

The Art of Vacuuming

Vacuuming likely isn't the worst of all dreaded household chores. For most, it comes in above scrubbing the toilet or cleaning the oven. Some even enjoy vacuuming. There's something satisfying about those vacuum tracks through your clean carpet: evidence of a job well done. And some babies are even soothed by the vacuum's roar (just ask any new mom or dad). Still, vacuuming can be a daunting task, especially if you've got a house full of carpet or hardwoods disappearing beneath pet fur.

We here at House Method get pretty obsessed about our homes and the best ways to keep them looking their best. Even the most mundane tasks can be made simpler, more efficient, more enjoyable—and that's what we're about here.

We talked to engineers and product developers at the top vacuum manufacturers—including Dyson, Miele, and Roomba—to understand what makes a great vacuum and how pick one for your home. We talked to professional cleaners to get the scoop on best ways to keep your floors clean and remove the worst stains.

In this guide, we'll address the following questions:

- How do vacuum cleaners work?
- How do you pick the right vacuum?
- Are those attachments a marketing ploy or are they great cleaning tools?
- How do you best care for your floors?

We'll even get into the history of vacuum cleaners and answer the question: *Is there a right way to vacuum?*

How a vacuum cleaner works

The vacuum is a simple machine, but it may not feel that way if you've ever had to deal with a broken one (more on that later!). Essentially, the basic vacuum has six components:

1. An electric motor (and the cord that connects it to a power source)
2. Intake port (usually at the head of a traditional vacuum; may contain a variety of attachments)
3. Exhaust port
4. Fan
5. Porous bag or in the case of bagless vacuums, a detachable canister
6. Housing that contains all other components

Plugging in your vacuum and switching it on engages the motor and sets the fan in motion. The fan, which pushes air out through the exhaust port, causes a drop of pressure behind the fan that creates suction. The suction creates a continuous flow of air through the intake port and out the

exhaust. This stream of air picks up dirt, debris, and dog hair from your floor and sucks it into the bag (or, in the case of a bagless vacuum, through a filter and then into a chamber). Many vacuums have rotating brushes that help to dislodge the debris from carpet fibers.

The basic mechanism of the electric vacuum cleaner hasn't changed much since its invention in 1901 by British engineer [Hubert Cecil Booth](#), who, after putting napkin over his mouth and sucking up table crumbs (yep), named his first machine the Puffing Billy. The most notable change to the design occurred in 1985 when [James Dyson](#) pioneered bagless vacuums with the Dyson Cyclone, a vacuum that uses a detachable canister instead of a bag. More recently, robotic vacuum cleaners like iRobot's [Roomba](#) have taken the stage (hello, Jetsons!).

Types of vacuum cleaners

The **standard upright** is the most common type of vacuum cleaner and includes bagless vacuums as well as vacuums that use a variety of different filtration systems, including HEPA and water filtration.

Stick vacuums, which are more compact than a standard upright and are often cordless, are ideal for small jobs and hardwood floors.

Handheld vacuums like the Dust Buster, introduced to the world by Black & Decker in 1979, are cordless and work well for vehicles and other areas that are hard to reach with standard vacuums.

Canister vacuums are perhaps more unwieldy than other vacuums, but are also quite powerful. Also, the slender wand of a canister vacuum can be ideal for reaching tricky spots like stairs and underneath beds or couches.

Robotic vacuums are popular these days for the obvious reason—they don't require a human for operation! The few early attempts at robotic vacuums were innovative (and even cute, in some cases), but not functional enough for daily use. [Tomy Dustbot](#), a 1985 vacuuming robot with blinky eyes, a tiny dustpan, and edge sensors, was adorable but clunky. In 1997, the [Electrolux Trilobite](#) was a real contender for robotic vacuuming success, but it had trouble with bumping into objects and wasn't a thorough a cleaner.

Ultimately, it was iRobot's Roomba, introduced in 2002, that significantly grew the category of robotic vacuums. Ken Bazydola, Director of Product Management for Roomba, shares that these little machines are really quite smart. They have sensors that detect the edges of stairs, and they know things even your kids might not know, like how to be gentle when coming into contact with furniture and how to avoid ingesting cords or tassels. What's more, the newer Roomba models, equipped with iAdapt 2.0 Navigation, not only map their cleaning routes, they also remember where they've already cleaned so as to avoid redoing an area.

Vacuum attachments: is this about marketing or do they actually work?

So, what's up with all those attachments? Are they really worth all the trouble, or do manufacturers throw them in as an incentive to get you to buy the product? According to Lily Cameron, Cleaning Expert at [Fantastic Services](#), some of those attachments really are indispensable. Her favorite attachment is the **crevice tool**: "it is great for so many hard-to-reach spots at home, such as in between kitchen appliances, small drawers, strips, and edges." She also shares that some higher-end vacuum cleaners come with a special **curved crevice tool** designed for cleaning under beds without the need to bend over, "making it great for elderly people or people with back issues." Also essential to a good cleaning routine, Cameron says, are the **dust brush** (great for cleaning window blinds!) and the **upholstery brush**.

Josh Mutlow, Dyson's Senior Design Engineer for Floorcare, also sings the praises of attachments which "give you the versatility to adapt the machine to clean in all different scenarios." For example, in Dyson's V10 series, the **Motor Head** attachment works wonders when you're trying to lift dust out of the carpet. The **Torque Drive Motor Head** attachment, which is brushless, allows a greater amount of carpet into the head of the vacuum, agitating the carpet fibers so that they release more dust and debris; this attachment is also designed to make the forward and backward strokes of the vacuum equally powerful (which means less work for you!). Some vacuums, like Dyson's Absolute model, have attachments specifically for removing debris from hard floors without damaging them.

How do you choose a vacuum cleaner?

It's a good idea to consider four basic questions when you're choosing a vacuum for your home:

1. Floor type

First, what type of flooring do you have throughout your home? Wall-to-wall carpet? Go with an upright vacuum, which will have the power you need to thoroughly sweep your entire house but will be easier to maneuver (and to store) than a canister vacuum. If you have a mix of carpet and hardwoods, an upright is still a good bet, but you'll want one that allows you to turn the brush roll off, as it will scatter dirt across your hardwoods before the vacuum's suction can pick it up.

2. Your household

Second, do you have pets or small children? Pet hair can be stubborn, and depending on the type of pets you have, it can multiply pretty quickly. Babies and toddlers will create messes you didn't even know were possible. With pets and tiny tykes dropping debris regularly, you'll want to select a vacuum that packs a punch when it comes to suction. It's a good idea to select a model with attachments that work for crevices and furniture, because pet hair and Goldfish crumbs get everywhere. Finally, a busy house requires a vacuum that's willing to work *all the time*. For the daily pick-up required of shedding pets, adding a robotic vacuum that runs daily—while you're not even home!—is a great idea. The robotic vacuum can take care of daily maintenance, which means you only have to pull out your upright vacuum once a week.

3. Health considerations

Third, does anyone in your home suffer from allergies? If so, get one with either a HEPA filter or, even better, a water filtration system. An aqua filter does the best job of collecting and trapping the allergens responsible for your sneezing and itchy eyes.

4. Size of your house

Finally, how big is your house? If you have more than one set of stairs, you probably won't want to lug around a canister vacuum, and if you live in a tiny city apartment, you'll want something that takes up as little space as possible, like a stick vacuum or even a handheld.

Since you likely won't have the opportunity to take your vacuum for a test drive before purchase, you'll need to do your homework. First, consider the above questions about the type of vacuum that is best for your home. Once you've narrowed down your choices to a specific type, you'll need to both read reviews ([Consumer Reports](#) is a good starting point) and also ask your friends and neighbors. Facebook can be a great crowdsourcing tool for finding the best product—tell your friends what you're looking for in a vacuum and what kind of floors you have and post away. You'll probably get even more advice than you bargained for, but too much information is always better than too little when you're about to make a big purchase.

5. Vacuum quality and standards

When you've decided on your favorite brands, do a little research on how those brands test their products. Do they have their own internal testing standards or rely only on national standards? If they test internally, what do those tests look like? In the United States, the [American Society for Testing and Materials \(ASTM\)](#) has created a variety of standards that manufacturers must pass before their vacuum goes to market. These standards test for such things as durability, cleaning coverage, and, for robotic vacuums, mission completion.

At [Dyson](#), a company that tests its vacuums in-house, there are rigorous internal standards for reliability and usability. Dyson's Mutlow reports that Dyson "prides themselves on failure." In other words, Dyson push themselves to prove that their products are working robustly in the ways they're intended to work. If their vacuums don't pass their tests, some of which include running them repeatedly into baseboards, dropping them from a meter above floor height, or attaching them to machines that simulate a year's worth of wear, they go back to the drawing board. "We want to test the limits of the product's design," Mutlow says, and then push those limits to create the best possible vacuum.

Caring for your floors and carpets

Most people don't put a lot of thought into how—or how often—they vacuum. If you can get in a quick vacuuming session before guests arrive, that probably feels like a win, right? Still, there are some systems and rules of thumb that might make the process a little easier.

First, how much time should you really be spending vacuuming your home? While Fantastic Service's Cameron admits that the answer to this question can vary widely depending on the area of your home, she did give us some guidelines: "It's a good idea to vacuum high-traffic areas such as mudrooms, hallways, and corridors a few times a week, especially if you have kids, pets, or both. Bedrooms can be vacuumed once each week." Not sure how thoroughly you're vacuuming? Cameron tells us that a two-bedroom apartment should take about 20–30 minutes total. When in doubt, use that estimate as your rule of thumb.

Cameron also provided us with these great cleaning tips for the days when you do vacuum:

Pick up the area before vacuuming

Remove clothes, toys, or clutter from the floor to save yourself time and to prevent the possibility of small objects being pulled into the vacuum.

Take it slow

We know, life is busy and time is scarce. But if you rush through your vacuuming, chance are you'll find yourself pulling out your vacuum more frequently than if you take your time. A slower, more deliberate process ensures that the vacuum efficiently picks up all dust and debris.

Keep your vacuum clean and in good shape

Check the dust bag and filters each time you vacuum and change them when needed. Also, keep an eye on the hose for cracks that might reduce the suction power.

Follow a pattern

First, clean the rooms that you use least often and that are on the outer edges of your cleaning pattern. Those might be the bedrooms and living room, with the kitchen and corridors left for last. Also, when vacuuming a carpeted floor, do so in long strokes that parallel the lines of the walls / floorboards. Try not to scratch the walls with the floor brush. Over time, this will leave marks that are hard to remove.

How to remove odors and stains from carpet

To keep your carpets fresh and spotless, a great vacuum is essential, but so is good, old-fashioned elbow grease. With some stains, you need to do a little nitty-gritty cleaning before you can vacuum the area. The worst culprits are coffee, wine, pet messes, and greasy food.

To deal with those unpleasant carpet woes, the cleaning experts at [Stanley Steemer](#) recommend that you have the following items on hand: clean white towels, an empty spray bottle, liquid dishwashing detergent, hydrogen peroxide, baking soda, white vinegar, ammonia, and a spoon. Keep these in a caddy near your vacuum. You'll also need access to clean, cold water when dealing with these stains. Here are the cleaning processes recommended by Stanley Steemer for effective stain removal:

Coffee and red wine are both full of tannins, which means they stain quickly, so getting to the spot as quickly as possible is ideal.

Removing coffee stains from carpet

1. Blot first with a clean, absorbent white towel. This allows you to see all of the coffee that's being absorbed.
2. Mix a solution of two cups of water and one teaspoon liquid dish soap in an empty spray bottle. Mist the area without oversaturating.
3. Using the spoon, agitate the area, then let the solution sit for about two minutes before blotting again and flushing the area with clean, cold water.
4. Blot one more time before spraying the area with hydrogen peroxide, which helps prevent dirt from sticking to the area.
5. Let the area dry completely before walking on it or vacuuming.

Removing wine stains from carpet

1. Sprinkle baking soda onto the spill and agitate the baking soda into the spill with a spoon. The baking soda will start to turn red and begin to clump.
2. Vacuum up the clumps and repeat this process until the baking soda can't absorb any more wine.
3. Mix a solution of two cups of water and one teaspoon liquid dish soap in a spray bottle. Mist the area without oversaturating.
4. Using the spoon, agitate the area, then let the solution sit for two minutes before blotting again and flushing the area with clean, cold water.
5. Blot one more time before spraying the area with hydrogen peroxide, which helps prevent dirt from sticking to the area.
6. When you're finished treating the area, let it dry completely before walking on it.

Removing pet stains from carpet

We love our pets, but sometimes with pets come accidents. Removing pet stains requires a two-step process.

1. The first step is to spray the area with hydrogen peroxide and then, using a clean towel, absorb as much liquid as you can before it penetrates the carpet pad or subflooring.
2. Mix a solution of two cups of water and one teaspoon liquid dish soap in an empty spray bottle. Mist the area but don't oversaturate.
3. Using a spoon, agitate the area, then let the solution sit for about two minutes before blotting again and flushing the area with clean, cold water.
4. Blot one more time before spraying the area with hydrogen peroxide. This will help prevent dirt from sticking to the area.
5. Let the area dry completely before walking on it or vacuuming.

Removing greasy food stains from carpet

Greasy food stains, the final offender, can create unsightly messes.

1. Sprinkle baking soda around the spot, using your spoon to work the baking soda into the spot. The baking soda should clump and discolor as the grease is absorbed.
2. Vacuum the baking soda and repeat this action until it no longer clumps.
3. Mix a solution of twelve ounces of water and three ounces of ammonia and use it to spray the spot.
4. Agitate the spot again with a spoon and use a clean white towel to blot it dry. Repeat this step until as much of the grease as possible has been removed.
5. Flush the spot with clean, cold water and blot up as much of the excess water as possible.
6. Mix a solution of four ounces of vinegar with twelve ounces of water. Leave the solution on the carpet for at least one minute before blotting up as much of it as possible.
7. Let the area dry completely before walking on it or vacuuming.

How to clean your vacuum cleaner

Cleaning your vacuum is essential to maintaining good working order and strong cleaning power. And regular upkeep of your machine will help to avoid messy situations later on (vacuum bags can actually explode if you fail to change them!). Most modern vacuums are made with filters and bags that can be detached and switched out pretty easily, making cleaning pretty painless.

Most vacuum specialists agree that a monthly cleaning of the machine's parts, including bag or canister, filter, and brush head, is a good rule of thumb. However, how often you need to clean your vacuum ultimately depends on how much it gets used. For example, if you vacuum a small space infrequently, you may only need to change your vacuum's canister and brush head every two months, though you'll still need to check the filter every month.

Here is a step by step process in the event that you're cleaning your entire vacuum at one time.

Before you begin

Also, aim to do this dirty job outdoors or in a garage where carpets and furniture won't be exposed to allergens and airborne debris. If you must do this indoors, be sure you've laid out newspaper or a sheet to protect the floor and other surfaces. If you're sensitive to allergens, consider wearing a mask when you change the bag or clean the filter.

First, run the machine for 30 seconds to one minute before cleaning so that loose dirt and debris is sucked from the tubing into the bag or canister. Then, unplug the machine.

Changing the bag or emptying the canister

Ideally, the bag will be only two-thirds full when you change it (gently squeezing the bag should give you a sense of its fullness). How you remove the bag will vary according to make and model, but in most cases you'll simply open the vacuum chamber and then either unclip or twist the bag away from the circular opening. Then, wipe down the vacuum canister with a clean cloth before attaching a new bag and securely closing the vacuum chamber.

Canisters, because they are so simple to detach and replace, can be emptied even more often—ideally when the canister is just half full. The canister, which is also the vacuum chamber, can simply be untwisted or lifted out of the vacuum's base.

Then, cover the opening of the canister with a plastic bag and slowly turn the canister over so that the contents spill into the bag. The canister itself should also be cleaned and rinsed in soapy water after emptying. Thoroughly wipe the canister dry before re-attaching it to your vacuum.

Cleaning and changing the filter

Many filters can simply be cleaned and rinsed in soapy water. **There are types of permanent HEPA filters, however, that can be ruined by water.** In this case, you can remove the HEPA filter and then tap it gently against a hard surface to release dirt and debris. Alternatively, you could use a blow dryer set on low (just be sure to do this outside!) to remove debris. Some filters will eventually need to be replaced. Check the manufacturer guidelines to get a sense of when your vacuum's filter will cease to be effective.

Cleaning the brush head

This is especially important if you are frequently vacuuming up long hair, which will wrap itself around the brush. You can remove tightly wrapped hair or string from the roller using the point of a pair of scissors. You can also use a clean cloth to carefully wipe down the roller itself, as well as the casing that surrounds it.

Repairing your vacuum

Regular, thorough cleanings should keep your vacuum running smoothly. But if it turns out that your vacuum just isn't working, don't automatically assume it needs to be replaced. First, try to determine what's causing the problem. If it's a worn-out part, a manufacturer will often replace the part free-of-charge.

If it's a more complicated problem—or if you just don't know what's wrong—take your vacuum to a local vacuum repair shop (many of them also service sewing machines, and most towns have at least one). If you're feeling extra ambitious and like to tinker, find a local DIY shop or [Repair Cafe](#) and learn how to fix the machine on your own.

Vacuum cleaner safety

Finally, a vacuum might seem like a pretty innocuous machine, but accidents do happen. Here's how to keep your family safe:

- Never use a vacuum with a frayed cord. Exposed wires are dangerous and can lead to fires. Also, when vacuuming, don't run over the machine's cord. This could cause the cord to fray or break over time.
- Never vacuum on or near wet surfaces, as this could cause electrical shock.
- Keep fingers—little fingers, especially—out of the way of the vacuum's moving parts. Your little ones may like to help with chores, but it's probably safer to have them start with sweeping or helping you pick up the floor before you vacuum.
- Finally, store the vacuum cleaner out of children's reach, ideally in a locked closet. Even when unplugged, the long cord can present a strangulation hazard for children and pets.