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## **Maintenance Sourcebook: Vacuum Cleaners**

### ***Keeping Vacuum Cleaners Running In Tip Top Condition***

Vacuum cleaners account for almost 20 percent of all equipment purchases made by facility service providers. This is because vacuum cleaners are usually the professional cleaner's most important tool. In comparison, this piece of equipment is as important to the custodian as chalk is to the teacher.

Due to its importance, it is imperative for vacuums to remain in tip-top condition for as long as possible. Not only will this keep the machines correctly operating—along with cleaning work being performed more productively and efficiently—but also a properly functioning vacuum cleaner is less likely to mar indoor air quality or damage floors and carpets.



Although backpack and canister vacuum models are becoming more common in commercial cleaning, the most frequently used vacuum cleaner is overwhelmingly still the upright. Accordingly, most of the maintenance care tips listed below will apply to an upright machine, while some will apply to all types of vacuum cleaners.

### **The Un-Connection**

A common and potentially dangerous problem with vacuum cleaners is when the busy cleaning professional, in haste, may unplug the machine by pulling on the cord and not the plug itself. Pulling on the

cord instead of the plug can weaken the connections and possibly cause an electric “short.” Most vacuum cleaners have specifically grounded plugs to protect the user, the machine, and the building. It is vital to always unplug the machine by its plug.

### **Better Roller Bars**

Agitation is a major component of all cleaning work. A vacuum cleaner’s roller bar—designed with bristles, with the proper denier (the diameter of the bristle) and bristles per tuft, help agitate and loosen soil from the carpet fibers, which are then sucked into the machine by the motor. Over time, these bars can become covered with threads and debris hampering the bar’s brushes’ effectiveness. Periodically check this area—with the vacuum cleaner off and turned upside down—by removing the housing that protects the beater bar. There are usually clips on each end holding the bar in place. Pull the bar out, remove any debris, and replace. Eventually, the bar will also need to be replaced if it is worn, cracked, or broken.

### **How is the Belt Holding Up?**

An older vacuum cleaner’s drive belt may need to be changed every few months. Follow the steps above to remove the beater bar and check the belt to see if it is worn or cracked. If it is worn, loosen the belt from the motor pulley, slide it off, and replace it. Make sure the belt turns the beater bar in the correct direction so dust and debris are deposited *into* the machine. Newer vacuum cleaners often have belts that are geared or have sprockets, which rarely wear out and usually perform better than rubber belts.

### **Fine Filters**

The vacuum cleaner’s filters are very important. Filters protect the machine’s motor and inner workings and exhaust filters prevent impurities from escaping the machine and becoming airborne. On most newer vacuum cleaner models, the filter can be easily removed. To do so, remove the holding or access door and simply lift it out and check for any secondary filters. The safest way to clean a filter is to vacuum it with another vacuum cleaner. HEPA filters may need to be frequently cleaned because as the filter(s) becomes filled with debris, the suction ability of the machine will be hindered.

## **Bag Care**

Although bagless vacuum cleaners are popular for the residential market, most commercial vacuum cleaners have air-filtration bags. These bags must be frequently changed because if they become too full, the machine's suction power will decrease. Some more advanced machines have indicator lights, informing the user when it is time to change the bag; otherwise, regularly check the bag. Once the bag is three quarters full, it is time for a new bag. Some newer machines also have lever controls making bag changing easy and preventing impurities from being released in the changing process. Pulling the lever out releases the bag. Then, attach the new bag and push the lever in to secure it.

## **Vacuum Cleaner Tidbits**

It is not recommended to "self" service the vacuum cleaner's motor. A trained professional should handle any motor problems.

Coins, paper clips, and other items may become lodged in the vacuum cleaner around the beater bar. Remove the bar as described earlier and remove these objects.

Check the machine's casing to make sure it is not cracked or any joints are loosening. Impurities can escape the machine through these openings.

A residential vacuum cleaner may last as long as 15 years if properly maintained. However, a good quality commercial vacuum cleaner may only last about five years, even with the best of care. This is because most commercial vacuums are used four hours every day, while a home vacuum is used as little as 20 minutes, 2-3 times per week.

Without proper maintenance, however the lifespan of both may be much shorter. And, because they are so vital to the professional cleaner, keeping them properly operating not only improves cleaning and productivity, but helps improve the cleaning worker's morale and effectiveness.

