For most homeowners, Heating & Air Conditioning troubleshooting can feel intimidating. But when your system unexpectedly breaks down, troubleshooting helps determine what's wrong with it so you can get the necessary repairs done before the problem gets bigger.

Of course, most Heating & Air Conditioning issues still require the services of a skilled, experienced technician, but there are a few issues you can easily and quickly diagnose by yourself.

Here are some Heating & Air Conditioning troubleshooting tips for homeowners, to start with:

1. **Your furnace isn't producing enough heat? Check and change your clogged air filter**.

All the air flowing into your furnace passes through the air filter. Since it traps the dust and debris that would've otherwise entered the furnace, it's important to replace the air filter every now and then.

When the filter is clogged, it keeps air from passing through it. The lack of airflow traps the heat when your furnace is running. Then your furnace will overheat each time it starts up.

If this keeps happening, expect more frequent breakdowns and a shortened lifespan for your unit.

Replacing a clogged air filter keeps your Heating & Air Conditioning unit running smoothly. You may check your owner's manual for the proper way to change the air filter.

2. **Having issues regulating the temperature of your unit? Look out for a faulty thermostat**.

If the thermostat's display isn't lit, it may have malfunctioned. Dead batteries or wiring problems could've caused it.

But first, make sure the thermostat is turned ON and your heat or cool setting is selected. Then, check the wiring; a circuit breaker or fuse may have been tripped or blown. Turn the breaker on and off and see if the thermostat works properly after the breaker is turned on.

Alternatively, you may use a multimeter, a versatile tool that measures electrical resistance in a circuit, to check a faulty thermostat.

If you're an experienced DIY-er, replacing the thermostat yourself is doable, but hiring a technician is still the safer option.

3. **Getting no heat? Check the furnace flame to make sure your burners are clean**.

Burners that are clean will release sufficient natural gas for combustion. Otherwise, you won't receive any heat from your furnace.

You know your burners are clean if the furnace flame is blue. If the flame is yellow or orange, or any other color aside from blue, the burners may have been contaminated with debris.

We recommend checking and cleaning your burners at the beginning of each heating season. It will help keep your gas furnace in peak condition and prevent future breakdowns.

It's best to leave cleaning your burners up to the professionals as there are very delicate parts in your Heating & Air Conditioning system that could break.

4. **Is your furnace making shrieking sounds? Check for a slipped or worn blower belt**.

If it sounds like your furnace is screaming at you, there might be a problem with the motor.

The blower belt might be loose or damaged, so the fan doesn't turn as it should. If there isn't any sign of damage to the belt, adjusting it might fix the problem. If the high-pitched squealing noise is persistent, the belt may need replacement.

If you're buying a new blower belt, it doesn't hurt to buy two and keep the extra one for emergencies.

While older models of Heating & Air Conditioning furnaces use belt driven motors, newer units don't have them, for the most part. If your blower is not working on a newer unit, you may want to call a professional to help you out with your problem.

5. **Rattling noise and strange odors? Your heat exchanger may be cracked.**

You might hear a rattling noise when there are loose panels that need to be tightened, but it can also be due to a faulty heat exchanger.

A cracked heat exchanger can be dangerous, since it might leak carbon monoxide into your home. But don't wait for the CO alarm to go off before checking the heat exchanger.

If there's soot buildup in the furnace, or if you detect strange odors reminiscent of formaldehyde, call a professional right away.

When it comes to repairing or maintaining your HVAC system, you want to do it right.

Learning how to troubleshoot a few issues may be satisfying and cost-effective, but DIY repairs can easily go wrong if they're above your level of expertise. Never take on a DIY job you aren't sure you can handle safely.