

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **AIR HANDLER**

SITE AND BLDG #: PA 166-01

MECHANIC  
SIGNATURE: 

DATE: 5/15/19

LOCATION/RM #: DRILL WO# 8474 ASSET # 3176  
HALL

START TIME: 10:30

FINISH TIME: 11

| CHECK<br>POINT                                    | CHECKPOINT DESCRIPTION                                                                                                                                                                                                                        | TASK COMPLETE                       |    | SPECIAL INSTRUCTIONS | NOTES/ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO. PROVIDE EXPLANATION) |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----|----------------------|------------------------------------------------------------------------|
|                                                   |                                                                                                                                                                                                                                               | YES                                 | NO |                      |                                                                        |
| 1                                                 | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.                                                              | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 2                                                 | Remove power at Drive or at Breaker Panel. Verify with tester or meter that power has been removed. Install lock out tag out if servicing alone or in confined space for safety precautions.                                                  | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| <b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b> |                                                                                                                                                                                                                                               |                                     |    |                      |                                                                        |
| 1                                                 | Check fan blades and moving parts for cracks and excessive wear.                                                                                                                                                                              | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 2                                                 | Check running motor amperatures on all three phases (record in note column) notate L1, L2, and L3 amp draws.                                                                                                                                  | <input checked="" type="checkbox"/> |    | L1 3.4 L2 3.3 L3 3.1 |                                                                        |
| 3                                                 | Tighten all electrical connectors/lugs to proper torque.                                                                                                                                                                                      | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 4                                                 | If unit is a multi-zone air handler, then check each individual zone damper and associated controls.                                                                                                                                          | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 5                                                 | Check bearing collar set screws on fan shaft to make sure they are tight.                                                                                                                                                                     | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 6                                                 | Check filters for dirt accumulations, replace as necessary. Check belt, repair or replace as necessary.                                                                                                                                       | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 7                                                 | Check damper actuators and linkage for proper operation. Adjust linkage on dampers if out of alignment.                                                                                                                                       | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 8                                                 | Lubricate mechanical bearings and connections sparingly.                                                                                                                                                                                      | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 9                                                 | Clean coils by brushing, blowing, vacuuming, or pressure washing.                                                                                                                                                                             | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 10                                                | Check coils for leaking, tightness of fittings.                                                                                                                                                                                               | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 11                                                | Use fin comb to straighten coil fins.                                                                                                                                                                                                         | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 12                                                | If applicable, clean strainer (annually).                                                                                                                                                                                                     | <input checked="" type="checkbox"/> |    |                      |                                                                        |
| 13                                                | Flush and clean condensate pans and drains, remove all rust prepare metal and paint. Hose down coils and drain pans and wash with an appropriate EPA approved solution approved solution. Treat condensate pans with an EPA approved biocide. | <input checked="" type="checkbox"/> |    |                      |                                                                        |

| CHECK POINT | CHECKPOINT DESCRIPTION                                                                                                                                                      | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|-------------------------------------------------------------------------|
|             |                                                                                                                                                                             | YES           | NO |                                                                         |
| 14          | Check belts for wear and cracks, adjust tension or alignment. Replace belts when necessary. Multi-belt drives shall only be replaced with matched sets.                     | ✓             |    |                                                                         |
| 15          | Check rigid couplings for alignment on direct drives, and for tightness of assembly. Check flexible couplings for alignment and wear.                                       | ✓             |    |                                                                         |
| 16          | Check and test frezestat for proper operation                                                                                                                               | ✓             |    |                                                                         |
| 17          | Vacuum interior of unit.                                                                                                                                                    | ✓             |    |                                                                         |
| 18          | Check filter doors and access doors for proper gasketing and air leaks. Correct as necessary.                                                                               | ✓             |    |                                                                         |
| 19          | Lubricate fan shaft bearings while unit is running. Add grease slowly until slight bleeding is noted from the seals. Do not over lubricate. Remove old or excess lubricant. | ✓             |    |                                                                         |
| 20          | Clean up work area.                                                                                                                                                         | ✓             |    |                                                                         |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed discription of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST  
VARIABLE FREQUENCY DRIVE

SITE AND BLDG #: Pa 166-01 MECHANIC SIGNATURE:  DATE: 5-15-19

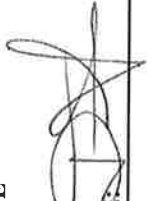
LOCATION/RM #: 1074 WO# 8744 ASSET # 3384 START TIME: 2 FINISH TIME: 2:10

| CHECK POINT                                | CHECKPOINT DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                            | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|-------------------------------------------------------------------------|
|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | YES           | NO |                                                                         |
| SPECIAL INSTRUCTIONS                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |    |                                                                         |
| 1                                          | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered.                                                                                                                                                                                                                                                                                                     | ✓             |    |                                                                         |
| 2                                          | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.                                                                                                                                                                                                                                                                                                                       | ✓             |    |                                                                         |
| TO BE PERFORMED AT EACH INSPECTION SERVICE |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |    |                                                                         |
| 1                                          | Perform a complete visual inspection and cleaning. Broken or damaged parts are replaced as necessary. Inspected for ambient temperature, dust, dirt, moisture, evidence of overheating, corrosion, integrity, etc. Capacitors are checked for leakage. Conductors and parts are checked for proper insulation. Drives are cleaned using vacuum or compressed air as required. Filters are cleaned or replaced. Power connections are re-torqued to manufacturer's specifications. | ✓             |    |                                                                         |
| 2                                          | Proper cooling is critical to the operation of a VFD. Fans are energized and tested for air flow. Heat sinks and air passages are inspected to detect blockage or broken/cracked components. Fans are replaced as necessary.                                                                                                                                                                                                                                                      | ✓             |    |                                                                         |
| 3                                          | Inspect VFD panel for alarm and confirm that unit is in automatic operation and system is normal.                                                                                                                                                                                                                                                                                                                                                                                 | ✓             |    |                                                                         |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.  
To be performed by: HVAC Technician  
Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **VARIABLE FREQUENCY DRIVE**

**SITE AND BLDG #:** Pal601

**MECHANIC SIGNATURE:** 

**DATE:** 5-15-19

**LOCATION/RM #:** Mechanical WO# 8744 **ASSET #** 3386

**START TIME:** 1:30

**FINISH TIME:** 1:40

| CHECK POINT                                | CHECKPOINT DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                            | TASK COMPLETE |    | NOTES/ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|------------------------------------------------------------------------|
|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | YES           | NO |                                                                        |
| SPECIAL INSTRUCTIONS                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |    |                                                                        |
| 1                                          | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered.                                                                                                                                                                                                                                                                                                     | ✓             |    |                                                                        |
| 2                                          | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.                                                                                                                                                                                                                                                                                                                       | ✓             |    |                                                                        |
| TO BE PERFORMED AT EACH INSPECTION SERVICE |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |    |                                                                        |
| 1                                          | Perform a complete visual inspection and cleaning. Broken or damaged parts are replaced as necessary. Inspected for ambient temperature, dust, dirt, moisture, evidence of overheating, corrosion, integrity, etc. Capacitors are checked for leakage. Conductors and parts are checked for proper insulation. Drives are cleaned using vacuum or compressed air as required. Filters are cleaned or replaced. Power connections are re-torqued to manufacturer's specifications. | ✓             |    |                                                                        |
| 2                                          | Proper cooling is critical to the operation of a VFD. Fans are energized and tested for air flow. Heat sinks and air passages are inspected to detect blockage or broken/cracked components. Fans are replaced as necessary.                                                                                                                                                                                                                                                      | ✓             |    |                                                                        |
| 3                                          | Inspect VFD panel for alarm and confirm that unit is in automatic operation and system is normal.                                                                                                                                                                                                                                                                                                                                                                                 | ✓             |    |                                                                        |

**Note:** The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

# PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST VARIABLE FREQUENCY DRIVE

SITE AND BLDG #: Pa 166-01

MECHANIC SIGNATURE: 

DATE: 5-15-19

LOCATION/RM #: bft WO# 8744 ASSET #3385

START TIME: 2:10

FINISH TIME: 2:20

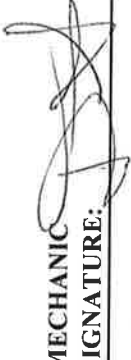
| CHECK<br>POINT                             | CHECKPOINT DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                            | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|-------------------------------------------------------------------------|
|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | YES           | NO |                                                                         |
| SPECIAL INSTRUCTIONS                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |    |                                                                         |
| 1                                          | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered.                                                                                                                                                                                                                                                                                                     | ✓             |    |                                                                         |
| 2                                          | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.                                                                                                                                                                                                                                                                                                                       | ✓             |    |                                                                         |
| TO BE PERFORMED AT EACH INSPECTION SERVICE |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |    |                                                                         |
| 1                                          | Perform a complete visual inspection and cleaning. Broken or damaged parts are replaced as necessary. Inspected for ambient temperature, dust, dirt, moisture, evidence of overheating, corrosion, integrity, etc. Capacitors are checked for leakage. Conductors and parts are checked for proper insulation. Drives are cleaned using vacuum or compressed air as required. Filters are cleaned or replaced. Power connections are re-torqued to manufacturer's specifications. | ✓             |    |                                                                         |
| 2                                          | Proper cooling is critical to the operation of a VFD. Fans are energized and tested for air flow. Heat sinks and air passages are inspected to detect blockage or broken/cracked components. Fans are replaced as necessary.                                                                                                                                                                                                                                                      | ✓             |    |                                                                         |
| 3                                          | Inspect VFD panel for alarm and confirm that unit is in automatic operation and system is normal.                                                                                                                                                                                                                                                                                                                                                                                 | ✓             |    |                                                                         |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

Additional Notes:

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **VARIABLE FREQUENCY DRIVE**

|                                        |                                                                                                               |                                 |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------|
| <b>SITE AND BLDG #:</b> <u>Pa16601</u> | <b>MECHANIC SIGNATURE:</b>  | <b>DATE:</b> <u>5-15-19</u>     |
| <b>LOCATION/RM #:</b> <u>boiler</u>    | <b>WO#</b> <u>8744</u>                                                                                        | <b>ASSET #</b> <u>3381</u>      |
| <b>START TIME:</b> <u>8:30</u>         |                                                                                                               | <b>FINISH TIME:</b> <u>8:40</u> |

| CHECK POINT                                | CHECKPOINT DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                            | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|-------------------------------------------------------------------------|
|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | YES           | NO |                                                                         |
| SPECIAL INSTRUCTIONS                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |    |                                                                         |
| 1                                          | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered.                                                                                                                                                                                                                                                                                                     | ✓             |    |                                                                         |
| 2                                          | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.                                                                                                                                                                                                                                                                                                                       | ✓             |    |                                                                         |
| TO BE PERFORMED AT EACH INSPECTION SERVICE |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |               |    |                                                                         |
| 1                                          | Perform a complete visual inspection and cleaning. Broken or damaged parts are replaced as necessary. Inspected for ambient temperature, dust, dirt, moisture, evidence of overheating, corrosion, integrity, etc. Capacitors are checked for leakage. Conductors and parts are checked for proper insulation. Drives are cleaned using vacuum or compressed air as required. Filters are cleaned or replaced. Power connections are re-torqued to manufacturer's specifications. | ✓             |    |                                                                         |
| 2                                          | Proper cooling is critical to the operation of a VFD. Fans are energized and tested for air flow. Heat sinks and air passages are inspected to detect blockage or broken/cracked components. Fans are replaced as necessary.                                                                                                                                                                                                                                                      | ✓             |    |                                                                         |
| 3                                          | Inspect VFD panel for alarm and confirm that unit is in automatic operation and system is normal.                                                                                                                                                                                                                                                                                                                                                                                 | ✓             |    |                                                                         |

**Note:** The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

# PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST AIR HANDLER

SITE AND BLDG #: Pa 166-01

MECHANIC  
SIGNATURE: 

DATE: 5-20-19

LOCATION/RM #: 11 room WO# 8474 ASSET # 3014

START TIME: 9

FINISH TIME: 9:30

| CHECK POINT                                | CHECKPOINT DESCRIPTION                                                                                                                                                                                                                        | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|-------------------------------------------------------------------------|
|                                            |                                                                                                                                                                                                                                               | YES           | NO |                                                                         |
| SPECIAL INSTRUCTIONS                       |                                                                                                                                                                                                                                               |               |    |                                                                         |
| 1                                          | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to.                                                              | ✓             |    |                                                                         |
| 2                                          | Remove power at Drive or at Breaker Panel. Verify with tester or meter that power has been removed. Install lock out tag out if servicing alone or in confined space for safety precautions.                                                  | ✓             |    |                                                                         |
| TO BE PERFORMED AT EACH INSPECTION SERVICE |                                                                                                                                                                                                                                               |               |    |                                                                         |
| 1                                          | Check fan blades and moving parts for cracks and excessive wear.                                                                                                                                                                              | ✓             |    |                                                                         |
| 2                                          | Check running motor amperatures on all three phases (record in note column) notate L1, L2, and L3 amp draws.                                                                                                                                  | ✓             |    | L1 ____ L2 ____ L3 ____                                                 |
| 3                                          | Tighten all electrical connectors/lugs to proper torque.                                                                                                                                                                                      | ✓             |    |                                                                         |
| 4                                          | If unit is a multi-zone air handler, then check each individual zone damper and associated controls.                                                                                                                                          | NA            |    |                                                                         |
| 5                                          | Check bearing collar set screws on fan shaft to make sure they are tight.                                                                                                                                                                     | ✓             |    |                                                                         |
| 6                                          | Check filters for dirt accumulations, replace as necessary. Check belt, repair or replace as necessary.                                                                                                                                       | ✓             |    |                                                                         |
| 7                                          | Check damper actuators and linkage for proper operation. Adjust linkage on dampers if out of alignment.                                                                                                                                       | NA            |    |                                                                         |
| 8                                          | Lubricate mechanical bearings and connections sparingly.                                                                                                                                                                                      | ✓             |    |                                                                         |
| 9                                          | Clean coils by brushing, blowing, vacuuming, or pressure washing.                                                                                                                                                                             | ✓             |    |                                                                         |
| 10                                         | Check coils for leaking, tightness of fittings.                                                                                                                                                                                               | ✓             |    |                                                                         |
| 11                                         | Use fin comb to straighten coil fins.                                                                                                                                                                                                         | ✓             |    |                                                                         |
| 12                                         | If applicable, clean strainer (annually).                                                                                                                                                                                                     | NA            |    |                                                                         |
| 13                                         | Flush and clean condensate pans and drains, remove all rust prepare metal and paint. Hose down coils and drain pans and wash with an appropriate EPA approved solution approved solution. Treat condensate pans with an EPA approved biocide. | ✓             |    |                                                                         |

| CHECK POINT | CHECKPOINT DESCRIPTION                                                                                                                                                      | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|-------------------------------------------------------------------------|
|             |                                                                                                                                                                             | YES           | NO |                                                                         |
| 14          | Check belts for wear and cracks, adjust tension or alignment. Replace belts when necessary. Multi-belt drives shall only be replaced with matched sets.                     | ✓             |    |                                                                         |
| 15          | Check rigid couplings for alignment on direct drives, and for tightness of assembly. Check flexible couplings for alignment and wear.                                       | ✓             |    |                                                                         |
| 16          | Check and test freestat for proper operation                                                                                                                                | ✓             |    |                                                                         |
| 17          | Vacuum interior of unit.                                                                                                                                                    | ✓             |    |                                                                         |
| 18          | Check filter doors and access doors for proper gasketing and air leaks. Correct as necessary.                                                                               | ✓             |    |                                                                         |
| 19          | Lubricate fan shaft bearings while unit is running. Add grease slowly until slight bleeding is noted from the seals. Do not over lubricate. Remove old or excess lubricant. | ✓             |    |                                                                         |
| 20          | Clean up work area.                                                                                                                                                         | ✓             |    |                                                                         |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

**Additional Notes:**

batt circuits have leaks & are out of R-22 unable to run unit to this will destroy compressors there is no intention to make repairs on this unit from information given by Tim Peters



# PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST OUTDOOR CONDENSING UNIT

SITE AND BLDG #: Pa 166-01

MECHANIC  
SIGNATURE: 

DATE: 5-20-19

LOCATION/RM #: Outside WO# 8474 ASSET # 3013

START TIME: 11:20

FINISH TIME: 11:20

| CHECK POINT                                | CHECKPOINT DESCRIPTION                                                                                                                                                           | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|-------------------------------------------------------------------------|
|                                            |                                                                                                                                                                                  | YES           | NO |                                                                         |
| SPECIAL INSTRUCTIONS                       |                                                                                                                                                                                  |               |    |                                                                         |
| 1                                          | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to. | ✓             |    |                                                                         |
| 2                                          | Schedule outage of unit with personnel in area the unit serves.                                                                                                                  | ✓             |    |                                                                         |
| 3                                          | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.                      | ✓             |    |                                                                         |
| 4                                          | If disposal of the equipment is required, follow regulations concerning removal of refrigerants and disposal of the unit.                                                        | ✓             |    |                                                                         |
| TO BE PERFORMED AT EACH INSPECTION SERVICE |                                                                                                                                                                                  |               |    |                                                                         |
| 1                                          | Remove debris from air screen and clean underneath unit.                                                                                                                         | ✓             |    |                                                                         |
| 2                                          | Wash coil with coil cleaning solution - Rinse Thoroughly                                                                                                                         | ✓             |    |                                                                         |
| 3                                          | Straighten fin tubes with fin comb, as needed.                                                                                                                                   | ✓             |    |                                                                         |
| 4                                          | Check electrical connections for tightness.                                                                                                                                      | ✓             |    |                                                                         |
| 5                                          | Check mounting base for tightness.                                                                                                                                               | ✓             |    |                                                                         |
| 6                                          | Inspect fans for bent blades, unbalance, excessive noise and vibrations.                                                                                                         | ✓             |    | Fan housing on 2 fans is smashed                                        |
| 7                                          | Inspect all piping for leaks and tighten loose connections.                                                                                                                      | ✓             |    |                                                                         |
| 8                                          | Check wires at condenser electrical fused safety switches for tightness and burned insulation. Repair as necessary.                                                              | ✓             |    |                                                                         |
| 9                                          | Check supply air temperature to ensure unit is operating properly. If possible record room temperature.                                                                          | ✓             |    |                                                                         |
| 10                                         | Inspect unit for overall condition and recommend for replacement or other needed repairs.                                                                                        | ✓             |    |                                                                         |
| 11                                         | Clean up work area.                                                                                                                                                              | ✓             |    |                                                                         |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

unit is no bigger used 3 fan blade cages need replaced & 2 fan motor housings need replaced  
they have no intentions of fixing unit  
Page 1 of 1

# **PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST** **OUTDOOR CONDENSING UNIT**

SITE AND BLDG #: PA 166-01MECHANIC  
SIGNATURE: DATE: 5/20/19LOCATION/RM #: OUTSIDE WO# 8744 ASSET # 3272START TIME: 11:00FINISH TIME: 11:20

| CHECK POINT                                       | CHECKPOINT DESCRIPTION                                                                                                                                                           | TASK COMPLETE |    | NOTES/ ACTIONS<br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|-------------------------------------------------------------------------|
|                                                   |                                                                                                                                                                                  | YES           | NO |                                                                         |
| <b>SPECIAL INSTRUCTIONS</b>                       |                                                                                                                                                                                  |               |    |                                                                         |
| 1                                                 | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered to. | X             |    |                                                                         |
| 2                                                 | Schedule outage of unit with personnel in area the unit serves.                                                                                                                  | X             |    |                                                                         |
| 3                                                 | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.                      | X             |    |                                                                         |
| 4                                                 | If disposal of the equipment is required, follow regulations concerning removal of refrigerants and disposal of the unit.                                                        | X             |    |                                                                         |
| <b>TO BE PERFORMED AT EACH INSPECTION SERVICE</b> |                                                                                                                                                                                  |               |    |                                                                         |
| 1                                                 | Remove debris from air screen and clean underneath unit.                                                                                                                         | X             |    |                                                                         |
| 2                                                 | Wash coil with coil cleaning solution - Rinse Thoroughly                                                                                                                         | X             |    |                                                                         |
| 3                                                 | Straighten fin tubes with fin comb, as needed.                                                                                                                                   | X             |    |                                                                         |
| 4                                                 | Check electrical connections for tightness.                                                                                                                                      | X             |    |                                                                         |
| 5                                                 | Check mounting base for tightness.                                                                                                                                               | X             |    |                                                                         |
| 6                                                 | Inspect fans for bent blades, unbalance, excessive noise and vibrations.                                                                                                         | X             |    |                                                                         |
| 7                                                 | Inspect all piping for leaks and tighten loose connections.                                                                                                                      | X             |    |                                                                         |
| 8                                                 | Check wires at condenser electrical fused safety switches for tightness and burned insulation. Repair as necessary.                                                              | X             |    |                                                                         |
| 9                                                 | Check supply air temperature to ensure unit is operating properly. If possible record room temperature.                                                                          | X             |    |                                                                         |
| 10                                                | Inspect unit for overall condition and recommend for replacement or other needed repairs.                                                                                        | X             |    |                                                                         |
| 11                                                | Clean up work area.                                                                                                                                                              | X             |    |                                                                         |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

# PREVENTATIVE MAINTENANCE PROGRAM CHECKLIST VAV BOX

SITE AND BLDG #: PA166-01 MECHANIC SIGNATURE: [Signature] DATE: 3/17/19

LOCATION/RM #: VAV 4.41 WO# 8744 ASSET # 4726 START TIME: Room 229 FINISH TIME:

| CHECK<br>POINT                             | CHECKPOINT DESCRIPTION                                                                                                                                                        | TASK COMPLETE |    | NOTES/ ACTIONS<br><br>(IF TASK COMPLETE IS CHECKED NO, PROVIDE EXPLANATION) |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----|-----------------------------------------------------------------------------|
|                                            |                                                                                                                                                                               | YES           | NO |                                                                             |
| SPECIAL INSTRUCTIONS                       |                                                                                                                                                                               |               |    |                                                                             |
| 1                                          | In addition to the procedure(s) outlined in this standard, the equipment manufacturer's recommended maintenance procedure(s) and/or instruction(s) shall be strictly adhered. | X             |    |                                                                             |
| 2                                          | Follow lock out/tag out procedures at all times. De-energize or discharge all hydraulic, electrical, mechanical, or thermal energy prior to beginning work.                   | X             |    |                                                                             |
| TO BE PERFORMED AT EACH INSPECTION SERVICE |                                                                                                                                                                               |               |    |                                                                             |
| 1                                          | If EMS system permits, check that the operating controls activate damper per design specifications.                                                                           | X             |    |                                                                             |
| 2                                          | If required, check damper linkage for tightness and lightly lubricate.                                                                                                        | X             |    |                                                                             |
| 3                                          | If required, inspect dampers for free movement.                                                                                                                               | X             |    |                                                                             |
| 4                                          | If required, inspect actuators for tightness to mounting brackets.                                                                                                            | X             |    |                                                                             |
| 5                                          | As needed, tighten electrical connections to servo motor.                                                                                                                     | X             |    |                                                                             |
| 6                                          | Inspect unit for overall condition and recommend for replacement or other needed repairs.                                                                                     | X             |    |                                                                             |

Note: The technician shall perform any repairs identified during PM up to \$250 (direct labor and direct material cost) per PM occurrence. For any deficiencies found exceeding \$250 open a corrective maintenance (CM) ticket and include the Asset #, WO #, photos, and a detailed description of the deficiency.

To be performed by: HVAC Technician

Additional Notes: