Common Causes of Sump Pump Noise and How to Minimize It

Sump pumps are mechanical systems and make noise when they run. For some homeowners, the sound of the pump running is reassuring. As the water moves through the pump's pipe, it first moves air out, which is the source of what should be minimal noise.

Higher-quality pumps will make less noise when operating, but older, lower-quality pumps may make a lot of noise when air is released from the system.

However, if your sump pump is noisier than you’d like, some noise levels can be reduced, depending on the cause.

How noisy a sump pumps system is depends on many factors, including:

- Pump design
- Pump location within the sump pit
- Pump condition
- Sump pump materials

Following are a few of the more common noise-causing conditions, along with steps you can take to reduce noise.

**Vibration or clanging**

When water is discharged through the system's piping, you may hear a clanging noise, caused by the pipe hitting the pump's basin.

- Wrapping insulation around the pipe to dampen the noise when the pipe comes into contact with the basin or wall may reduce noise levels.

- You can also line the underside of the sump pump lid or cover with rubber grommets if the vibration is the result of the pipe striking the inside of the pump. Rubber grommets reduce both the vibration sounds and motor rattling.

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Excessive angles and joints in the discharge line can create clanging and vibration, while straight discharge pipes allow water to flow freely and quietly. Contact a certified plumber to reroute your discharge line, if needed.

A noisy motor

Sump pumps constructed from PVC or plastic generate more noise than cast-iron systems. Newer pumps also feature self-lubricating motors and run more quietly. If your motor is very noisy, the system is old and you've tried installing rubber stoppers, it's may be time to replace the system.

Opt for a replacement model that, in addition to featuring cast-iron construction and self-lubrication, lets the motor rest below the sump basin. The replacement system should also feature a fully insulated lid or covering to keep noise levels down.

Gurgling

Gurgling noises are often caused when water flows back down the discharge pipe after the pump cycles.

To reduce gurgling, upgrade your standard swing check valve with a spring loaded check valve. This type reduces gurgling because it allows water to flow more evenly through the plumbing.

Another tactic to reduce gurgling sounds is to adjust the pump switch so that it stops running before the basin is completely empty. When your sump pit or basin is empty, the pump makes a sound similar to sucking liquid through a straw.

Cover your pump basin with a lid or fitted foam insulation. Newer pump models are completely enclosed and come with a plastic cover to keep noise low, but you can cover older models with exposed basins by fitting a piece of plywood over the basin. Secure the plywood to the surrounding floor with a rubber gasket to create a seal and reduce vibrations.

Tip

Contact the manufacturer of your sump pump to see if they supply replacement or upgrade parts for your pump model to save time and money.

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