

# HVAC Troubleshooting

Follow our interactive troubleshooting guide to find answers to your system's problems. Choose from a selection of common HVAC issues or pick your product for help with fixes you can try yourself.

## Thermostat Controls Troubleshooting

Feedback

Without your thermostat, your HVAC system wouldn't be able to function. Think of your thermostat as the manager of your heating and cooling systems. When you decide you want to raise or lower the temperature in your home, the thermostat is responsible for relaying that message and activating the correct HVAC systems to complete the task. Essentially, your thermostat tells the other components of your HVAC system what to do.

This means, your thermostat working properly is a pretty big deal. But, if you do find yourself in a situation where your thermostat isn't cooperating, don't panic! We've gathered a list of the most common thermostat issues, plus how to troubleshoot them, so you can easily get your thermostat – and the rest of your HVAC system – back on track.

### Thermostat not working? Here's what you can do

While there are a number of common problems your **thermostat and temperature controls** could have, there's also typically a wide range of thermostat troubleshooting solutions you can try yourself. So, if you find your thermostat is facing one of these common issues, here's what you can do to safely try to combat the problem. If these solutions don't work – or you don't feel comfortable trying them yourself – **contact an HVAC professional** for assistance.

## Thermostat is not turning on

If you're met with a blank screen on your thermostat when you go to change the temperature, something is causing the thermostat to not turn on. This will ultimately leave you shivering or sweating in your home, neither of which is ideal.

### Troubleshooting tips

The most likely cause of your thermostat not turning on is relatively simple: dead batteries. The solution is equally simple: try replacing the batteries to see if your thermostat powers back on. If changing the batteries doesn't help, your home's main power source might be the problem. If you can safely reach your circuit breaker, try flipping it on and off to get your thermostat up and running again. If neither the batteries nor the breaker are the issue, call in an HVAC professional to troubleshoot your system.

## HVAC system suddenly not working

Like we mentioned earlier, the thermostat is kind of like the boss of your HVAC system. Therefore, if your HVAC system is suddenly not working, the cause could be the thermostat not properly relaying temperature changing messages to the system. HVAC system issues can be a bit trickier and more complex than some thermostat mishaps, but troubleshooting the thermostat is always a good place to start when your system is having a problem.

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### Troubleshooting tips

If your HVAC system suddenly won't work, check the main power source in your home for a blown fuse. Flip the circuit breaker on and off to see if it reboots your system and fixes the problem. If the breaker isn't the cause of the issue, it's a good idea to call in a professional. Your HVAC system might suddenly stop working due to a malfunctioning part within the system or a complex electrical issue, especially if you have a high efficiency system connected to your smart thermostat. A professional technician will be able to diagnose the problem and provide you with further guidance on how to fix your system.

## Room temperature doesn't match thermostat settings

**Programmable thermostats** are a great advancement in HVAC technology because they allow you to set your device to your own unique temperature needs, then let the thermostat do the true heavy lifting while you just adjust as needed. This technology could experience an issue where the room temperature doesn't match the thermostat settings you programmed.

## Troubleshooting tips

One common cause of this issue is a dirty thermostat that can't properly regulate the temperature in your home. Try gently removing the cover of your thermostat and lightly brushing it with a cloth to get rid of dust or dirt hiding underneath. Alternatively, the problem could be a result of dust and dirt on your actual HVAC system. In this case, try **replacing the air filters** in your HVAC systems. After performing both these cleaning functions, adjust the thermostat and see if the problem persists.

Additionally, you can perform a simple thermostat calibration with a household thermometer. Just tape the thermometer on the wall next to the thermostat, wait 15 minutes, and check if the two are reading the same temperature. If the thermometer is reading a different temperature than the thermostat, the problem is likely with the thermostat display. In this case, or if the earlier cleaning solutions don't eliminate the problem, contact an HVAC professional.

## HVAC system is short cycling or continuously running

Investing in a **smart thermostat can save you money** in many ways. For example, smart thermostats monitor and control your HVAC system usage and program the system to run only when you need it. This ultimately stops your HVAC system from running too frequently, which in turn can help lower your utility bills. But, an issue could occur where your HVAC system is short cycling or continuously running. Similar to situations in which your HVAC system may suddenly stop working, a thermostat or bigger HVAC system issue might be causing your system to run continuously.

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## Troubleshooting tips

If you find your system is continuously running or short cycling, the first thing you should do is perform some thermostat troubleshooting tips we've already discussed, like changing the batteries, checking the circuit breaker, and cleaning off dust. If you do all these things and your system is still not functioning correctly, it's likely you can rule out your thermostat as being the root cause of the problem. Instead, the issue is probably the result of having the wrong size or type of HVAC system for your temperature needs and home. In this case, call in an HVAC professional to help determine if you need a system **repair or replacement**.

## Thermostat won't let you change the temperature

After making the tough choice of **what temperature to set on your thermostat**, you may grow irritated if your thermostat won't actually let you program the temperature of your choice. If every time you press the controls on your thermostat you're met with an unchanging screen, try

these troubleshooting tips to fix the problem.

## Troubleshooting tips

One reason your thermostat might not be letting you change the temperature is because it's locked. To unlock a Trane thermostat, press the plus (“+”) and minus (“-”) keys at the same time for three to four seconds, then try adjusting the temperature again. If this doesn't work, try resetting your thermostat with the reset button, changing the batteries, or cleaning off any dust and dirt inside. If the temperature is still stuck, an electrical or display issue might be to blame. Contact an HVAC professional for further help.

## Bad thermostat symptoms: How to know if you need a replacement

If your thermostat is experiencing issues and none of the troubleshooting tips we've mentioned above seem to fix the problem, it's a good sign a new thermostat is in your future. Here are a few other signs to look out for that indicate you might need a thermostat replacement:

- Your thermostat is more than 15 years old.
- Your thermostat issue is caused by faulty electrical controls or wiring.
- Your thermostat frequently displays the incorrect room temperature.
- Your thermostat frequently gets stuck on one temperature.
- Your energy bills are inexplicably high.
- Your thermostat is making strange noises.
- Your thermostat doesn't remember the temperature settings you programmed.

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## When to call a professional to fix a thermostat

If you've tried all our troubleshooting tips to no avail, don't run to the store to buy a replacement thermostat quite yet. Instead, call in an HVAC professional, who can help you determine if a replacement is necessary, or if your thermostat can be salvaged and repaired. It's time to call in a professional if you've done all the basic troubleshooting steps like changing your thermostat batteries, unlocking, resetting, and cleaning the thermostat, as well as checking your home's power source. Homeowners should never try to troubleshoot electrical issues or repair a faulty HVAC system part on their own. Leave that to the professionals. They'll get your thermostat back up and running!

Is your HVAC system still experiencing issues?