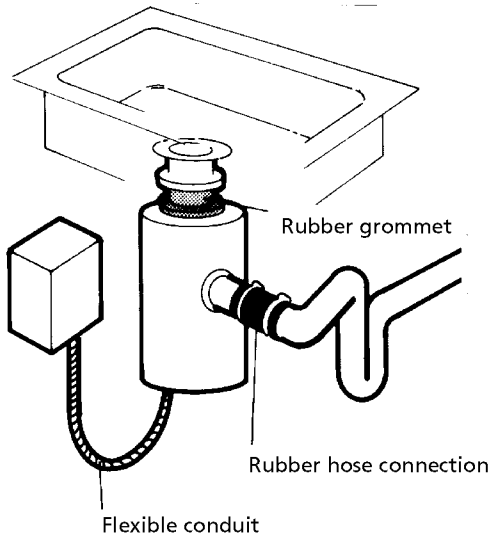
HOW-TO BOOKLET #3021

DISPOSER TROUBLE

TOOL & MATERIAL CHECKLIST

- ❑ Length of Broomhandle
- ❑ Phillips/Standard Slot Screwdriver
- ❑ Adjustable Wrench
- ❑ Plumber's Putty

Read This How-To Booklet for Specific Tools and Materials Not Included in the Basics Above.



If noise is a problem that can't be resolved with the procedures detailed in this Booklet, you may have to isolate the unit, as shown.

Sink-mounted garbage disposers are efficient and almost maintenance-free. Problems usually are within a do-it-yourselfer's skills to solve—once the problem has been diagnosed.

To help in the diagnosis, you need a little information and understanding about how a disposer operates:

Garbage is dumped into the hopper of the disposer. The disposer is then turned on. A motor drives a flywheel, impeller, and cutters which pulverize the garbage into tiny bits by throwing the garbage against a shredder device. The tiny bits are now flushed down the drain/sewer pipe with water from the kitchen sink.

What can go wrong is detailed below:

Stuck grinding wheel. This is probably the Number 1 disposer problem. It almost always is caused by bones, silverware, bottle caps, or other very hard objects jammed between a cutter and the shredder ring around the flywheel of the disposer.

First, turn off the disposer, if the motor is running or making a humming sound. Most disposers have an automatic overload switch that shuts off the power in the event the flywheel sticks or there is another malfunction of the unit. The "switch" operates similar to a circuit breaker. At the bottom or along the side of the housing you will see (usually) a red button marked "reset."

By pushing this button down, the electricity is reactived to operate the disposer.

Look down into the hopper of the disposer and see if you can spot any object in the hopper that could be causing the stick-up. If you can see this object, turn off the power to the disposer at the main electrical service panel. Check to make sure this power is off by turning on the disposer motor or pushing the reset button. You will hear a humming sound from the motor if the power is not off. Once you are sure that the power is off, use kitchen tongs or the hook of a flattened wire coat hanger to remove the object for the hopper.

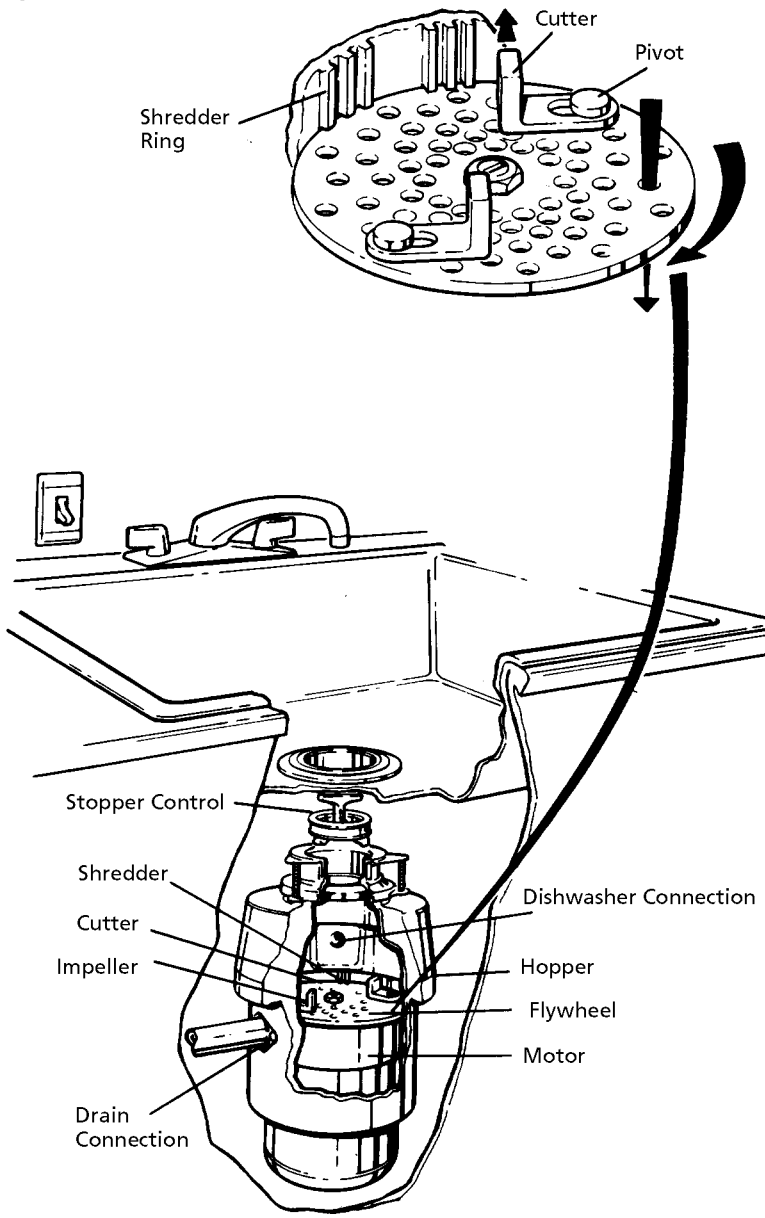
Never, under any circumstances, put your hand down into the hopper of the disposer. Use tongs, pliers, or even a coathanger/hook device to retrieve ungrindable debris.

Then, with a short length of broomhandle or a rolling pin, go into the hopper and try turning the flywheel in either direction. If it doesn't turn, double-check the hopper for objects; you may not have removed all the hard debris that's jamming the flywheel.

You will feel (and sometimes hear) the flywheel break free. At this point, turn on the power, run plenty of water into the hopper and flick the disposer switch on/off in quick sequence. This jolt should spin the flywheel and the water will flood away any loose debris in and around the hopper component.

Some disposer models have a jam-breaking wrench that is inserted in the bottom of the unit and turned to free the flywheel (sometimes called a "turntable"). Some models also have a "reverse gear" for a flywheel. By running the disposer in "reverse," you may be able to unstick the flywheel.

If you determine that there is no garbage debris causing the jam in the hopper, try pushing the reset button, as detailed above. Also, check the fuses and/or circuit breakers at the main electrical service entrance. If you reside in an older house, don't overlook a special fuse/circuit breaker box that powers

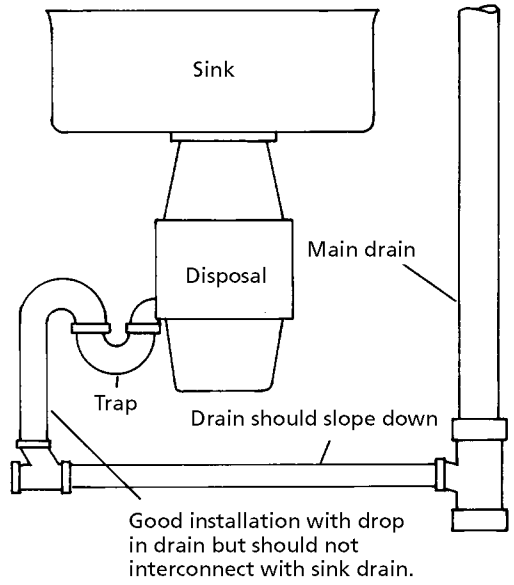


Anatomy of a garbage disposer.

Most models look like this one. Use this drawing as a parts locator for troubleshooting and repair. When a disposer is turned on, the flywheel will spin at approximately 1725 rpms. The centrifugal forces created by the disk forces the food against the walls of the disposer. The food waste then hits the shredder ring located in the rim of the disk where the debris is ground into a liquid.

the disposer and probably the dishwasher if you have one. It could be that a power overload has caused these devices to trip and, therefore, the disposer motor is not getting electrical power.

If the disposer has been working okay and then has suddenly stopped, and there is no debris blocking the flywheel, then wait 15 to 20 minutes and push the reset button. Also check the fuse system. Some disposers do not have reset buttons. If your unit is one of these, let this disposer "cool" for 30 minutes or so if it has been in use and debris has not stopped it. The power will be automatically restored when the parts cool. If not, suspect a damaged overload protector. This is a job for a professional to replace. Or replace the disposer. It could be less expensive than a service call.



If the above procedures don't work, refer to "humming noise" below.

Water leakage. If the trouble is just below the opening to the sink, the problem is probably a bad seal between the sink flange and the disposer unit.

To repair this:

1. Turn off the power to the disposer.
2. Go beneath the sink and lightly tighten the bolts (in the ring-like part) that hold the disposer to the sink. There are usually three bolts and they turn clockwise to tighten. The parts are called the "sink mounting flange" and "support flange."
3. If tightening the bolts doesn't work, loosen the bolts slightly. Then block up the bottom of the unit so the sink flange protrudes slightly above the surface of the sink. Force plumber's putty under this flange. Go completely around it and push in as much putty as you can with your fingers.
4. Drop the disposer back into place and retighten the mounting bolts.
5. The pressure from the bolts may cause the plumber's putty to ooze out from under the flange. If so, just wipe away any excess putty. If your kitchen sink is stainless steel, use stainless steel plumber's putty.

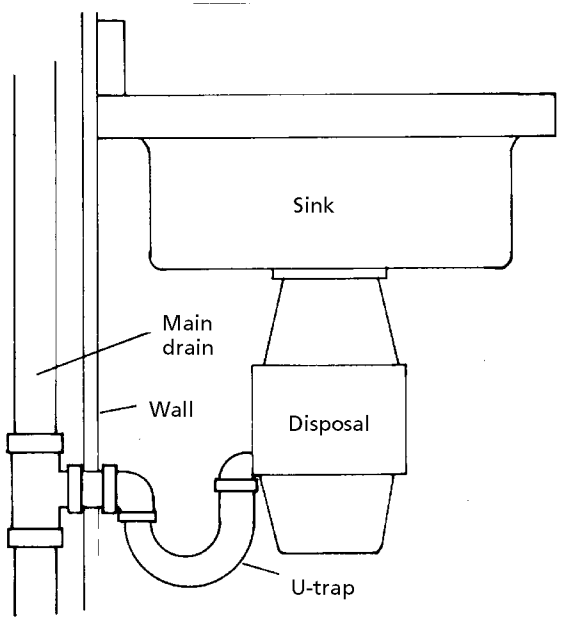
Other leak areas include the drainpipe connection at the disposer, and the joint between the shredder housing and the hopper. These parts are usually sealed by gaskets. Also, your dishwasher may be connected to the disposer so look at this connection for leaks. A clamp usually holds the drainhose from the dishwasher to the disposer. Tighten this clamp or change the hose if it is leaking.

If the trouble is at the drainpipe, remove the screws (or bolts) holding the pipe to the housing, if tightening the screw/bolts doesn't stop the leak. Pull the pipe away from the housing, remove the old gasket, install a new one, and reassemble the pipe to the housing.

If the gasket is leaking between the shredder and the hopper, you probably will have to remove the disposer from the sink by disassembling the drainage trap, unbolting the disposer from the sink mountings, and removing a clamping ring that holds the hopper to the shredder housing.

Depending on the model, you may be able to remove the clamping ring without removing the disposer from the sink. Once apart, a new gasket can be quickly installed. This is a factory part, however, and you might have to go to a dealer to get the gasket. But check on "universal" gaskets.

Slow drainage. First, run the disposer longer, giving it an opportunity to clear all garbage and flush it down the drain.



Poor installation because drain is almost on level with disposal

If this doesn't do it, remove the trap along the drainpipe and clean it. Also, with an auger or plumber's snake, rod out the drain from the trap through the drain pipe—not back up through the disposer. **Never pour liquid drain cleaner down through the disposer to open a slow or clogged drain. You could damage the disposer.**

Drain still slow? Then check to make sure that the slope of the drain pipe is adequate to carry away the debris, see illustrations. A slope in the drainpipe is preferred over a more horizontal line because it assures freer flow of the water/garbage mixture. Local plumbing codes may dictate how the drain must be connected. The slope should be about 1 inch per 4 feet of drainpipe run, or according to codes.

A broken or damaged cutter (flyweight) on the flywheel sometimes can cause poor drainage, although it is not a prime consideration. If broken/damaged, you may be able to replace the cutter or the entire flywheel by removing the trap and separating the hopper and shredder housing via the clamping ring.

Vibration. If the disposer is not loaded with garbage and it vibrates excessively when you turn it on, try loosening the mounting bolts slightly. Give them about 1/4 to 1/2 turn each. Then test the unit. If it is still vibrating, loosen the mounting bolts just a tad more. Sometimes the mounting bolts are so tight that the resilience from the mounting pads is deadened.

Noise. If the disposer is not loaded with debris, the noise can be a vibration problem. Correct this by loosening the mounting bolts as detailed above.

If the disposer is loaded, chances are that the noise is coming from a hard object in the hopper such as silverware, a bottle cap, broken glass.

Humming noise. Almost always this is caused by a stuck flywheel. In a few seconds the fuses will pop automatically to shut down the power.

However, if the unit hums and it is unloaded, the hum can come from a burned-out motor or loose electrical connections. If the problem is the motor, repairs should be made by a pro. Or, the unit should be replaced; it may be less expensive to replace it.

You can check the connections by opening the connection port—usually at the base of the disposer. **But first, turn off the power at the main electrical service entrance to the house.** Tighten the terminal screws with a screwdriver. Or, if the wiring has spade connections, tighten the nuts holding the connections to the terminals.

Won't start problems. First, press the reset button on the unit. If this doesn't start it, check the fuses/circuit breakers at the power service entrance to your home. If this is not the trouble, the switch to the unit could be malfunctioning. There are two types of switches:

1. If your disposal is a batch feed model, you have to turn on the power by twisting a stopper in the neck of the disposer. This stopper-switch could be faulty. Have it tested by a pro.
2. If your disposal is a continuous feed model, the power is controlled by a wall switch. This switch could be faulty. The best way to test the switch, if you don't have a continuity tester, is to **turn off the power** at the main service panel, remove the wires from the old switch and install a new switch that you know works properly.

If this treatment doesn't work, and the fuses are not blown or tripped, the problem might be in the connections—but suspect a burned-out motor.

GENERAL MAINTENANCE FOR GARBAGE DISPOSERS

By following a couple of very simple procedures you can add life to garbage disposer in your life, plus save yourself lots of repair and maintenance time and costs.

1. When you operate the disposer, use **PLENTY OF WATER**. Don't skimp, because water is what cleans the working parts and keeps them clean and in working order.
2. Load the hopper lightly, i.e., don't cram and jam garbage into the hopper as tight as you can and expect the disposer to handle it. In short, do several loads instead of one big load.
3. Never, under any circumstances, put metal, glass, stoneware, or other hard objects in the disposer—including bones. Some manufacturers claim that their product will grind bones. This may be true, but do your disposer a favor and toss the bones in a garbage bag.
4. Never use a drain cleaner in a disposer.
5. If the hopper jams or you accidently drop an item into the hopper that you don't want in the hopper, do not stick you hand down into the hopper. Instead, retrieve the item with kitchen tongs or pliers.

IF YOU ARE INSTALLING A NEW DISPOSER...

In some localities, garbage disposers are forbidden by local plumbing codes or laws. The problem is that the disposers discharge garbage into the sewer system, overloading it if it happens to be marginal—and many are.

Before you buy and install a new disposer, be sure to check out the local codes in your specific community: township, county, area. If the locality where you reside has an up-to-date sewer system, disposers are probably allowed. If you have you own private sewer system—a septic tank—it is strongly recommended that you do not use a disposer. However, check this out before you make a buying decision with a professional plumber in your community.

Installing a new disposer unit is not beyond the skills of a do-it-yourselfer. Most manufacturers include complete installation procedures with their disposer products.