

How to Clean Evaporative Air Conditioner Pads

An evaporative air cleaner is a very useful machine to have, but like many other pieces of equipment, it requires regular maintenance to keep it running smoothly, not to mention as long as possible. The pads are by and large the most important part of the overall machine, but keeping every part of it in top shape is important if you want an evaporative air cooler to last as long as possible. That said, if you have never cleaned your unit before, you may not know exactly how to go about it. This guide will explain step by step how to go about cleaning and maintaining your unit, cooling pads included.

Knowing these important cleaning and maintenance steps will ensure that your evaporative air conditioner lasts as long as possible and that its performance will be the best it can be.

1. Drain the Unit

Provided that your unit still has water in it, the first step to cleaning it is to cut off the water supply and drain all of the water from the reservoir. You'll want to cut the power so you don't get shocked while doing this. How you drain the tank depends on what type of evaporative air conditioner you have, but in general, it depends on the size. A whole house cooling system generally has a drain plug, which may need to be siphoned out with a hose. Smaller, portable units can often just be tipped to dump the water, or they might have removable water tanks. Either way, this is the indisputable first step to even getting to the pads that need to be cleaned.

Be sure to dry the empty tank very well after it has been drained, as it will be much harder to clean the tank in step 2 if you have not dried it beforehand.

2. Clean the Water Tank

While you have the tank open and available, it is a good idea to go ahead and clean it. After all, if it has been some time since the last cleaning, it will probably be quite dirty. You should use a scouring tool like a stiff brush or an appropriate sponge to loosen any debris that may be caked to it. If there is a lot of said debris once the scrubbing is all said and done, consider using a vacuum cleaner to get it all up. Though if the tank is light enough, you could just dump this as well.

After that, you'll want to scrub the inside of the tank with soapy water to make sure it is absolutely clean, but this may not be enough if the water your air conditioner regularly uses has a high mineral content. In that case, it may have mineral deposits on the inside of the tank, which won't scrub away easily. If this is your situation, you'll need to put a little more effort into cleaning the tank.

You'll want to fill the tank with white vinegar, then allow it to sit for an hour or more. The high acidity of the vinegar will help dissolve mineral deposits in the tank, which can obstruct the flow of the machine and prevent it from working at top capacity. It'll also help get rid of any unseemly smells the tank might have. Once the vinegar soak is complete, rinse it with clean water, then scrub all of the surfaces once again. Then rinse it one last time to get rid of any remaining residue or debris.

3. Check for Problems

Before even getting to the pads, now is a very good time to check your air conditioner for damage or defects. After all, damage to the different parts of your evaporative air conditioner will either prevent it from working entirely or at least prevent it from operating at peak efficiency. The first thing to look for will be cracks or punctures in the water tank, where water may seep out. You'll probably notice this while cleaning the water tank, but it is worth it to double check and make sure you didn't miss anything. If you do find any breaches in your water tank, you can use silicone caulking to plug it. Just follow the manufacturer's instructions on how long the caulk needs to sit and dry.

You should also check the float arm. It needs to be able to move freely up and down, or else there is an issue. If it is having trouble moving, it is possible that there are mineral deposits causing the arm to stick. You'll need to scrub them off, or use the vinegar trick from before to get rid of them if they are especially stubborn.

If you can reach them without too much trouble, you'll also want to check on the motor and fan for your conditioner, since moving parts like these need to be regularly maintained. Applying a bit of oil to moving parts will help keep them lubricated and have them last significantly longer. You'll also want to check the belt on your fan if at all possible, to ensure that it still fits snugly. If it is saggy or cracked, you'll want to replace it. You can check the owner's manual or online to find out about replacement parts for your particular air conditioner.

It is worth noting that many of these parts aren't as readily accessible with a portable evaporative air conditioner, but if you can get to them, you should still follow these guidelines. Usually, full scale home evaporative air conditioners will have easy access to nearly all of these parts, but portable ones may not. You should refer to your user manual or operating guide to see how or if you can access the different components of your unit.

4. Deodorize the Unit

If you came across any mold or mildew while you were cleaning, or if you simply want the air to smell a little better when you turn on your unit for the season, you may want to take this chance to deodorize it.

To do it yourself, you should fill a spray bottle with fifteen to twenty drops of an essential oil you particularly like the smell of, then combine it with some water. Spray this combination on the water pan and the reservoir parts of your unit, and the air will smell a lot nicer the next time you turn on your unit.

Deodorizing the unit doesn't have any real practical benefits, but it is nice to be able to make the air smell a bit more pleasant. Besides, after long periods of extensive use with no maintenance, your air conditioner may start to smell musty, so it is a pretty good idea to deodorize the unit every time you are conducting maintenance.

5. Inspect the Unit's Cooling Pads

We now finally get to the cooling pads. They are definitely one of the most important parts of the entire evaporative system. They tend to be wet for long periods of time, meaning they are especially vulnerable to mildew, which is dangerous. In fact, if you spot any mold or mildew on your pads, don't even bother with attempting to clean them, as throwing them away is safer. Mold and mildew can put harmful allergens in the air that cause respiratory issues, and considering that this is an air conditioner, that only makes the situation worse.

If you do need to replace the pads, there are two different types you can get. There are fiber pads and rigid media cooling pads. Some pads might be made to fit your machine, and others may need to be cut to fit. In the case of the latter, be sure to keep your old pads around so you can use them as reference for what size to cut the new ones.

You can always refer to your user guide or operating manual to see if there are specific types of pads that your manufacturer recommends, or if they outright offer replacement pads as part of a warranty. Generally, you can cut any type of pad to fit with your machine and it will work just fine, but if you want to be doubly sure you are getting the most effective pads, this is the right course of action.

6. How to Clean your Cooling Pads

If you inspect your cooling pads and find that there is no mold or mildew on them and that they are still physically intact, then you can just clean them rather than outright replacing them.

Thankfully, this is a simple and easy process. First, you'll want to remove loose debris with a vacuum cleaner. After that, cleaning them is as simple as taking the pads outdoors and rinsing

both sides with a hose. Just keep that up until the water runs cleanly off of them. Once that is done, you are free to reinstall the pads in your unit even while they are still wet, since this will just help the unit run faster anyway.

However, if your pads have calcium deposits that are especially resistant, you may need to take things a step further. Very tough and difficult to remove calcium deposits might be a sign that you should just replace the pads altogether, but this isn't necessary if you want to put in the effort to get rid of those deposits.

Doing this will once again call for the high acidity of distilled white vinegar mixed with water. You'll want to use about three cups of the vinegar and water solution in a bucket, so you can dip a wire brush or equally tough scouring tool into it. Then it will be a matter of physically scrubbing away the calcium deposits until they are no more. This is also not a bad way to go about scrubbing off deposits elsewhere on the unit. Getting rid of these deposits may not be imperative, but it is still a good idea to eliminate them. After all, with too many of them in the right places, it can slow down the efficiency of your unit or outright stop some of the moving parts.

Of course, if your pads have physical damages or tears, you'll probably need to just outright replace them. They may still be able to function even if they have some breaches, but small tears are very likely to evolve into larger ones, and if they are damaged at all the quality of the air the unit is producing is lowered as well, which is something you don't want for you or the people in your household. It is generally better to just be safe and replace your pads if you find physical damages or breaches anywhere on them.

7. How Often should you clean your Air Conditioner?

The answer to this question depends on a couple of different factors. First and foremost is obviously how much you use the evaporative air conditioner. If you live in a particularly dry climate, it may be on very often, and therefore require more cleaning. Three times a year is the recommended minimum: before the season you plan on using it, after the season you used it during, and before you put it away into storage.

Of course, you'll want to drain the water tank and refill it once a month at least, which will stop the air from getting musty and give you a chance to refresh the scent if you really feel the need to. It's also not a bad idea to check your cooler at least once every three months just to see what state it is in, and clean it during those times.

Essentially, it is a good idea to check on your unit regularly, and also clean it before and after any sort of heavy use. This is the best advice if you want to keep the unit in top shape for as long as possible, and to avoid the growth of mildew and mold for as long as you can.

Things to keep in Mind

As you can see, cleaning and maintaining your evaporative air conditioner is not a very grueling or difficult process. As long as you know what you are doing, you can have the entire unit cleaned and tuned up in just a few hours, or even less if some of the more harrowing tactics like the vinegar soak aren't required. In short, all you really need is whatever tools that might be required to open or drain your unit and water, unless you also need vinegar and a good sponge.

That said, all that really matters is conducting this maintenance regularly. If you conduct regular maintenance on your unit, the likelihood of deposits will be lessened and you won't have to scrub as hard or at all. As for the pads themselves, keeping an eye on them and checking on a regular basis is important for an entirely different reason. Because the air conditioner's pads are almost always wet, you need to keep a close eye on them to ensure that they do not grow mildew or mold. As stated previously, mold and mildew produces very dangerous allergens that could cause respiratory problems for those breathing the air, so vigilance is crucial.

This is why your pads are by far the most important part of the evaporative air conditioner, and why they need to be taken care of regularly and properly. That said, don't think that you can be cheap and just clean your pads forever. Eventually they must be replaced, as it is dangerous to keep old ones for too long. While you can clean them pretty regularly, you should never keep them for more than a year, and that's a bit of a stretch at best. Clean them when you can, but do replace them if you ever find mold or mildew, for the health of both you and your family.

So long as you conduct regular checkups and maintenance on your air conditioning unit, it will continue to function for quite a long time. After all, it is a simple machine with relatively few moving parts, so the chances that something will go seriously wrong are slim, and when things do break, it is usually as simple as replacing a single part or so. Just keep an eye on the pads to ensure that there is no mold or mildew, and replace them when there is, since you can clean them when there isn't. Follow that simple rule and your evaporative air conditioner unit will always be safe to use, even if it has been in operation for a long time. Regular maintenance is the key to the longevity of any tool.