

## Introduction

An HVAC is a system that involves Heating, Ventilation and Air Conditioning. The goal of an HVCA system is to provide ultimate comfort during the entire year, regardless of the temperature, but most importantly, the Air Conditioning unit can save you during the summer. Usually, there are indoor and outdoor units. Together, they offer the possibility of having a comfortable house in every season.

However, just like any other system, the air conditioning units need a lot of maintenance. The lack of proper care for the unit might mean a lot of stress, especially when the system fails and you have to deal with a hot or cold house.

Because of this, it is crucial to make sure that each homeowner knows exactly what to do to prevent these types of situations. The key is to have an inspection schedule or checklist. This way, you will be able to spot any problems immediately and contact assistance.

However, not a lot of people know what to look for and what to do while doing an inspection. Being so, in this short E-BOOK we will teach you how to inspect your air conditioning system and have a checklist as a guide so you won't have to worry about a defective system when you need it the most. Good read!

# Chapter 1.

## Understanding your HVAC / Air conditioning system

If you are going to inspect your air conditioning system, then you need to understand what you are doing. The system is made of important parts that will be involved during the inspection, so by understanding what each of them does you will be much more prepared when you are checking them later to find any problems. After all, you will only be able to find flaws if you know how these pieces should typically be when they are working correctly. Take notes.

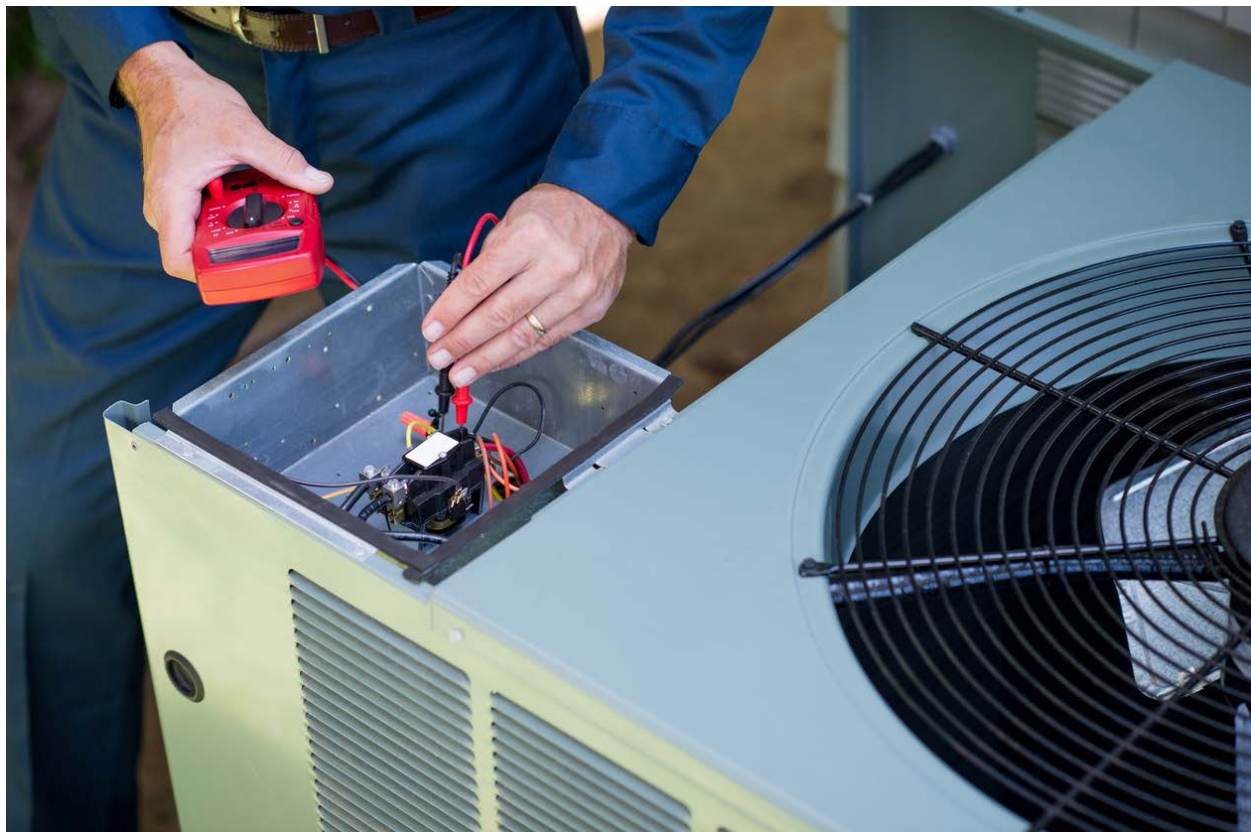
- ▶ **Furnace** – This part of the HVAC system will push the air inside of the system. Usually, you will find the furnace at the basement or attic, as it is a large piece of the system.
- ▶ **Evaporator coil** – The evaporator coil is found at the top of the furnace, and it is the part of the system that will spread the cold air throughout the house. They are usually activated instantly when the thermostat indicates a rise in temperature.
- ▶ **Heat Exchanger** – Another part of the furnace, the heat exchanger will be the part to warm the air that enters the house. They usually work with gas burners or electricity.
- ▶ **Thermostat** – The thermostat controls the temperature inside of the house, and will send a signal to the system if your home is in need of hot or cold air.
- ▶ **Ductwork** – The ductwork part of the system is usually not easily visible, but they represent a vital part of the process. Obviously, they are going to distribute the air inside of the house.
- ▶ **Condensing Unit** – You will find this part outside of the house. Inside of it, there would be what we call a refrigerant gas. This gas is then compressed and condensed turning into liquid, which is the version of the gas that will be used to cool the air.
- ▶ **Refrigerant Lines** – They are responsible for transporting liquid from the condensing unit to the furnace, and then transporting the gas into the condensing unit.
- ▶ **Vents** – Lastly, the vents are responsible for releasing the air into the rooms of your house.

## Chapter 2.

# Homeowner air condition inspection checklist

Right before summer and during the season are the times when you need to pay extra attention to your air conditioning system. To do that, you can use a checklist that will guarantee that you inspect all the crucial parts of it, preventing any problem from becoming worse and affecting the function of the air conditioner.

You can schedule the inspection as frequently as you want, but it is recommended that you don't go a long period of time without at least cleaning the vents and doing necessary checkups. Here is how you can do it:





## Outdoor AC Unit

Follow the listed steps to make sure your system will work perfectly during the summer:

- ▶ **Step 1.** Make sure you have turned off the AC system, the inspection can become dangerous really quickly in case you forget this step.
- ▶ **Step 2.** If you usually have a winter cover on your outdoor AC unit, remove it.
- ▶ **Step 3.** Make sure to clean the surroundings of the AC Unit. If you have noticed that there's grass, make sure to eliminate it. Your outdoor system needs a lot of space and air circulating.
- ▶ **Step 4.** Clean the vents carefully. Remove any dirt, sand, snow, leaves, or anything that might block the passage of air.
- ▶ **Step 5.** Inspect the insulation and fix/replace any damaged section that you find.
- ▶ **Step 6.** Clean your condenser. One of the most essential parts of this inspection is cleaning your condenser. However, this has to be done by a company that knows what they are doing since the condenser involves power that can harm anyone who doesn't understand the unit.

## Indoor Unit

- ▶ **Step 1.** Make sure to inspect the furnace filter and replace if you feel needed. The furnace is one of the most critical parts of the system, and if it doesn't have plenty of ventilation, it might become weaker, which will require more "effort" from the unit and can easily cause overworking of the unit. This will also mean more energy costs as the unit will be overworking. This part of the inspection should be done monthly since it is extremely easy for the filters to become clogged.
- ▶ **Step 2.** Clean all of the vents. All of them, in each room. Sometimes the problem might not be in the system itself, but the vents might be blocked.
- ▶ **Step 3.** Make sure that the condensate lines are not blocked as well.
- ▶ **Step 4.** An underrated part of inspecting your AC system is making sure to check all of the windows and doors. Make sure they are sealed and tight, and that there is no air circulating when they are closed.
- ▶ **Step 5.** Check the thermostat when you are preparing for the summer to make sure they are have programmed it to how you want it to work during the season. Make sure to test if it is working correctly.

Have a professional help. Sometimes we, as homeowners, feel like we can do everything by ourselves. However, one wrong step and your AC unit will be even more damaged because of your lack of knowledge about the system. It is always a safer choice to have a professional inspect and clean your unit, especially the condenser.

*P&M* is a company that offers scheduled inspections during the entire year and with exceptional care for each season. During the spring, the focus is on the thermostat operation, safety, compressor, drain pan and lines. Meanwhile, during the fall, the focus is on making sure there are no gas leaks, adjusting the burner unit, inspecting the heat exchanger and check the blower.

You will also be able to sign up for a Maintenance plan and get rid of any worry during the entire year since you will be covered in case anything helps. Each maintenance plans involves frequent inspections that will check the air filters, thermostat, voltage, heater system, evaporator coils and any part of the whole AC unit. The plan also includes support for emergency situations.

Taking this into consideration, if you want to get help from a professional team and have the security of signing up for a maintenance program, then you can check out the *P&M website* for more information on the different plans and benefits.

Regardless if you are getting professional help or following the checklist, you must make sure that you are inspecting your unit every month. Just a few days working with something wrong can damage the unit and cause further problems. Make yourself a schedule to check if everything is working correctly even before you notice any issues. Prevention is the best solution.





## Last thoughts...

Spotting any problems with your air conditioning unit can save you a lot of trouble during the year and especially summer. Take just a few hours of a day in the month to follow the checklist that we prepared for you, and you will drastically decrease the chances of having any bad surprised when you need your AC the most.

Make sure to contact P&M in case you need assistance and access the website to know more about their maintenance plans if you do not want to deal with your unit but still wants to have the safety of knowing that everything is working correctly. Go to P&M by [clicking here](#).

We wish you the best and a very comfortable summer,

P&M Air Conditioning and Heating

