

<b>Dates Inspected:</b>						<b>Inspected by:</b>

TS-0031

### **Heat Pump (Central Forced Air)**

*These instructions are to be used as a guide to help you maintain your home or office in a safe and efficient manner. They do not replace the requirements of the manufacturer. You should ALWAYS review your owner's manual for additional preventive maintenance requirements.*

This inspection is in two parts and is designed to increase the efficiency of your heat pump unit and prolong the life of the compressor.

#### Background:

The heat pump unit has two parts: the evaporator, and the condenser. The evaporator gets cold and air from inside your facility flows over the evaporator coil, is cooled and is distributed throughout your living space.

The condensing unit is located outdoors. There are normally two copper pipes leading from the condensing unit to the evaporator.

#### Indoor Inspections:

1. Visually inspect the copper pipes (one is a little larger than the other) for ice. If ice is present, contact a service professional. Condensation is normal but ice is not and generally indicates that your unit is low on refrigerant.
2. Remove air filter and inspect for cleanliness. If the filter is dirty, clean it or replace it. Some filters are disposable and cannot be cleaned. Others can be cleaned with water and a brush. If the filter comes out wet, you may have a plugged drain and you should clean the drain pipe or contact a professional before you have water damage to your unit or facility.
3. Place filter back in the air handling unit and replace covers as required.
4. Inspect the drain pipe connected to the tray at the bottom of the evaporator. In the newer units, there is an automatic cut-off switch on the drain line and it can easily be pulled out making visual inspections easy. Others, are more difficult and the best place to see if the drain is working is to go outside and check the drain (it is normally found close to the condensing unit).

#### Outdoor Inspections

1. Check the drain pipe to make sure the end is not plugged and that water can freely flow through it.

The Maintenance Guru says take your time and do a thorough inspection. Ask if you have questions!

2. Inspect the area around the condensing unit. Remove all grass or weeds that may be touching the unit.
3. Inspect the pipes attached to the unit for ice. The larger pipe may have moisture on it, which is normal. Ice is not normal and indicates that the system needs to be serviced.
4. Inspect the wires that lead into the condensing unit for signs of stripped or damaged wires. (Often weed eating around the unit can lead to damaged wires). If damaged wires are found, take steps to correct them or call a professional to make necessary repairs. Often the most vulnerable wires to weed eaters are thermostat wires which are small and frail. A weed eater can easily strip the wires and even break them. Keeping them taped tight to the larger pipe can help protect them from yard equipment.

Note: The most important inspection on this list concerns the filter. If the filter is plugged, air cannot flow across the evaporator and your compressor works harder and longer than it should. Electricity is wasted and the compressor's life is shortened.

Finding ice on the unit is another indication that the unit is not working properly and that continued operation will waste electricity and can damage the compressor.

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