

## The maintenance of Air conditioner

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Although the weather of our lower mainland is quite mild, it does have a couple of hot days over 30 C in summers. Therefore, many families have the AC installed especially in the newer buildings and high end condos. We are going to simply introduce the maintenance of AC.



AC is comprised of the evaporator (interior component), condenser & compressor (exterior component), refrigerant line, air supply & return duct as well as cooling water drain and thermostat. All the above parts have to be taken care of. Ex. interior components, which are normally set up in attic or above the heat exchanger of furnaces, the home owners can clean or replace the filter before the evaporator every year although it is not easy to the evaporators in attic. It is important to protect the evaporator coil and keep the interior air clean. Also the coil should get cleaned by professionals in every 2-3 years, which benefit to the cooling efficiency. The exterior part is the core of AC, which has to be horizontally secured and leave enough space around. It should be clear without any leaf and debris covered. We have to regularly check leakage or oil stain around the bottom of compressor and refrigerant tube. We should listen to tones of the compressor and fan while they are working, also be alert to any burn smell. If these happened, we would have to ask contractor to repair. If the ambience is lower than 18 C, we should not turn on the AC. It has to be at least 5 mins interval between the twice start-up. If the AC has been powered off for long time, It has to wait for 12 hours after powered on then to start. These are essential to maintain the compressor. The compressor is not cheap to replace. Apparently most part of the refrigerant line cannot be visible. It has to be run down by gravity from evaporator to compressor without any obstacles. The tube should be smooth without any squeeze and nick. The visible air duct in attic should be insulated and cleaned or vacuumed every year, which is the same as heating duct. The cooling drain has to be attention. If the outlet is exterior, it has to be far from wall to avoid moisture and moss damage in long term. If it is discharged to any inside drain, the trap is needed to prevent nasty smell backup to whole building through evaporator. In addition, it is better to have secondary drain pan under the evaporator in attic. Because once it is leaking, the damage is distinct.

AC is not complicated but not cheap on purchasing and installation. It could last 15 years if properly maintained.