

Rheem Water Heater Leaking [How To Fix It]

The main reasons behind the Rheem water heater leaking are:

- **Loose pipe connections**
- **Malfunctioning T&P relief valve.**
- **Faulty Drain valve.**
- **Gas control thermostat.**
- **Inner tank.**
- **And more.**



Rheem Water Heater Leaking

You should immediately turn off the water heater as a leaky water heater can be dangerous. Then, you can move on to diagnose the source of the leak and

fix the issue. We've discussed all these steps in detail in this guide. Keep on reading to learn more about it.

Rheem Water Heater Leaking [How To Fix It]

Leaking water heaters are annoying as you'd often get less hot water due to it. The most common sign of leaking water is visual. You'd see water leaks on the tank surface or around it and know what's going on.

But there are times when you can be aware of the leak early on. Sometimes, the water heater will make rumbling sounds when there's a leak. That way you can catch the problem at an early stage and nip it in the bud.

The faster you fix the leak, the less severe its consequences will be. So, follow these steps if you want to know what to do if the water heater is leaking:

Step 01 - Verify The Leak Is Coming From The Water Heater

Seeing water around the heater doesn't necessarily mean that the heater is leaking. You have to know about condensation to realize that. If you store the heater in a cold room, water droplets can accumulate on the tank surface.

You may initially think that the tank is leaking. But in reality, it's just condensation. Especially, if you have a brand new water heater that's leaking. Keep in mind that condensation is common in new heaters and you shouldn't be worried about it.

You can do a simple test if the issue here is condensation as opposed to leaking. Wipe all the water droplets on the tank surface and remove all the water around the heater. Turn off the gas control knob or set it to the "Pilot" position. Wait for 5-6 hours and see what happens.

If you don't see any water after this period, you can rest assured that it was condensation. But if water reappears, that means there's a leak. The more

water you see, the more severe the leak. If you see water after a while, you have to get serious about diagnosing and fixing the issue.

Step 02 - Shut Off Gas & Power Supply

By now, you should have a clear idea if your water heater is leaking or not. The first thing you have to do to diagnose the root cause of the leak is turn off the heater. The exact process depends on which type of heater you own.



For gas water heaters, you'd have to shut off the gas control valve. In some valves, you'd have to move the gas control knob to the "Off" position. In others, you'd get an On/Off switch.

You can also turn off the main manual gas shutoff valve to totally cut off the gas supply to the heater. Unplug the power cord of the heater from the power outlet too as you won't be using the heater for a while.

If you're using an electric water heater, you need to locate the circuit breaker that supplies power to it. Then, you need to flip the circuit breaker and turn off the power to the heater.

The next step is the same for both gas and electric heaters. You'd have to shut off the cold water supply to the heater. There are cold water shut off valves located in the water supply line of most heaters.

Turn it perpendicular to the water lines to cut off the water supply. If you don't have such a shutoff valve, you'd have to switch off the cold water supply to your entire house.

Step 03 - Locate & Repair Leak Source

Now, comes the most important step. Once you turn off the cold water supply, try to notice where the leak is coming from. The common problem areas which can be the cause of the leak are:

- Tank leaking at the top (pipe connections and vent collars)
- Tank leaking at the side (internal cracks or T&P valves)
- Drain valves, gas control valves, and heating element connections.
- Corroded or cracked tank.

If you can't find the source of the leak right away, don't panic. At least, you know what to look for now. Clean the water accumulated around the heater. Then, look for the source of the leak again.

Make sure you inspect all the common problem points we mentioned above. Once you find the leak source, you'd have to repair or replace the faulty component. You'll find out how to check for leaks in all potential problem areas and their fixes in the next section. So, keep reading.

Rheem Water Heater Leaking [Possible Leak Sources]

Unfortunately, there are many points in a heater that could cause the leak. You'd have to examine these points and see where the leak is coming from. If you're smart during the diagnosis, you'll find the leak source.

Once you do that, all you have to do is replace the faulty component and stop the leak. Here are the most common points behind a water leak:

01. Loose Pipe Connections

Your water heater could be leaking from the top of the tank. No matter where the leak is coming from, you have two tools in your arsenal to check it. The first is to check it visually. The second is to feel it with your hand.



So, check the pipe connections at the top of the tank first. You'll find both the cold water inlet and the hot water outlet lines there. See if there's any water residue around that area. If there is water, that's a giveaway of the leak source and you've just found the culprit.

If there's no significant water residue, you should inspect the connections by hand. Check the threaded connections as well as the pipe connections. Put your finger in there and notice if you feel any water. Ideally, there should be no water there. If you find water, it means the pipe connections are leaking.

The final thing you should check here is the points where the pipes meet the dielectric nipples. There are also other fittings there. They can corrode over time, get cracked, and cause a leak.

Solution:

If the leak source is the pipe connections, the fix is simple. You can tighten the pipe connections using a wrench. But it'll take a lot more work to fix the issue if the fault lies with the dielectric nipples.

It's hard to pull the nipples if you don't know what you're doing. Here's how you can do it correctly:

- Set up a ratchet strap on the water heater and a cheater bar on the nipple wrench.
- Pull the strap with one hand and use the other to push the wrench.
- You'd be able to easily remove the nipple without moving the entire unit.

02. Vent Collar

Another leak source if your water heater is leaking from the top is the vent collar. The good thing about such leaks is that they're incredibly easy to detect. You'll see a stream of mist in most cases if there's a leaky vent collar. There's a little pinhole that sprays water and causes this mist.



Solution:

There's no way to repair the vent collar if it's leaking. You'd have to replace it. As it can be a complex job, you shouldn't attempt it yourself if you don't have experience working on such components. You're better off hiring a qualified technician to do it.

03. T&P Relief Valve

As the water heater's tank is a closed area, it can explode if the pressure gets too high. The temperature and pressure relief valve is the safety device that keeps the tank from exploding.



The T&P valve has a discharge tube connected to it. When the pressure gets too high, it relieves the pressure by draining some water through that pipe. So, if you see the water heater leaking at the side, it could be due to the T&P valve.

Normally, the T&P valve goes into action when the water pressure goes beyond 150 PSI or the temperature goes past 210 degrees Fahrenheit. It works automatically and loses water through the discharge tube.

Feel for water with your hands at the end of the discharge tube. If there's water there and right below it, you can be sure that it came from the discharge tube. Now, there are two potential culprits here.

The first one is that there's too much pressure inside the tank. The second one is you have a loose or faulty T&P valve. If it's due to too much pressure, then the T&P is doing what it's supposed to do. We have a dedicated section on too much water pressure. So, check it to learn how to solve it.

However, the T&P relief valve itself can be faulty. Check the area of the tank where the T&P valve is connected to the tank. If it's leaking too, then there's a high chance that there's a leaking T&P valve.

You can also do a test to see if the T&P valve is bad. Operate it manually and the pressure should escape from the tank. If that doesn't happen, you can tell with certainty that the T&P is bad.

Solution:

If the T&P valve is leaking at its connection point to the heater, it's loose. You can tighten it with a wrench to fix the issue. But make sure you don't over tighten it as doing that can also cause leaks.

However, you'd have to replace the T&P valve if it turns out to be faulty. It's not difficult to replace it on your own. You can follow these steps do it:

1. Turn off the gas supply to the water heater and wait for it to cool down. Attach a garden hose to the drain valve and place the other end of the hose to the nearest floor drain.
2. Turn off the cold water supply to the water heater. Open a hot water faucet to relieve some of the pressure inside the tank.
3. Open the drain valve to get rid of the water inside the tank. If the T&P valve is mounted on the top of your water heater, draining a gallon of water should be enough. However, you'd have to drain 10 gallons of water if the T&P valve is mounted to the side.
4. Locate the run-off tube attached to the drain valve and disconnect it. Then, pull the valve with a wrench. Add some Teflon tape to the threaded portion of the T&P valve and install it. After you put it in, use more Teflon tape if needed.
5. Turn on the cold water supply and check for leaks. If there are no leaks, you're done. Close the drain plug, remove the garden hose and that's it.
6. If there are leaks, tighten the T&P valve further. If you can't get the leaking to stop, there has been an installation mistake. You can take it off and start from scratch. Otherwise, you can hire a qualified technician.

04. Drain Valve

If your Rheem water heater is leaking from the bottom, a common culprit behind it is a faulty drain valve. Besides being damaged, not fully closing the drain valve can also cause leaks in it.

The drain valve is an important component for doing maintenance work on your heater. You can get rid of the water inside the tank using it. But if you don't close it all the way, water can leak from it.

The good news is that it's super easy to know if the drain valve is leaking. The first thing you can do is just look at it for a while and see if any water is dripping from it.

Secondly, you can also inspect the drain valve with your hand and see if there's any water residue. If you see or feel the water at the drain valve, you can be confident that you've located the source of the leak.



Solution:

The right fix depends on the reason why the drain valve is leaking. The easiest thing to fix is if the drain valve is still partially open. Take a flathead screwdriver and rotate the drain valve plug all the way to the closed position.

If the drain valve is loose, you can tighten it with a wrench and see if that solves the issue. If none of those things work, you most likely have a faulty drain valve.

Your only option is to replace it. You can do it yourself if you have expertise in working on heater components. Otherwise, you should hire a professional technician for this job.

If you decide to take on the replacement job yourself, we have something to help you out. Check out our guide on [replacing the Rheem drain valve](#) to find detailed instructions on it. You'll also learn how you can replace a plastic drain valve if it breaks in the middle of the replacement.

Keep in mind that a plastic drain valve has a higher chance of developing cracks and leaking. If you have a plastic drain valve, you should change it to a drain valve made of brass. It'll last for a much longer period and has little to no chance of leaking.

05. Inner Tank

One of the worst possible leak sources is from within the tank. There are so many reasons that can lead to the tank leaking. The first major one is when the tank is corroded.

There's a device called an anode rod that's installed inside the tank. It's essentially a self-sacrificial device that attracts sediments towards itself to protect the rest of the tank. So, the anode rod gets corroded with time.



You are supposed to replace the anode rod at certain intervals. If you don't do that, the anode rod will be completely depleted. The sediments will then affect the tank and corrode it.

If you live in an area with a hard water supply, you'd have to replace the anode rod more frequently. Failure to do so will eventually corrode the tank and there will be cracks in it. So, the tank will start to leak water.

You should understand that all tanks are supposed to get corroded at some time. If you've used your water heater for more than 10-15 years, you've gotten good use of it. But if it has gone bad before that, it's due to the build-up of sediments and your negligence.

It's not the easiest thing in the world to tell if the tank is leaking from the inside. Sometimes, you'll get early signs of a corroded tank. For example, if the water is brown, it means there's rust inside the tank.

If the tank is leaking from the bottom and the other points are okay, you can also be certain you have a leaky tank. But the leak isn't always that obvious. Remove the outer burner door of your water heater. Feel the insulation of the burner cover and check if that's wet. If it's wet, you have a leaking tank.

Solution:

Unfortunately, there's no easy fix for this issue. The water heater tank is designed to withstand a lot of pressure. It's not like you can put a sealant at the leak source and call it a day.

You'd have to replace the entire tank to solve this problem. Better yet, you can upgrade to a new heater that's more suited to fulfill your needs. Take it as a lesson that proper maintenance of the heater is important. Replacing the anode rod on time would have prevented this issue.

06. Gas Control Thermostat

The gas control valve isn't the most common problem area for water leaks. That's why it's ranked so low on our list. But as it's a comprehensive guide, you should know about all the potential issues.



The threaded connections of the gas control thermostat need to be sealed tightly. If the seal is broken, water would be leaking from it. You can feel the threaded connections with your hand and see if that's leaking. If it feels wet, water is leaking from it.

Solution:

You'd have to reinstall the gas control valve. The key is to apply Teflon tape to the gas control valve before putting it in. Doing that will ensure a proper seal. Check out our [Rheem gas control valve guide](#) if you want to know how you can install it yourself.

07. Heating Element

This point is only for electric heaters. You may think that the water is leaking from the thermostat But the thermostat would never leak. In reality, the water on the thermostat is leaking from the heating element. It could be either the upper or the lower heating element.



You'd know which one after taking off the panel and inspecting it. There are two main reasons why it happens. In most cases, it's when the rubber gasket of the heating element comes off. Secondly, the heating element can be corroded.

Solution:

If it's due to a leaky rubber gasket, you'll have to replace it. The same goes for a bad heating element. Once you find the culprit, you can replace it, and solve the issue.

08. Excessive Pressure

The T&P valve drains some water through the discharge tube when there's too much pressure in the tank. It's okay if that happens once in a while. But it's normal for it to happen frequently.

If it happens too often, there's too much pressure inside the tank. It's not a good sign. If you don't take care of this issue soon, the water will directly come out of the tank through the thinnest tank well. If that happens, the damage will be irreversible.

Solution:

If you install a thermal expansion tank, the problem will be solved. It should solve the water leaks. On top of that, you should get more hot water from the water heater. You can do it yourself if you have the expertise. Otherwise, you should consult a qualified technician.

How To Prevent Rheem Water Heater From Leaking?

Taking good care of your heater will not only prevent leaks but also make sure it lasts longer. If you do some basic things at regular intervals, you'll have a much better experience using the water heater. Here are the maintenance tips you should follow to keep the water heater from leaking:

- Operate the T&P valve manually every six months and see if it works. Replace it if it doesn't work.
- Drain the water heater once or twice a year depending on the level of hard water use in your house.
- Keep an eye on the anode rod and be prepared to change it when the wiring becomes too exposed.
- Check the pipe connections annually and see if any of them are corroded or loose. Take appropriate steps to fix them.

FAQs

Should you use hot water from a leaking water heater?

Using hot water from a leaking tank can be potentially dangerous. So, you should refrain from using it. Shut off the cold water supply and fix the source of the leak first. Then, you can use hot water.

Can a leaking water heater always be fixed?

If the source of the leak isn't the tank itself, then the problem can be fixed in most cases. But if the tank is leaking internally, you'd have to replace the tank or the entire heater.

How do sediments get inside the water tank?

The main source of sediment build-up in the tank is hard water. It has a lot of minerals that are deposited at the bottom of the tank. Besides, sediments can also accumulate from worn-out parts in the heater.

Can a leaky Rheem water heater explode?

If the tank is leaking due to excessive pressure, there's always the possibility that it can explode. The T&P relief valve usually prevents that. But if it goes bad or the pressure is too high, the tank could explode.

Conclusion

Seeing your Rheem water heater leaking is an annoying issue as it often leads to no hot water. But now you know the most common sources of these leaks and how you can fix them. It's highly likely that the leak in your heater originated from one of the points we mentioned.

Hopefully, it won't be a corroded tank in your case and you'll be able to solve your problem easily. Check out our [Rheem gas water heater repair guide](#) if you're facing other issues with your heater.

LSIs:

brand new rheem water heater leaking
what to do if water heater is leaking
rheem water heater leaks
why is my water heater leaking water
rheem hot water heater leaking from top
rheem water heater leaking from top of tank
rheem water heater leaking from the top
water heater leaking from relief valve
rheem water heater leaking from pressure relief valve
rheem water heater relief valve leaking
water heater leaking from drain valve
rheem water heater plastic drain valve leaking
rheem hot water heater drain valve leaking
rheem water heater leaking from the bottom
rheem hot water heater leaking from bottom
rheem water heater leak bottom
rheem gas water heater leaking bottom
rheem water heater leaking from inside
rheem water heater anode leaking
water heater leaking from thermostat
rheem water heater leaking from thermostat
rheem water heater leaking from bottom element

