT NOTE.
3. Updated FILTDTDF BI-Weekly and Monthly (M) task with IMPORTANT NOTE.
4. Add PUMPLQ Monthly (M) task with IMPORTANT NOTE.
5. Add part AIRDRYER, CABAIRCOMP, DTCLSYS, FAN-M, KJELDAHL, MANUAL DOOR, MANUAL GATE, PIMPLQ-M, SPILL KIT, and WTRRECLAIMSYS.
GENERAL INSTRUCTIONS

This handbook provides a description of maintenance tasks to be performed on campus equipment maintained by the Preventive Maintenance Shop. It is designed to be a handy pocket reference. The handbook is organized into two sections, GENERAL INSTRUCTIONS and PM STANDARDS.

GENERAL INSTRUCTIONS (this section) provides information about the purpose and use of the handbook.

The PM STANDARDS section contains the maintenance tasks to be performed for specific types of equipment and describes the frequency of that work. The standards are organized alphabetically by the PM Basic name that is written on PM work orders.

EXAMPLE: A PM work order to perform quarterly maintenance on an HVAC fan coil unit will show the PM Basic name as FCU/UV-Q. In this handbook, you would find the tasks to be performed by finding the PM Standard called FCU/UV.

Each PM Standard is organized with tasks listed per frequency of performance: monthly, quarterly, semi-annual and annual, as appropriate. For brevity purposes, similar tasks for different frequencies are not repeated but it is understood that they are to be performed. For example: annual tasks for an air Handling Unit, AHU, only has one task listed; however, the quarterly and semi-annual tasks must also be performed along with the annual task.

For all PM standards, the first task listed is: "Common Tasks, See GENERAL INSTRUCTIONS." These are tasks to be performed for all equipment and for all frequencies. They are listed on the next page.

PM Common Tasks

1. Lockout/tagout equipment before servicing.

2. Check for (as applicable):
   a. General condition.
   b. Equipment operates as intended (both before and after servicing).
   c. Unusual noises or vibrations.
   d. Rust and corrosion.
   e. Loose burnt or damaged wiring.
   f. Leaks
   g. Excessive wear

3. Report any problems to foreman & write up work request as needed.
PM STANDARDS
### HVAC PACKAGE UNIT

**FREQ** | **TASK DESCRIPTION**  
--- | ---  
ALL | Common Tasks, see GENERAL INSTRUCTIONS  
M | **IMPORTANT NOTE:** The Monthly (M) task is not required for all equipment of this type only for specific equipment in certain buildings. Refer to the individual equipment PM work order extra description detailing specific PM Task that need to be completed.  
1. Replace filter (as needed)  
2. Clean drain pan & drain line  
Q | 1. Check cleanliness of coils.  
2. Replace filter (as needed)  
3. Clean drain pan & drain line  
4. Inspect fan  
5. Check belts/sheaves for wear & alignment, correct as needed  
S | 1. Check & lubricate fan bearings  
2. Inspect condition of damper linkages and actuators  
A | Check & lubricate motor bearings

### HVAC SPLIT SYSTEM

**FREQ** | **TASK DESCRIPTION**  
--- | ---  
ALL | Common Tasks, see GENERAL INSTRUCTIONS  
M | **IMPORTANT NOTE:** The Monthly (M) task is not required for all equipment of this type only for specific equipment in certain buildings. Some of these task are the same for Seasonal Monthly March – September (SMMS) PM task. Refer to the individual equipment PM work order extra description detailing specific PM Task that need to be completed.  
1. Replace filter (as needed)  
2. Clean drain pan & drain line  
Q | 1. Check cleanliness of coils.  
2. Replace filter (as needed)  
3. Clean drain pan & drain line  
4. Inspect fan  
5. Check belts/sheaves for wear & alignment, correct as needed  
S | 1. Check & lubricate fan bearings  
2. Inspect condition of damper linkages and actuators  
A | 1. Check & lubricate motor bearings  
2. If equipped with condensate pump clean tank, float, and drain line  
3. If equipped with condensate pump check drain line for kinks
**AHU  
AIR HANDLING UNIT**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>M</td>
<td><strong>IMPORTANT NOTE:</strong> The Monthly (M) task is not required for all equipment of this type only for specific equipment in certain buildings. Some of these task are the same for Weekly, Bi-weekly, Seasonal Monthly March – September (SMMS), Seasonal Monthly March – May (SMMM) and Seasonal Monthly Weekly March – May (SMWMM) PM task. Refer to the individual equipment PM Work Order extra description detailing specific PM Task to be completed.</td>
</tr>
<tr>
<td></td>
<td>1. Replace filter (as needed) &amp; inspect for proper fit in housing</td>
</tr>
<tr>
<td></td>
<td>2. Clean drain pan &amp; drain line</td>
</tr>
<tr>
<td></td>
<td>3. Vacuum &amp; wash down intake</td>
</tr>
<tr>
<td></td>
<td>4. Vacuum inside AHU</td>
</tr>
<tr>
<td>Q</td>
<td>1. Check cleanliness of coils.</td>
</tr>
<tr>
<td></td>
<td>2. Replace filter (as needed) &amp; inspect for proper fit in housing</td>
</tr>
<tr>
<td></td>
<td>3. Clean drain pan &amp; drain line</td>
</tr>
<tr>
<td></td>
<td>4. Inspect fan</td>
</tr>
<tr>
<td></td>
<td>5. Check belts/sheaves for wear &amp; alignment, correct as needed</td>
</tr>
<tr>
<td></td>
<td>6. AHRC Only: Check pressure drop across filters and record in logbook.</td>
</tr>
<tr>
<td>S</td>
<td>1. Check and lubricate fan bearings.</td>
</tr>
<tr>
<td></td>
<td>2. Inspect condition of damper linkages and actuators.</td>
</tr>
<tr>
<td>A</td>
<td>1. Check and lubricate motor bearings</td>
</tr>
<tr>
<td></td>
<td>2. If equipped with UV lights replace blubs.</td>
</tr>
</tbody>
</table>

**AIRCOMP  
AIR COMPRESSOR**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>Q</td>
<td>1. Check belts/sheaves for wear &amp; alignment, correct as needed</td>
</tr>
<tr>
<td></td>
<td>2. Check air filter &amp; replace as needed</td>
</tr>
<tr>
<td></td>
<td>3. Bleed water from air tank</td>
</tr>
<tr>
<td></td>
<td>4. Check oil level - add as required</td>
</tr>
<tr>
<td></td>
<td>5. If equipped with refrigerated air dryer, check cleanliness of coil, fan &amp; motor.</td>
</tr>
<tr>
<td>S</td>
<td>Change oil</td>
</tr>
<tr>
<td>A</td>
<td>Check and lubricate motor bearings.</td>
</tr>
</tbody>
</table>
### AIRCUR
**AIR CURTAIN**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
</tbody>
</table>
| Q    | 1. Check cleanliness of coils.  
    | 2. Replace filter as needed  
    | 3. Inspect fan. |
| S    | Check & lubricate fan bearings |
| A    | Check and lubricate motor bearings. |

### AIRDRYER
**REFRIGERATED AIR DRYER**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>Q</td>
<td>Check cleanliness of coil, fan &amp; motor, clean as needed.</td>
</tr>
<tr>
<td>A</td>
<td>Check, clean &amp; lubricate motors.</td>
</tr>
</tbody>
</table>

### AUTODREL
**AUTOMATIC DOOR UNIT - ELECTRIC**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>Q</td>
<td>Check belts/chain/sprocket for wear &amp; alignment, correct as needed</td>
</tr>
<tr>
<td>S</td>
<td>Check &amp; lubricate bearings &amp; chains</td>
</tr>
<tr>
<td>A</td>
<td>Check &amp; lubricate motor bearings</td>
</tr>
</tbody>
</table>

**NOTE:** These are motorized automatic doors that swing or slide open/closed. An example would be a handicapped door. This is not a roll up type door which is another type of equipment found in a garage or shop area.
AUTOGATE
AUTOMATIC GATE

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
S 1. If equipped check & lubricate bearings & chains
   2. If equipped check chain/sprocket for wear & alignment, correct as needed
   3. If equipped check belts/sheaves for wear & alignment, correct as needed.
A If equipped check & lubricate motor bearings

AUTOWDOP
AUTOMATIC WINDOW OPENER

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
Q Check chain/sprocket for wear & alignment, correct as needed
S Check & lubricate bearings & chains
A Check & lubricate motor bearings

NOTE: These are motorized opening devices typically found in greenhouses or other specialized areas.

CABAIRCOMP1
CABINET AIR COMPRESSOR

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
S Welding shop maintenance.

NOTE: This maintenance is done by a contractor scheduled by the welding shop.

CABAIRCOMP2
CABINET AIR COMPRESSOR

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
S Zone shop replace air filter.
## CABHTR
CABINET HEATER

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
</tbody>
</table>
| Q    | 1. Check cleanliness of coils, clean as needed  
2. Replace filter as needed (if equipped)  
3. Inspect fan, clean as needed  
4. Check belts if equipped. |
| S    | Check & lubricate fan bearings |
| A    | Check & lubricate motor bearings |

**NOTE:** These are units flush mounted, wall mounted or ceiling hung that heat only. They normally have a fan and some form of coil (HW, electric, steam) and a filter. They are normally found inside bldg entrance doors and stairwells.

## CHEMSYS
CHEMICAL FEED SYSTEM (WATER TREATMENT)

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
</tbody>
</table>
| B&M  | 1. Test for TDS (total dissolve solids) phosphate reading  
2. Inspect pumps & timers  
3. Inspect controller for proper operation  
4. Inspect & clean probe as needed  
5. Check system for proper control sequence  
6. Check drum chemical level & change as needed  
7. Remove empty drums |

## CISTERNSYS
CISTERN SYSTEM (WATER TREATMENT)

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
</tbody>
</table>
| M    | 1. Replace filter  
2. Check for leaks |

## COILRH
REHEAT COIL (HOT WATER, STEAM, ELECTRIC)

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>A</td>
<td>Check cleanliness of coils, clean as needed</td>
</tr>
<tr>
<td>COLDROOM</td>
<td>COLD ROOM (WALKIN FREEZER/COOLERS)</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>FREQ</strong></td>
<td><strong>TASK DESCRIPTION</strong></td>
</tr>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>Q</td>
<td>1. Replace filter as needed</td>
</tr>
<tr>
<td></td>
<td>2. Check belts/sheaves for wear &amp; alignment, correct as needed</td>
</tr>
<tr>
<td></td>
<td>3. Inspect fan, clean as needed</td>
</tr>
<tr>
<td>S</td>
<td>Check &amp; lubricate fan bearings</td>
</tr>
<tr>
<td>A</td>
<td>Check &amp; lubricate motor bearings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COOLTW</th>
<th>COOLING TOWER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FREQ</strong></td>
<td><strong>TASK DESCRIPTION</strong></td>
</tr>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>B</td>
<td>Inspect and clean as needed:</td>
</tr>
<tr>
<td></td>
<td>a. upper basin: inlets, nozzles, deck</td>
</tr>
<tr>
<td></td>
<td>b. Lower basin: debris in water (brush &amp; siphon) and fill (buildup), float valve, overflow, water level, outlet drains &amp; screens</td>
</tr>
<tr>
<td></td>
<td>c. Sides: inlet screens, louvers, fill, leaks</td>
</tr>
<tr>
<td></td>
<td>d. Area around tower (debris, etc)</td>
</tr>
<tr>
<td>M</td>
<td>Test dip slide</td>
</tr>
<tr>
<td>Q</td>
<td>1. Check &amp; lubricate motors &amp; bearings</td>
</tr>
<tr>
<td></td>
<td>2. Check belts/sheaves for wear &amp; alignment, correct as needed</td>
</tr>
<tr>
<td></td>
<td>3. Check gear box oil level, add as required</td>
</tr>
<tr>
<td>A</td>
<td>Change gear box oil</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DKFTN</th>
<th>DRINKING FOUNTAIN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FREQ</strong></td>
<td><strong>TASK DESCRIPTION</strong></td>
</tr>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>A</td>
<td>1. Check cleanliness of coil, clean as needed</td>
</tr>
<tr>
<td></td>
<td>2. Check &amp; lubricate motor</td>
</tr>
</tbody>
</table>
DMP/LOUV MISC
DAMPER/LOUVER MISCELLANEOUS

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
A 1. Check cleanliness of screens, clean as needed
2. Lubricate pivot points
3. Lubricate linkages
4. Inspect condition of linkages, actuators, wiring, etc.

DTCLSYS
DUST COLLECTION SYSTEM

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
W IMPORTANT NOTE: The Weekly (W) task is not required for all equipment of this type only for specific equipment in certain buildings. Refer to the individual equipment PM work order to know what frequency is scheduled and PM Task that need to be completed.

Empty dust bins

M IMPORTANT NOTE: The Monthly (M) task is not required for all equipment of this type only for specific equipment in certain buildings. Refer to the individual equipment PM work order to know what frequency is scheduled and PM Task that need to be completed.

1. If equipped check filter & replace as needed
2. Clean as needed.

S 1. Check & lubricate fan bearings
2. Check belts/ sheaves for wear & alignment, correct as needed

A Check & lubricate motor bearings

EMGNDL
EMERGENCY GENERATOR-DIESEL

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
M 1. Check water level in radiator
2. Check belts/sheaves for wear & alignment, correct as needed
3. Check air filters, hoses & block heaters, replace as needed
4. Check oil level, add as required
5. Check water level in batteries
6. Check fuel level
7. Start up unit
8. Check run time readings & log book
9. Ensure generator in auto mode

Q Load test
### EMGNNG
**EMERGENCY GENERATOR-NATURAL GAS**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
</tbody>
</table>
| M    | 1. Check water level in radiator  
     | 2. Check belts/sheaves for wear & alignment, correct as needed  
     | 3. Check air filters, hoses, & block heaters, replace as needed  
     | 4. Check oil level, add as required  
     | 5. Check water level in batteries  
     | 6. Start up unit  
     | 7. Check run time readings & log book  
     | 8. Ensure generator in auto mode |
| Q    | Load test |

### EMLTB
**EMERGENCY LIGHT (BATTERY BACKUP)**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
</tbody>
</table>
| Q    | 1. Test that light will come on.  
     | 2. Check condition of batteries & change as required  
     | 3. Replace bulbs as needed |

### EMLTNB
**EMERGENCY LIGHT (NO BATTERY)**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>Q</td>
<td>Check to see if lit, replace bulbs as needed</td>
</tr>
</tbody>
</table>

### ENVIRORM
**ENVIRONMENTAL/GROWTH ROOM**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
</tbody>
</table>
| Q    | 1. Replace filter as needed  
     | 2. Check belts/sheaves for wear & alignment, correct as needed  
     | 3. Inspect fan, clean as needed |
| S    | Check & lubricate fan bearings |
| A    | Check & lubricate motor bearings |
ERU
ENERGY RECOVERY UNIT

**FREQ**  **TASK DESCRIPTION**

**ALL**  Common Tasks, see GENERAL INSTRUCTIONS

**M**  IMPORTANT NOTE: The Monthly (M) task is not required for all equipment of this type only for specific equipment in certain buildings. Some of these task are the same for Seasonal Monthly Weekly March – May (SMWMM) and Seasonal Monthly March - May (SMMM) PM task. Refer to the individual equipment PM Work Order extra description detailing specific PM Task to be completed.

- Replace filter as needed & inspect for proper fit in housing

**Q**  
1. Check cleanliness of heat transfer surfaces, clean as needed
2. Replace filter as needed & inspect for proper fit in housing
3. Inspect condition of damper linkages & actuators

**EVAPCOOL**  
**EVAPORATIVE COOLER**

**FREQ**  **TASK DESCRIPTION**

**ALL**  Common Tasks, see GENERAL INSTRUCTIONS

**M**  IMPORTANT NOTE: The Monthly (M) task is not required for all equipment of this type only for specific equipment in certain buildings. Refer to the individual equipment PM work order to know what frequency is scheduled and PM Task that need to be completed.

- Replace filter (as needed)

**Q**  
1. Replace filter, as needed if equipped
2. Replace evaporative pads, as needed
3. Clean drain pan & drain line
4. Inspect fan, clean as needed
5. Check belts/sheaves for wear & alignment, correct as needed
6. Treat water after each cleaning
7. Inspect pumps & repair as needed

**S**  Check & lubricate fan bearings

**A**  Check & lubricate motor bearings

**EXLTB**  
**EXIT LIGHT (BATTERY BACKUP)**

**FREQ**  **TASK DESCRIPTION**

**ALL**  Common Tasks, see GENERAL INSTRUCTIONS

**Q**  
1. Test for proper operation on battery mode
2. Check condition of batteries & change as required
3. Replace bulbs as needed
### EXIT LIGHTS (NO BATTERY)

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>Q</td>
<td>Check to see if lit, replace bulbs as needed</td>
</tr>
</tbody>
</table>

### FAN

**FAN (EXHAUST/OUTSIDE AIR/RETURN AIR FAN /RELIEF AIR FAN /ETC)**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
<tr>
<td>M</td>
<td><strong>IMPORTANT NOTE:</strong> The Monthly (M) task is not required for all equipment of this type only for specific equipment in certain buildings. Refer to the individual equipment PM work order to know what frequency is scheduled and PM Task that need to be completed. If equipped inspect filter &amp; replace if needed.</td>
</tr>
</tbody>
</table>
| S    | 1. Clean as needed  
    2. Check & lubricate fan bearings  
    3. Check belts/sheaves for wear & alignment, correct as needed. |
| A    | Check & lubricate motor bearings |

### FCU/UV

**FAN COIL UNIT/UNIT VENTILATOR**

<table>
<thead>
<tr>
<th>FREQ</th>
<th>TASK DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
</tbody>
</table>
| Q    | 1. Check cleanliness of coils  
    2. Replace filter (as needed)  
    3. Clean drain pan & drain line  
    4. Check belts/sheaves for wear & alignment, correct as needed  
    5. Inspect fan, clean as needed |
| S    | Check & lubricate fan bearings |
| A    | 1. Check & lubricate motor bearings  
    2. If equipped with condensate pump clean tank, float, and drain line  
    3. If equipped with condensate pump check drain line for kinks |
FILTDHF
FILTER-DUCT OR DIFFUSER

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS

BW, M IMPORTANT NOTE: The Bi-Weekly (BW) and Monthly (M) frequency is not required for all equipment of this type only for specific equipment in certain buildings. Refer to the individual equipment PM work order to know what frequency is scheduled and PM Task that need to be completed.

- Replace filter as needed

Q Replace filter as needed

FIREDR
FIRE DOOR

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
S 1. Check & lubricate bearings
2. Check belt/sheave for wear & alignment, correct as needed
3. Check water level in batteries, if equipped
A Check & lubricate motor bearings

NOTE: These are automatic doors that close in the event of fire. The closing mechanism is motor driven. Magnetic door hold open devices are not included in this category of equipment.

FIREPUMP
FIRE PUMP (DIESEL/NATURAL GAS)

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
M 1. Check water level in radiator
2. Check belts/sheaves for wear & alignment, correct as needed
3. Check air filters, hoses & block heaters, replace as needed
4. Check oil level, add as required
5. Check water level in batteries
6. Check fuel level, if equipped
7. Start up unit
8. Check run time readings & log book
9. Ensure generator in auto mode
Q Load test
A State Inspection
GHAUTOSD
GREENHOUSE AUTO SHADE SYSTEM

**FREQ**  **TASK DESCRIPTION**

**ALL**  Common Tasks, see GENERAL INSTRUCTIONS

**A**  There are no specific PM tasks to be performed per the O&M manuals: however, ask users if they know of any problems with the system. If so, report them to your foreman for follow-up action.

**HEATBBEL or HEATBBOT**
HEATER, BASEBOARD, ELECTRIC or OTHER

**FREQ**  **TASK DESCRIPTION**

**ALL**  Common Tasks, see GENERAL INSTRUCTIONS

**A**  Check cleanliness of coils/heating elements

**HUMIF MISC**
HUMIDIFIER/DEHUMIDIFIER MISCELLANEOUS

**FREQ**  **TASK DESCRIPTION**

**ALL**  Common Tasks, see GENERAL INSTRUCTIONS

**Q**  1. Replace filter (as needed) & inspect for proper fit in housing
   2. If equipped check belts/sheaves for wear & alignment, correct & get help from HVAC mechanic as needed

**HVACC**
HVAC CONDENSING UNIT

**FREQ**  **TASK DESCRIPTION**

**ALL**  Common Tasks, see GENERAL INSTRUCTIONS

**A**  1. Check cleanliness of coils, clean as needed
   2. Check cleanliness of fan grille, clean as needed
   3. Check fan proper operation & general condition
   4. Request assistance from A/C Refrigeration shop 56, if needed

**HWCWSYS**
HOT WATER/CHILLED WATER CLOSED SYSTEM

**FREQ**  **TASK DESCRIPTION**

**ALL**  Common Tasks, see GENERAL INSTRUCTIONS

**Q**  1. Test hopper station for total dissolve solids
   2. Test hopper station for nitrite levels
   3. Add chemicals as needed
   4. Check flow through bypass feeder
HYDLIFT
HYDRAULIC LIFT

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
Q Check fluid levels add as needed
A Change fluid

ICEMKR
ICEMAKER

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
A 1. Check cleanliness of coil, clean as needed
   2. Check & lubricate motor bearings
   3. Replace filter (air & water) as needed

KJELDAHL
KJELDAHL UNIT

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
A 1. Check & lubricate bearings
   2. Check belts/sheaves for wear & alignment correct as needed

MANUALDOOR
MANUAL DOOR

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
A Grease hinges

MANUALGATE
MANUAL GATE

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
A 1. Check gate & hinge alignment
   2. Grease hinges
   3. Oil latch
MAU
MAKEUP AIR UNIT

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
Q 1. Check cleanliness of coils.
   2. Replace filter (as needed) & inspect for proper fit in housing
   3. Clean drain pan & drain line
   4. Inspect fan, clean as needed
   5. Check belts/sheaves for wear & alignment, correct as needed
S 1. Check and lubricate fan bearings.
   2. Inspect condition of damper linkages and actuators.
A Check and lubricate motor bearings

MISC
MISCELLANEOUS

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
Q,S,A Perform maintenance task per PM Standards associated with each type equipment listed in part
extra description

ODORUNIT
COMPACTOR ODOR CONTROL UNIT

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
A 1. Replace filter & check for proper fit
   2. Remove & clean glass insulator & electrodes
   3. Check & lubricate motor bearings
   4. Inspect fan, clean as needed

OPERTBEL
OPERATING TABLE-ELECTRIC

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
S Check & lubricate bearings
A Check & lubricate motors bearing
OPERTBHY
OPERATING TABLE-HYDRAULIC

<table>
<thead>
<tr>
<th>FREQ</th>
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</tr>
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<tbody>
<tr>
<td>ALL</td>
<td>Common Tasks, see GENERAL INSTRUCTIONS</td>
</tr>
</tbody>
</table>
| S    | 1. Check & lubricate bearings  
2. Check pump seals for leaks  
3. Check fluid levels add as needed  |
| A    | Check & lubricate motor bearings  |

OVERHEADDOOR
OVERHEAD DOOR

<table>
<thead>
<tr>
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</table>
| S    | 1. Check & lubricate bearings, chains, sprockets, etc  
2. Check belts if equipped, replace as needed.  |
| A    | Check & lubricate motor bearings  |

NOTE: These are motorized roll-up doors similar to those found in a garage or shop area.

PUMPLQ
PUMP, LIQUID

<table>
<thead>
<tr>
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</table>
| M    | IMPORTANT NOTE: The Monthly (M) task is not required for all equipment of this type only for specific equipment in certain buildings. Refer to the individual equipment PM work order extra description detailing specific PM Task that need to be completed.  
Grease pump only 1 or 2 drops  |
| Q    | 1. Check pump seals for leaks  
2. Check couplings for wear  
3. Check couplings for alignment  |
| S    | Check & lubricate bearings  |
| A    | Check & lubricate motor bearings  |

NOTE: This category includes HW, Chilled water, circulating, condensing water, steam condensate, sump and any other pump designed to pump liquids through a piping system.
RODISYS
REVERSE OSMOSIS DE-IONIZED WATER SYSTEMS

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
B Check & record readings per log book instructions

RWOZONESYS
RAINWATER OZONE FILTRATION SYSTEM
(WATER TREATMENT)

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
W Clean filter as needed

SPILL KIT

SPILL KIT

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
S 1. Inventory contents per list inside barrel.
   2. Report any shortages & damages to foreman

SSFILSYS
SIDE STREAM FILTRATION SYSTEM
(WATER TREATMENT)

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
B Check proper operation of unit & general condition
A Clean filter
TTWHVAC
HVAC UNIT - THRU THE WALL

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
Q 1. Check cleanliness of coils, clean as needed
   2. Replace filter as needed
   3. Clean drain pan & drain line
   4. Inspect fan, clean as needed
S Check & lubricate bearings
A Check & lubricate motors bearings

NOTE: These are packaged air conditioning units with their own compressor that are mounted through a wall to allow system heat to be expelled to the outside. Some are heat pumps and/or have supplemental electric heat. These are similar to units found in motels.

TU1
TERMINAL UNIT WITHOUT COIL/FILTER

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
A Check cleanliness of unit, clean as needed

TU2
TERMINAL UNIT WITH COIL

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
A Check cleanliness of coils & unit, clean as needed

TU3
TERMINAL UNIT WITH COIL/FILTER

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
M IMPORTANT NOTE: The Monthly (M) task is not required for all equipment of this type only for specific equipment in certain buildings. Refer to the individual equipment PM work order to know what frequency is scheduled and PM Task that need to be completed.
   1. Replace filter as needed
   2. Check filter for proper mounting
Q 1. Check cleanliness of coil, clean as needed
   2. Replace filter as needed
   3. Check filter for proper mounting
## UHEL/UHG/UHHW/UHST
UNIT HEATER-ELECTRIC/GAS/HW or STEAM

<table>
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</table>
| A    | 1. Check thermostat function  
|      | 2. Check cleanliness of elements, clean as needed  
|      | 3. Check & lubricate motors |

**NOTE:** These are similar to cabinet heaters but usually do not have filters. Typically found in shop areas, warehouses, restrooms, green houses or other areas not cooled but heated.

## VACPUMP
VACUUM PUMP

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</table>
| Q    | 1. Check belts/sheaves for wear & alignment, correct as needed  
|      | 2. Bleed water from air tank  
|      | 3. Check oil level-add as required clean strainers  
|      | 4. Check pump seals for leaks  
|      | 5. Check couplings for alignment  
|      | 6. Check couplings for wear |
| A    | 1. Change oil  
|      | 2. Check & lubricate motors |

## WINCH

<table>
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</table>
| Q    | 1. Check belts/sheaves for wear & alignment, correct as needed  
|      | 2. Check chains/sprockets/cables/pulleys for wear & alignment, correct as need |
| S    | Check & lubricate bearings |
| A    | Check & lubricate motor bearings & chains |

**NOTE:** These are electric motor powered winches used to raise and lower equipment.
WSAC
WATER SOURCE AC UNIT

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS

Q 1. Check cleanliness of coils, clean as needed
    2. Replace filter as needed
    3. Clean drain pan & drain line
    4. Inspect fan, clean as needed

S 1. Check & lubricate bearings
    2. Check belts/sheaves for wear & alignment, correct as needed

A Check & lubricate motor bearings

These are air conditioning units that are water cooled vs air cooled. Other than being WC they are self contained units.

WTRRECLAIMSYS
WATER RECLAIM SYSTEM
(WATER TREATMENT)

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS

Q 1. Inspect pump for proper operation
    2. Inspect pump strainer & clean as needed
    3. Inspect water flow meter for proper operation
    4. Add antimicrobial tab to reservoir as needed
    5. Clean reservoir with a brush & wet-vac as needed

WTRSOFT
WATER SOFTENERS

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS

M 1. Check proper operation of timers
    2. Check proper operation of controllers
    3. Test softness of water & add salt as needed
WU
AC WINDOW UNIT

FREQ TASK DESCRIPTION
ALL Common Tasks, see GENERAL INSTRUCTIONS
Q 1. Check cleanliness of coils, clean as needed
   2. Replace filter (as needed)

This also includes window unit heat pumps.