

HVAC System Issues

Symptoms

- Heating and/or Cooling is not occurring in the unit when running the unit fan with the thermostat on either the Cooler or Warmer setting
- Warm air is coming out when running the air conditioning
- Air Conditioning/Heat is exiting the vents, but not efficiently

These are common problems of the HVAC units experienced during the "peak" of HVAC usage often resulting from air getting trapped in the specialized water valve and/or a failed valve. Once a valve becomes worn out it needs to be inspected by a HVAC contractor and possibly replaced. Costs can run up to \$1800 or more to have it replaced. It is also possible that the heat/cool exchanging fins and coils are clogged with debris that will cause inefficient transfer of heating or cooling into your ventilation system.

Responsibility

Since the valve and heat/cool exchanging system is "inside" the individual condominium unit, within the HVAC access area, it is therefore is the responsibility of the unit owner, not the Association to repair, replace, and service.

If there is something else wrong, perhaps a blocked pipe, then the Association may be responsible, but the owner should get a contractor to discover this, document it, and contact the management representative to request that the unit be fixed with the Association paying for the repairs.

Possible Causes

- If the valve is not working, running the blower fan on high will circulate the air, but it will generate more heat in the unit (note: the x05 units (and some others) have two fan motors, while most units have only one, and each motor generates a significant amount of heat, if you are trying to cool your unit, it is better to shut off the HVAC fan)
- The valve servo can be worn out, or the valve is corroded and cannot move. Usually the valve is stuck in a closed state, but it is possible it can be stuck in an open state, or a "slightly" open state, such that it is not allowing enough water into the coils to make much of any impact on heating or cooling.
- Sometimes the valve will work and sometimes it will not work as it is going bad, until it fails completely
- Air may be trapped in the valve resulting in deterioration of the valve system
- Dust can clog the heat/cool exchanging fins and coils causing inefficient transfer of heating and cooling at any fan speed

Valve Test

1. During the cooling season put the temperature setting to the HOT side (not the COLD side), then turn off the fan - let it sit for about 10 minutes (reverse hot and cold for heating season)
2. Open the HVAC access door

3. After 10 minutes, turn on the fan (set it to low so that it is easier to hear water flow through the valve and coils)
4. Turn the temperature switch so that you hear it "click", meaning it should be opening the valve to let cold (hot) water flow past the valve and through the coils
5. Listen very closely for the rush of water past the valve and into the coils immediately after you hear the click, it's best to have two people in slightly different positions, if one can be on a ladder and up in the HVAC compartment, even better, but do NOT touch anything! Just because you do not hear water does not mean the valve is defective, there may be no air in the system so you may not hear the water
6. If you do not hear the rush of water, it is possible the valve is "broken" and needs to be replaced as it is not opening up, in which case a contractor must be called in
7. It is also possible the fins and coils may be clogged with debris; it is recommended to call a service agent to get the fins and coils cleared

Removing Trapped Air - If experiencing difficulty getting AC (heat) into the unit, it is possible air is trapped in the valve, or the valve is broken:

1. Turn on the fan, any setting, but low if you want to more easily hear water flow after you hear the click in the following steps (this works in either cooling or heating seasons)
2. Turn the thermostat so that you hear it click - leave it there for about 10 seconds
3. Turn the thermostat the other way so that you hear it click again - leave it there for about 10 seconds
4. Turn the thermostat the other way so that you hear it click again - leave it there for about 10 seconds
5. Set the thermostat to where you want it so that is cooling or heating as necessary
6. In about 10 minutes put your hand next to a vent opening to see if the air is cold (cooling season) or hot (heating season). It should be obvious, it should not be, "it feels kind of cool or warm", it should be COLD or HOT as long as the thermostat is set so that it is still cooling or heating correctly.

Heat Mitigation/Avoidance Steps

1. Shutting shades when the sun is coming in the windows
2. Running a ceiling fan so that it blows the hot air down
3. If there is a ceiling fan you can also run a fan from the raised bedroom area to blow hot air to the ceiling fan
4. Open windows only if it is warmer inside than outside
5. Try not to use the stove or oven; if you need to heat things use a microwave oven
6. If your HVAC system is not efficiently cooling your unit, turn off the blower fan
7. Turn off lights and other electrical devices you are not using