Garbage Disposals

Garbage disposals are residential and commercial appliances designed to shred food waste so that it can fit through plumbing. They are usually electrically powered (although occasionally powered by water pressure) and are installed beneath sinks. Despite the convenience afforded by garbage disposals, the strain they can place on septic systems should be weighed against any potential benefits they might provide.

Why Use a Garbage Disposal?

When food waste is discarded into the trash, it will place an enormous burden on waste management systems and harm the environment. Garbage disposals reduce the severity of these problems by routing food waste into septic systems or sewers instead of landfills.

The following are a few specific problems associated with food waste that can be curbed through the use of a garbage disposal:

- It must be collected and transported long distances to landfills and waste treatment facilities.

In landfills, food scraps decompose and produce methane gas, which contributes to global warming.
Note – The above points must be weighed against the added expense of treating food waste in sewer systems and transporting it from septic systems.

Garbage Disposals and Septic Systems

If a garbage disposal discharges into a septic tank, it can place significant strain on the septic system. The amount of waste that enters the tank, particularly grease and suspended solids, will increase considerably. This load increase requires that the septic tank be pumped more often than would otherwise be required. The New York Septic Code counts the presence of a garbage disposal the same as an extra room in a house when they estimate the load placed on a septic tank. The additional strain will also reduce the life span of the septic system. Septic systems can be designed to accommodate food waste but, in general, they are not.

To test a garbage disposal for leaks, turn it on and run water through it. The water load should be great enough so that any leaks will become apparent. A good way to do this is to close the drain and fill the sink with water before releasing the stopper.

- While testing a garbage disposal, never put anything other than water through it. Before turning it on, check to make sure there are no objects already in the disposal.
- Do not attempt to fix a broken garbage disposal (or any other appliance) while performing a home inspection.
- If a dishwasher is connected to the disposal, make sure that the line that connects them is securely attached.
- Check to make sure that the garbage disposal is connected to a drain that is 1.5 inches in diameter or greater.
- Check to make sure that the disposal is provided with an adequate water supply.
  If the home has a double sink, check to make sure the waste pipe from the disposal has a trap installed.

Wiring Inspection

- The National Electrical Code (NEC) does not require a garbage disposal to have GFCI protection. GFCI protection for this appliance is optional.
- The vibration caused by the operation of a garbage disposal can cause electrical connections to separate.
- Check for any loose connections in the wire compartment box at the base of the disposal.
  Garbage disposals should be either hardwired or connected to an outlet through a grounded electrical outlet.
- A dedicated circuit is generally recommended, although a circuit that is shared with a dishwasher is sometimes appropriate. The best authority on this distinction is the disposal's user manual.

Maintenance and Operation Suggestions:

- Put only small quantities of food into the disposal at a time. Large food scraps should be cut into smaller pieces before entering the disposal.
- Never put anything down the disposal that is not food or water. Bottle caps, aluminum foil, and other non-food items can damage the disposal or get stuck in piping.
- Run water while using the disposal, and for approximately 30 seconds after you turn it off. Food scraps will flow through the piping more easily if they are pushed along by water. Cold water is better than warm water for this purpose because it will force fats and grease to congeal and harden, allowing them to move more easily through pipes. Warm water can be run through the disposal while it is not in operation.
- Ice can be used to clear off solidified grease and other debris from the blades in a garbage disposal.
- The garbage disposal should only be used to grind non-fibrous, leftover food. If in doubt as to whether something can be put in the disposal, err on the side of caution and put it in the trash instead.

The following items should never be put in a disposal:

- Items that are hard enough to dull the blades, such as shells from shellfish or bones; food that is highly fibrous, such as cornhusks, artichokes, pineapples, potato peels, asparagus, or celery should enter a disposal only in small quantities or avoided entirely. These foods take a long time to grind and can clog the disposal or the plumbing.
- Grease or household oils; or chemicals.

In summary, garbage disposals have the potential to limit the amount of household trash that must be taken away to waste management facilities. They can also place additional strain on septic systems and, for this reason, they should be used infrequently. Inspectors can test disposals for leaks and proper wiring, but they should beware not to do anything that might cause them to break.