



Hot Tub Leak Troubleshooting Guide

Rev. 11/2/22

If your tub develops a leak. Follow these steps in order. If the first one doesn't work, go on to the second and so on.

First - a slow drip is not a cause for concern. Bigger leaks (loss of more than one inch in 24 hours) can be addressed by following the steps below.

If your tub develops a significant leak (not just a slow drip) that it didn't have before, something has changed. Do some investigation to discover the cause. You will need a strong flashlight and a handheld mirror so you can look all around and under the tub. Use the flashlight and mirror to do a thorough inspection of the tub when it is full of water to find the leaks and determine the cause.

The most common causes for leaks are:

1. Drain plug is not seated properly.
2. Loose or broken plumbing fittings.
3. The tub has been left empty and dry for an extended period of time (weeks) and the staves have contracted enough to leak.
4. Broken staves (look under the tub for signs of stave damage)
5. Improper or uneven foundation for the tub. Check that the tub foundation is level and the tub floor is properly supported on chine joists.
6. Bench block screws driven into the seam between two staves.
7. Rot – with older tubs, the wood may have deteriorated

1 and 2: Check carefully for loose fittings or a drain leak. Check the drain, jets, suction, unions, all glue joints. Tighten or repair any of these that show signs of leaking.

3. If the tub has dried out from being left empty: Empty the tub and check the compression straps for tightness. If the wood has dried enough to show signs of shrinkage, it is a good idea to take up the slack with the tightening bolts. **NEVER** tighten the straps when the tub is full of water! With the tub empty, you can check and tighten the bottom one to about 40 ft/lbs, the upper ones to about 25 ft/lbs. The upper straps should not be over tightened. Do not force them. Do not attempt to hit the staves with the mallet. This could cause additional problems. Add water slowly and re-swell the tub – this process can take a few days depending on how much shrinkage occurred due to drying.

4. If a stave is broken, it will need to be replaced. Give us a call to get a new one.



Hot Tub Leak Troubleshooting Guide

Rev. 11/2/22

5. Check the floor of the tub with a level and inspect the foundation and chine joists under the tub. If the foundation is uneven, the tub will need to be drained and moved, and the foundation problem fixed.
6. If a bench block screw is wedging two staves apart this will cause a leak. The screw should be removed, the block repositioned to avoid the seam and the screw replaced.
7. With older tubs if the leak is caused by rot in the floor or corner joint , it may be time to replace the tub.

If you have found no obvious cause for the leak, the tub probably has a slow leak that can be cured with a simple wood flour treatment. **Wood flour** is extremely fine 'sawdust' produced by sanding, and it is one of the simplest and most effective ways to stop small leaks. This is a technique borrowed from wooden boat builders. The flow of water through the leak will draw sawdust into the gap. Like the rest of the tub, the sawdust swells as it absorbs water, and will help to stop the leak.

Included with your tub was a bag of fine cedar flour. If you can't find it or need more, you may be able to find some locally at a woodshop or we can send some to you.

Important: remove the filter from the filter cartridge during this procedure, otherwise it will clog.

Drain the tub and spread a cup or two of fine wood dust around the edges and seam(s) of the floor.

Refill the tub. As the water is added, the wood flour will be naturally drawn to places where the water is seeping out. The dust is harmless and the excess will be flushed out the first time you drain and rinse the tub.

Note: It may take a few treatments of sawdust to slow or fix the leak, but this method works in almost every case. It is common to need 3 to 5 applications.

We do not generally advise the use of silicone caulking. Any leaks too big to seal with wood flour usually indicate either a broken component or an installation error, and in either case the underlying cause should be found and fixed properly. Silicone may interfere with the natural swelling and sealing of the wood, or may trap moisture in places that promote rot.