

RARE BREED™

PLUMBING

**Homeowner's Peace Of Mind
Safety Check**



Rare Breed Plumbing: Homeowner's Peace of Mind Safety Check Manual

Too often we go to homes that have floods, water damage and heartbreak from plumbing issues that could have been prevented. This manual will guide you through each item on the "Peace of Mind Safety Check" list, helping you to perform your own home inspection. If you need a plumber, please give us a call at



The Herd You Can Trust!

Checklist Items and Instructions

Tools Needed

- GOOD pliers, BEST plumbing pliers here. <https://amzn.to/3yKv01B>
- Flat head screwdriver
- Pressure gauge with hose connection and spike indicator. <https://amzn.to/4dWbJZS>
- Water hardness test kit (Highly recommended) <https://amzn.to/3yKwoBl>
- Garden hose
- 5-gallon bucket
- Rubber gloves
- Water filters (if applicable and needed)
- Recommended. Water Chlorine test (optional) <https://amzn.to/4eWbqyA>
- Recommended. TDS meter <https://amzn.to/3yRPJAw>

Additional tools for tankless water heater

- Tankless flush kit <https://amzn.to/4701NML>
- White vinegar (4 gallons)
- Philips Screwdriver

OR

- Submersible pump <https://amzn.to/3XUGHv7>
- 5-gallon bucket
- (2) washing machine female, female $\frac{3}{4}$ hoses
- White vinegar (4 gallons)
- Philips Screwdriver

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When should I Do maintenance?

Consistent plumbing maintenance is essential for staying ahead of issues and avoiding expensive leaks. I recommend completing this maintenance checklist at least once a year. Personally, I choose New Year's Day—it's an easy date to remember and lines up with when I had my water heater installed.

Popular dates for annual plumbing maintenance include:

- **January 1st** - A fresh start to the year and your home's upkeep.
- **Memorial Day** - Ideal for getting your plumbing ready for summer use.
- **July 4th** - A perfect time to ensure your plumbing is ready for summer fun!
- **Labor Day** - A great time to prepare your plumbing for the fall and winter.
- **Thanksgiving Weekend** - Get your plumbing in top shape before the family arrives.
- **Your Purchase Anniversary** - Celebrate your home by taking care of it on the anniversary of its purchase or when major appliances were installed.

By choosing a memorable date, you're more likely to stay consistent with your maintenance, keeping your home's plumbing in top condition.

Establish a date I will do my plumbing maintenance on_____

Basic Plumbing Knowledge

Types of Water Pipe



PVC Lead Polybutylene Galvanized CPVC Copper Pex

PEX

Years Most Used: 1980s to present

- **Description:** PEX pipes are flexible, durable, and resistant to scale and chlorine, making them a popular choice for residential plumbing. It is often red white or blue.



Pros:

Cons:

They are color-coded—typically red for hot water, blue for cold water, and white for general use—which makes them easy to identify and work with. Just make sure it is protected from UV exposure.

Comforts:

- **Durability:** PEX is highly resistant to freezing temperatures and corrosion, making it ideal for long-term use.
- **Ease of Installation:** PEX is easier to install than rigid pipes like copper or CPVC, potentially lowering labor costs.
- **Quiet Operation:** PEX doesn't carry sound as much as metal pipes, so you'll experience less water hammer noise.
- **Warranty.** Many manufacturers and plumbing companies will warranty their PEX re-pipes for 25 years!

Concerns:

- **UV Sensitivity:** PEX should not be exposed to direct sunlight for prolonged periods, as UV rays can degrade the material.
- **Rodent Damage:** In rare cases, PEX can be chewed by rodents, which may lead to leaks.

Copper

Copper pipes have been a standard in plumbing for decades due to their durability, reliability, and ability to handle both hot and cold water. There are 3 thicknesses of copper. Use Martin Luther King to remember them. Type M is the thinnest and is for indoor use only. It is most prone to pin holes and has red writing. L is great for indoor use and is thicker and denser being preferred for repairs and steam applications. but it more expensive, it has blue writing. K is the thickest and is used for outdoor use and water mains.



Comforts:

- **Longevity:** Copper pipes can last 50+ years with proper maintenance.
- **Biostatic:** Copper has natural antimicrobial properties, which help prevent bacterial growth. There is some evidence it can naturally fight off viruses in the water as well.

Concerns:

- **Cost:** Copper is more expensive than other materials like PEX or CPVC.
- **Potential for Pinholes:** Over time, acidic water can cause pinhole leaks.
- **Noise:** Copper pipes can sometimes carry noise from water hammering.

Brass Pipes

Brass pipes are extremely uncommon but can be found in older homes tied to the Kennecott mine typically on the west side of the valley. They are manufactured in the same way as galvanized steel pipes. All threaded. These pipes are thick and robust. After 100+ years they show little to no sign of decay other than typical oxidation. Modern days typically brass is only sold in pieces that are under 12 inches long.



Concerns:

- **Lead Content:** Older brass pipes and fittings may contain lead, which can leach into water and pose health risks. Chlorine and lead should be checked each season.

CPVC (Chlorinated Polyvinyl Chloride) Pipes

CPVC is a plastic pipe material that is chemically resistant and capable of handling both hot and cold water. It is commonly used in residential plumbing when budget is the top priority. Because of its rigidity, it can have problems with stress fractures and catastrophic failure at freezing temperatures. It has a yellowish color and is ridged.



Comforts:

- **Ease of Installation:** CPVC is lightweight, easy to cut, and joined using solvent cement, which simplifies installation.
- **Corrosion Resistance:** CPVC doesn't corrode, making it a low-maintenance option.

Concerns:

- **Brittleness:** Over time, CPVC can become brittle and prone to cracking, especially in colder climates.
- **Chemical Sensitivity:** CPVC can degrade if exposed to certain chemicals, such as those found in some household cleaners.
- **Not as Durable:** CPVC is generally less durable than copper or PEX and might require replacement sooner.

Galvanized Steel Pipes

Galvanized steel pipes were commonly used in homes built before the 1960s. These pipes are coated with zinc to prevent rusting. Over the years the pipes will corrode on the inside, negatively affecting water pressure and clogging fixtures.

NOTE: In extreme when galvanized pipe mixes with water disinfectants it will leach lead into the drinking water. Homes built pre-1950 should have their pipes tested for lead.



Concerns:

- **Corrosion Over Time:** The zinc coating wears away over time, leading to rust, corrosion, and eventual pipe failure.
- **Water Quality Issues:** Corrosion in galvanized pipes can lead to discolored water and reduced water pressure.

- **Lead contamination:** In extreme cases, it can leach lead into the drinking water.
- **Need for Replacement:** If your home has galvanized pipes, it's likely time to consider replacing them to avoid leaks and water quality issues.

Polybutylene Pipes

Polybutylene was used extensively in homes from the late 1970s through the mid-1990s. These plastic pipes were a popular choice due to their low cost and ease of installation. You can recognize Polybutylene by its grey color.

Concerns:

- **Prone to Failure:** Polybutylene pipes are notorious for becoming brittle and failing over time, especially when exposed to chlorine in the water supply.
- **Class Action Lawsuits:** Due to widespread failures, polybutylene pipes were the subject of class-action lawsuits, and many homes with these pipes have experienced significant water damage.
- **Drinking Water Safety:** While the main concern with polybutylene pipes is their potential to leak or burst due to degradation, there is also concern about the long-term exposure of drinking water to deteriorating plastic. The degradation process could potentially lead to the leaching of chemicals into the drinking water, though the primary risk remains the structural integrity of the piping rather than contamination.
- **Replacement Needed:** If your home has polybutylene pipes, it is strongly recommended to replace them as soon as possible to avoid potential failures.



Lead Pipes

Lead pipes were commonly used for water supply lines in homes until the dangers of lead poisoning became widely recognized in the 1980s. Their use was particularly prevalent in homes built before World War II, around 1940. Today, lead pipes are no longer used in modern plumbing due to the significant health risks associated with lead exposure.

Concerns:

- **Health Risks:** Lead can leach into the drinking water, posing severe health risks, especially to children and pregnant women.
- **Immediate Replacement Needed:** If your home has lead pipes, replacing them should be a top priority to ensure the safety of your drinking water.

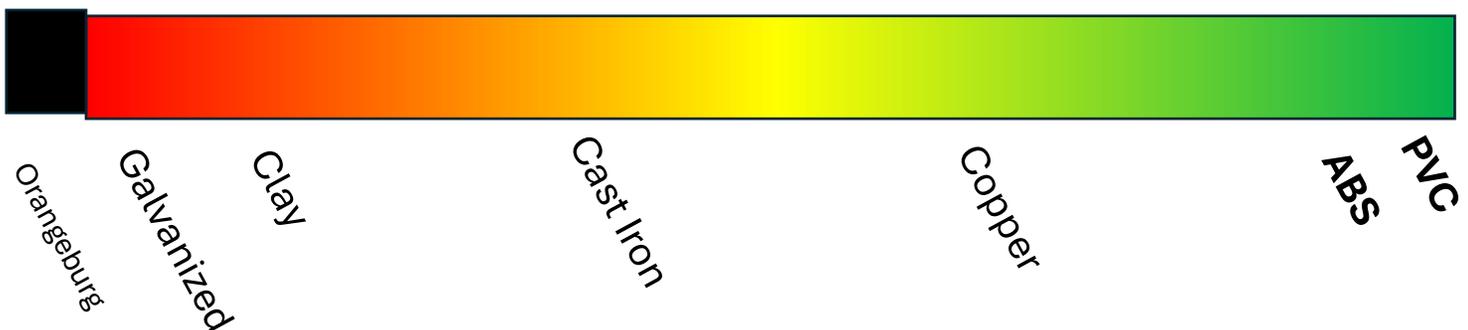


PVC Pipes (Polyvinyl Chloride)

PVC CANNOT BE USED for water supply inside the home!

If you see the white PVC used in your home call a plumber.

Types of drainage



PVC

Years Most Used: 1970s to present

- **Description:** PVC is a lightweight, white plastic pipe commonly used in modern homes for drainage, waste, and vent systems.

Pros:

- **Non-Corrosive:** Does not rust or corrode, making it ideal for drain systems.
- **Smooth Interior:** Resists clogging better than older metal pipes.
- **Chemical resistant.** Is resistant to harsh chemicals like DRAIN-O

Cons:

- **Heat Sensitivity:** Can warp in high temperatures, limiting its use for hot water drainage.
- **UV Sensitive:** Degrades when exposed to direct sunlight over long periods.
- **Noise:** PVC can be noisier than materials like cast iron, as it doesn't insulate sound as well. This can lead to more audible water flow, especially in waste and drain systems.
- **Expansion:** PVC piping is subject to thermal expansion, especially during temperature fluctuations. In colder months, you may hear a ticking or tapping sound in your walls when hot water flows through the cold pipes. This noise is caused by the pipe expanding slightly as it heats up and rubbing against framing materials like a 2x4. While it may sound like a drip, it's typically just the result of thermal expansion and not a leak.

Impact on Drain Cleaning: PVC is durable and easy to clean using snaking or hydro-jetting. It rarely suffers from blockages, but care should be taken not to expose it to harsh chemicals or high heat.



ABS

Years Most Used: 1970s to present

- **Description:** ABS is a rigid, black plastic pipe used in drainage, waste, and vent piping, like PVC but more flexible so it's perfect for remodels and re-pipes.

Pros:

- **Corrosion Resistant:** Doesn't rust or corrode like metal pipes.
- **Lightweight and Easy to Install:** Easier to handle than heavier pipe materials.

Cons:



- **Noise:** ABS can be noisier than materials like cast iron, as it doesn't insulate sound as well. This can lead to more audible water flow, especially in waste and drain systems.
- **Expansion:** ABS piping is subject to thermal expansion, especially during temperature fluctuations. In colder months, you may hear a ticking or tapping sound in your walls when hot water flows through the cold pipes. This noise is caused by the pipe expanding slightly as it heats up and rubbing against framing materials like a 2x4. While it may sound like a drip, it's typically just the result of thermal expansion and not a leak.

Impact on Drain Cleaning: ABS is resistant to most forms of clogging, and its smooth interior helps prevent debris buildup. Hydro-jetting and snaking can be used without much risk of damage to the pipe. It also resistant to damage from many chemical drain cleaners.

Copper

Years Most Used: 1960s -1970s

- **Description:** Copper pipes are primarily used for water supply but can sometimes be found in smaller drain lines.

Pros:

- **Corrosion Resistant:** Less prone to internal corrosion compared to other metal pipes.
- **Longevity:** Can last over 50 years with proper maintenance.

Cons:

- **Expensive:** Copper is one of the more costly piping materials.
- **Susceptible to Certain Chemicals:** Highly acidic water can cause pitting corrosion. And DRINO will eat right through it.

Impact on Drain Cleaning: Copper pipes are less common in drain lines, but if used, they are easy to clean with basic methods like snaking and jetting. However, care should be taken to avoid chemical cleaners that will eat holes in the pipe



Cast Iron

Years Most Used: Early 1900s to 1980s (still required in commercial.)

- **Description:** Cast iron is a heavy-duty metal pipe used in sewer systems for its durability and noise-reducing qualities.

Pros:

- **Durability:** Can last 50-100 years if well-maintained.
- **Noise Reduction:** Cast iron pipes are quieter than plastic pipes, reducing noise from flowing water.

Cons:

- **Corrosion:** Prone to rusting from the inside out, causing blockages and eventual failure.
- **Scale Build-Up:** The rough interior of the pipe can accumulate debris, leading to reduced flow and clogs.
- **Cracking:** Over the years hair line cracks from rough handling can deepen and worsen with time and the thermal expansion

Impact on Drain Cleaning: Cast iron is more prone to scale and rust buildup, requiring professional cleaning, often with hydro-jetting or snaking. Care must be taken to avoid breaking down the interior of the pipe further. It will rust through with the use of chemical drain cleaners.



Clay

Years Most Used: Ancient times to 1950s (occasionally still in use today)

- **Description:** Clay pipes are made from fired clay and have been used for thousands of years in sewer and drainage systems. They are still found in some older homes and cities.

Pros:

- **Chemically Resistant:** Unaffected by most household chemicals, preventing internal corrosion.
- **Long Lifespan:** Can last 50-100 years if properly maintained and not damaged by external factors like tree roots.

Cons:

- **Root Intrusion:** Joints between clay pipes (every 4 feet) allows tree roots to infiltrate and cause blockages.

Impact on Drain Cleaning: Clay pipes are susceptible to roots more than any another piping type. And therefore, need frequent cleaning. Hydro-jetting is effective but can cause the pipe to crack if handled too aggressively. A camera inspection before cleaning is often recommended. And a trenchless liner if roots have penetrated multiple joints.



Galvanized

Years Most Used: 1920s to 1960s

- **Description:** Galvanized pipes are made from steel coated in zinc to prevent rust. Although commonly used for water supply lines, they were used for drain lines as well.

Pros:

- **Initially Rust Resistant:** The zinc coating provides temporary protection from rust.
- **Strong:** Durable and can withstand high pressure.

Cons:

- **Corrosion Over Time:** The zinc layer wears away, causing the pipe to rust internally.
- **Reduced Flow:** Corrosion leads to reduced diameter and slower drainage.
- **Shorter Lifespan:** Usually lasts about 40-50 years max before needing replacement.

Impact on Drain Cleaning: Galvanized steel pipes are prone to rust and corrosion, which can clog the pipe. These pipes may need to be replaced instead of cleaned, as rust build-up is hard to remove completely without damaging the pipe.



Orangeburg

Years Most Used: 1940s to 1970s

- **Description:** Made from layers of wood pulp and tar, Orangeburg pipes were a low-cost alternative to metal pipes, commonly used in sewer lines this type of pipe was invented in the 1800s but really took off in popularity during World War 2 when there were widespread metal shortages. Because its just wood and tar its prone to collapse. If you have this pipe you need to start looking at a pipe lining.



Cons:

- **Weak Structure:** Prone to collapsing and root intrusion due to its soft material.
- **Short Lifespan:** Typically lasts only 30-50 years, and deteriorates over time.
- **Brittle and Leaky:** Easily cracks and breaks, leading to frequent leaks.
- **Impact on Drain Cleaning:** Orangeburg pipes are extremely prone to collapse under pressure. Mechanical cleaning methods like snaking or hydro-jetting can damage them further. In most cases, these pipes need to be replaced, rather than cleaned.

Pro Tip

Trees roots continue to grow up to 7 years after the tree it cut down. And they love working their way into sewer pipes for that nutrient dense water. If your home is over 50 years old you should get a camera inspection. The last thing you want is for the sewer to stop working on thanksgiving when all your family is in town.

Main Water Shut-Off

- **Importance:** your main water shut off is the way that you can shut off all the water to your home when you have an emergency. EVERY homeowner should know where it is at and how to use it. It should also be tested once a year to make sure its in good working condition
- **How to Check:** Locate your main water shut off valve (typically in the basement on the front of your home near the water meter). Check that it can be easily turned off and on. Check for any leaks/corrosion around the valve.
- **Biggest problems:** Shark Bite and compression Fittings. Check for these throught your home but they are most problematic around the main water shut off where the pressure is the highest.
- **Gate Valve VS Ball valve.** I Highly recommend you have a ball valve or ¼ turn valve. They are more reliable and less likely to fail in an emergency. Gate Valves can leak from the packing nut under heavy use. If you have an old gate valve and it doesn't turn easily, **don't force it! Call your trusted plumber!**



Shark Bite



Compression Fitting
Should NEVER be in the home



Ball Valve



Gate Valve

- **Recommend upgrade.** Moen Smart water Shut off. Will shut off your water if there is ever a leak saving you thousands in water damage. I highly recommend you plan for this before finishing your basement.



Ball Valve. Shuts on and off. No corrosion or signs of leaking



Gate Valve, Shuts on and off with difficulty. Some corrosion



Doesn't Shut off. Shark bite or compression.



PSI (Pressure)

- **Importance:** The city will bring water into your home at really high pressures, 100 PSI or more. But safe pressure for inside your home is maximum 80 psi. So it's your responsibility to have a pressure reducing valve and make sure its working. Otherwise you will have leaks sooner than you should.
- **How to Check:** Use a pressure gauge to measure water pressure at a faucet. Ideal pressure is between 45-75 psi.
- **Buy a Gauge.** Get a gauge that attaches to a hose connection. Like the one to your garden hose. I check the pressure at the water heater, the washing machine connections, or the hose bib outside. <https://amzn.to/4dWbJZS>
- **Resting pressure** should not exceed 80 PSI!
- **Working Pressure.** After you know the pressure is not over 80 psi turn on the water and let it run as you check it again. The pressure shouldn't drop more than 10 PSI.
- **Location.** The Pressure Reducing valve should be right above the main water shut off.



Economy PRV
Life span about 5-10 Y



Premium PRV
Life span about 10+ Y

- **Recommend upgrade.** Premiums PRV, and a permanently attached pressure gauge so you can inspect pressure at a glance.



Resting pressure below 80 PSI. Working pressure not dropping more than 10 PSI. No corrosion on PRV.



Resting pressure bellow 80 PSI. Working pressure with significant drop. Some corrosion.

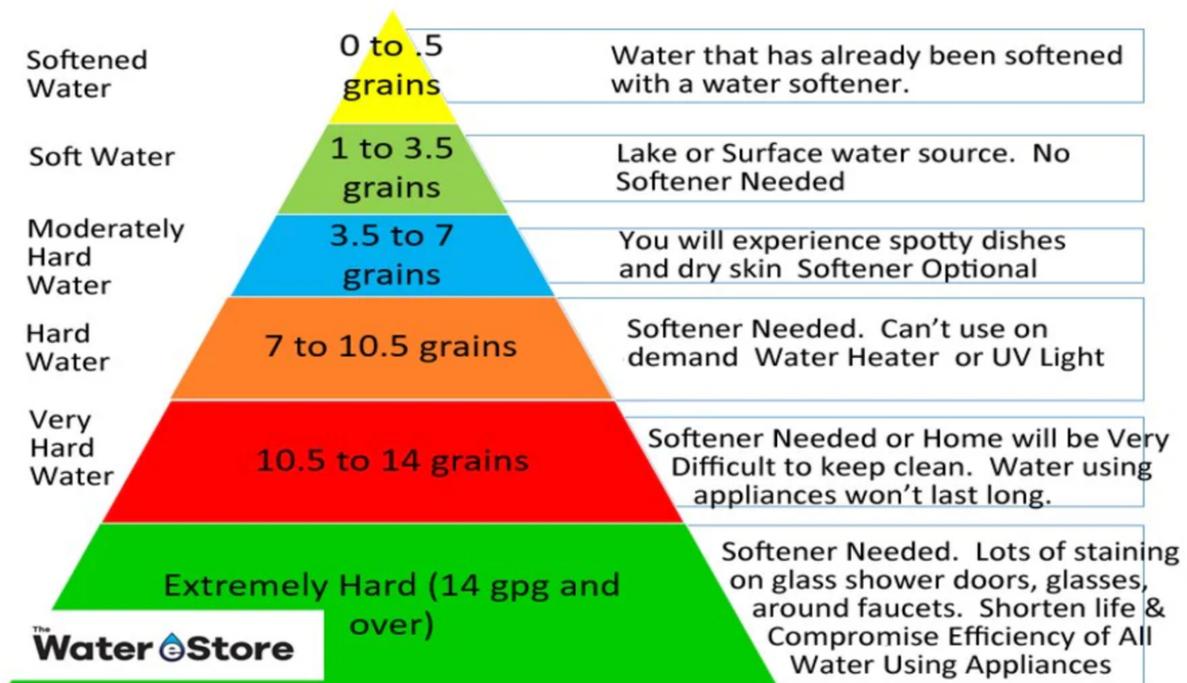


No PRV, Pressure above 80 PSI

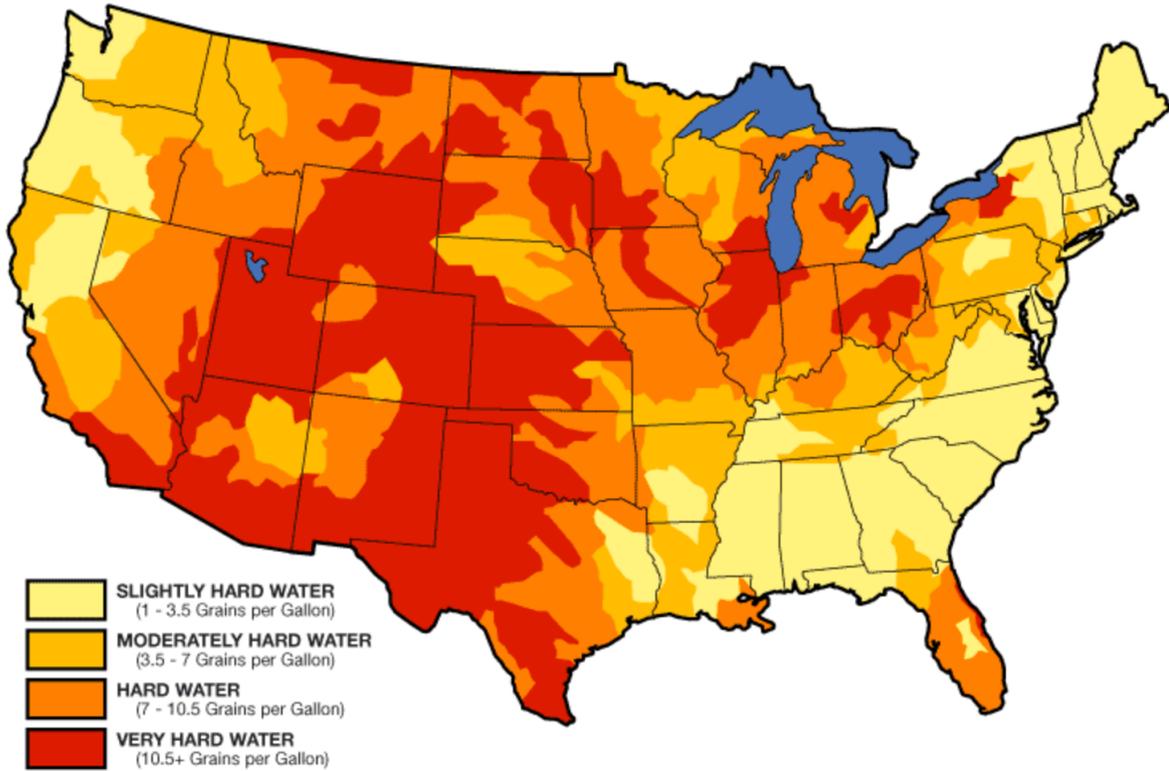


Hardness

- **Importance:** Hard water is just dissolved minerals in your water. Mainly calcium and magnesium. These minerals stick to your faucets and make them look dirty and cause them to fail quickly. Ice makers, dishwashers, water heaters everything fails faster with hard water.
- **How to Check:** Use a water hardness test kit to measure the hardness level. Follow the kit instructions for accurate results. <https://amzn.to/3yKwoBl>
- **Need to know.** Per square mile Utah has the hardest water in the nation. You probably should have a softener.
- **When do I NEED a water softener?** If you have a tankless water heater you NEED a softener. If you have problems with eczema, you need a softener. If you live in an area with a hardness of 25+ grains per gallon you need a softener.
- **Note:** A salt style softener is the ONLY softener to do everything it promises it will do. Everything else is water conditioning. Which has a place in the conversation.



WATER HARDNESS AREAS IN THE UNITED STATES



Below 4 grains of hardness



4-20 grains of hardness



20+ grains of hardness.

Chlorine/ Contaminants

- **Importance:** Chlorine helps keep your water clean. But once it's done its job you don't want to drink it! If you don't like the taste of your tap water you may have too many contaminants in it.
- **How to Check:** Use a chlorine test kit to measure the chlorine levels in your water. Follow the instructions. <https://amzn.to/4eWbqyA>
- **Also Check:** <https://www.ewg.org/tapwater/> This website is a great source of peace of mind to know what contaminants are in your drinking water and if it's completely free.
- **Self Reflection:** Does your family enjoy the taste of your tap water and prefer it over bottled water?
- **Recommended upgrade, Reverse osmosis** will remove 90% of the nasty stuff in your drinking water so it's as pure as can be. (Replace filters once per year)
- **Carbon Filter:** Will remove chlorine so you're not showering in it and introducing harsh chemicals into your daily routine. (Replace filters once per year)



Water Drop Reverse osmosis system



Whole home Carbon filter



Family enjoys the taste of the water. Chlorine under 4mg



4-20 grains of hardness. Chlorine 4-8mg



20+ grains of hardness. Chlorine 8mg+, Don't like the Taste.

Water Heater Age

- **Importance:** 90% of the time when a water heater fails it is because the tank rusts out and it started to leak. This can sometimes cause water damage that would have been avoided with an ounce of prevention. Saving the home owner thousands.
- **How to Check:** Find the manufacturing date on the water heater label. Replace if it is over 10-12 years old. (If the Anode rod has never been replaced.)
- **Anode Rod:** Replace the Anode Rod every 3-5 years to give the water heater maximum life.
- **Warranty:** Most water heaters have a 6 year parts and labor warranty.
- **Bradford White:** A few water heater brands make it difficult to see the age. Bradford white doesn't tell you the age. But you can use the serial number and the diagram below to determine the age.

Bradford White

J C 16433183

J = Built in the year 2012
C = Built in the month of March 2012

The remainder of the serial is just a sequential number

Production Year

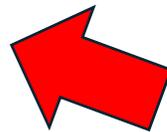
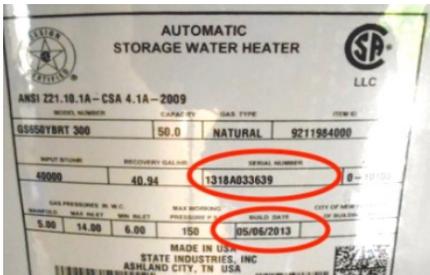
Please note:
For the year column, we do not use the letters : I, O, Q, R U, V

A = 2004 or 2024	L = 2014 or 2034
B = 2005 or 2025	M = 2015 or 2035
C = 2006 or 2026	N = 2016 or 2036
D = 2007 or 2027	P = 2017 or 2037
E = 2008 or 2028	S = 2018 or 2038
F = 2009 or 2029	T = 2019 or 2039
G = 2010 or 2030	W = 2020 or 2040
H = 2011 or 2031	X = 2021 or 2041
J = 2012 or 2032	Y = 2022 or 2042
K = 2013 or 2033	Z = 2023 or 2043

Production Month

Please note:
For the month column we do not use the letters: I & N - Z

A=January	G=July
B=February	H=August
C=March	J=September
D=April	K=October
E=May	L=November
F=June	M=December



Sticker with the age

- **Upgrade:** Consider a Tankless water heater! They have a 15 year warranty and should last 20 years with proper maintenance.



1-6 years old



6-10 without an anode replacement.



10+ years old

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385.308.7471



Expansion Tank (Exp Tank)

- **Importance:** When water heats up it expands. So the 40 gallons that goes into your water heater cold, expands to 41 gallons hot. This puts more pressure on the water heater and cause it to fail early.
- **How to Check:**
 1. Shut the water off to the home.
 2. Turn on faucet to depressurize the system.
 3. Put a tire gauge on the expansion tank
 4. It should be the same pressure as the incoming PSI we checked in the second step of the peace of mind check list, or slightly more.
 5. If not repressurize or replace expansion tank
- **Secure:** The expansion tank MUST be secured in some way that supports its weight. The pipe alone even if it is metal is not enough!
- **Corrosion.** Make sure nothing has been leaking onto the expansion tank or any corrosion on the threads. Or any water leaking onto the top of the expansion tank. Should be completely free of rust.



Not Secure

Secure



Correct PSI, Secured



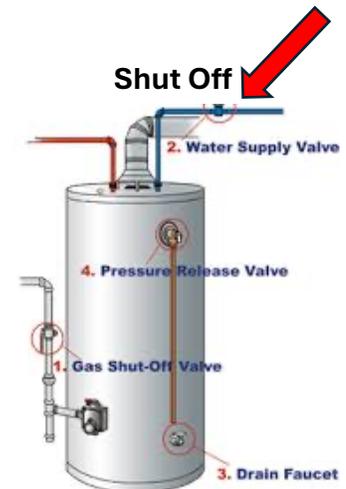
Not secure but has correct pressure.



No expansion tank/wont hold pressure Not secure.

Water Heater Shut Off/Code

- **Importance:** When your water heater starts leaking, knowing you can shut it down is HUGE! That along with other code requirements can go along way for peace of mind, and to prevent costly water damage.
- **How to Check:** Locate the shut-off valve and ensure it works.
 - COLD side (right side) of the water heater
 - Check that it works and if it's a ball valve or gate valve.
- **Local Code:** Local Code vary but here are some basic ones.
 - **Earthquake straps:** Should have 2 straps. One on the top third and one on the bottom third.
 - **Catch Pan.** If the water heater is above anything that it will do damage to if it leaks it needs to have a pan that it sits in to catch the water. Over the years these pans will rust out. Check the to see how good of shape it's in.
 - **T&P discharge tube.** There should be a pipe attached to the T&P in case of excessive pressure or heat. It should run down 2-6" above the floor.



Ball Valve. EQ straps, Has a catch Pan



Gate Valve, No Straps, Has a Pan



No shut off, or it doesn't work. No pan and its needed.

Water Heater Venting!!!

- **Importance:** This is the MOST important step. Water damage can be replaced. Lives cannot. If venting is wrong it can pour carbon monoxide into the home.
- **How to Check:**
 - Check the plastic on top of water heater for signs of melting.
 - Check the metal flue for signs of white power corrosion.
 - Both could be signs of back drafting and can be very dangerous. They should be checked by a professional immediately.
- **Other things!** Is there a carbon monoxide detector? If not, we should add one! <https://amzn.to/4dCL6IM> they are cheap, and you can just plug it in. They should be replaced every 7 years.
- **Size? Slope? Material?** We want to make sure it is sloped correctly and sized correctly. If concerned about that make sure to call a professional.
 - **Size.** As a general rule we would like to see 4" pipe for metal, and 2-3" pipe for PVC.
 - **Slope.** The pipe should ALWAYS slope upwards. Never having any dips or bellies so the carbon monoxide float out of the home and not into the home.
 - **Material.** IF you have PVC material for venting your water heater, it needs to be solid core. If you see its turning a yellow color but the joints are still very white. Call a professional!



4" flu. No corrosion, carbon monoxide detector.



3" Flu. No carbon monoxide detector.



Signs of back drafting. CALL A PROFESSIONAL!

Gas Shut Offs

- **Importance:** A gas leak can be very dangerous every homeowner should know how to shut off the gas to their appliances and to the whole home.
- **How to Check:** Locate and test the gas shut-off valves. Ensure they turn easily.
- **Stop!** If you need a wrench to shut off any of the gas shut offs inside the home don't touch them.
- **Paint.** Check the Paint on the main gas meter outside to make sure its weatherproof. If needed add more rostellum spray paint.
- **Recomended.** Make sure there is a meter wrench or some sort of tool close to the gas meter. <https://amzn.to/4eALdWu> You can get them from the local fire department, Or here on amazon. These tools are recommended to be zip tied to the outside gas meter. When the earth quake hit in magna is shook a lot of peoples gas pipes loose causing them to leak.



Inside Gas Shut off



Meter in need of paint



Full coverage paint. Working gas shut offs.



Working gas shut offs. Needs paint. No meter wrench



Gas shut off doesn't turn on and off.

Sad fact about gas.

Did you know that natural gas is completely odorless? Causing leaks to be extremely dangerous because no one knew there was any gas leak. But in 1937 a school in Texas had a gas leak that ignited killing over 200 children. And sense then it has been federal law to add a sulfur smell to gas to Beter detect leaks.

Water Heater Flush (Tank)

- **Importance:** Every manufacture recommends flushing the water heater each year. This is included in our membership program. Flushing removes sediment and extends water heater life.
- **How to Flush your water heater:** Follow the manufacturer's instructions to flush the water heater.
- **STOP!** If your water heater hasn't been flushed for 5 years don't start now! The sediment may be the only thing holding it together and it may leak after flushing.

Safety Precautions:

- Ensure the water heater is off before starting.
- Use safety gloves to protect your hands from hot water and surfaces.
- Be cautious of hot water and steam during the process.
- Be aware the drain valve may leak after flushing and will need replaced



Procedure basic flush:

1. **Turn Off the Water Heater:**
 - **Electric Water Heater:** Switch off the circuit breaker to the water heater.
 - **Gas Water Heater:** Turn the gas valve to the “Pilot” position.
2. **Connect the Garden Hose:**
 - Attach a garden hose to the drain valve at the bottom of the water heater. Ensure the other end of the hose is placed in a suitable drainage area (e.g., outside, in a drain, or in a large bucket).
 - STOP if the drain valve is plastic! Do not flush if it is plastic! It may break, call a professional.
3. **Open the Drain Valve:**
 - Slowly open the drain valve to start draining the water from the tank. Be cautious as the water may be hot. Drain into a bucket at first to monitor the amount of sediment.
4. **Flush the tank for 15 minuets:**
 - Flush the water heater down the closest drain, checking periodically using a bucket the amount of sediment in the water. Continue until the water runs clear from the hose. (About 15 minuets.)
5. **Close the Valves:**
 - Close the drain valve securely after flushing.
6. **Detach the Hose:**
 - Carefully detach the garden hose from the drain valve. Check for leaks.
7. **Turn On the Water Heater:**
 - **Electric Water Heater:** Turn the circuit breaker back on.

- **Gas Water Heater:** Turn the gas valve back to the “On” position. I prefer B in my home on the heat level.
8. **Check for Leaks:**
- Inspect all connections and the drain valve for leaks. Tighten if necessary. NOTE if the drain valve is leaking you can add a cap until you can replace it <https://amzn.to/3BBBUqV>

Final Checks:

- Ensure the water heater is functioning correctly.
- Verify that hot water is available at taps. (this will take 40 min for the water to heat up)
- Dispose of the drained water safely and clean up any spills.

Maintenance Tips:

- Repeat this process every 12 months to maintain your water heater’s efficiency.
- Consider scheduling professional inspections annually to check for any issues not visible during a DIY flush. (Included in our herd membership)

By following these steps, you can successfully flush your water heater, ensuring it operates efficiently and extends its lifespan.

	Flush completed
	Age makes it worrisome to flush
	Plastic drain valve, can’t flush.

Did you know you can upgrade your 6-year warranty to a 10-year warranty on a water heater by adding a second anode rod? That is how confident the water heater company is that the anode rod will keep it from leaking.

Water Heater Flush (Tankless)

- **Importance:** Flushing removes sediment buildup, ensure efficient operation, and extend the lifespan of the unit, maintains warranty.
- **STOP!** If your water heater hasn't been flushed and is over 6 years old don't start now! The sediment may be the only thing holding it together and it may leak after flushing.

Materials Needed:

- Tankless flush kit <https://amzn.to/4701NML>
- White vinegar (4 gallons)
- Philips Screwdriver

OR

- Submersible pump <https://amzn.to/3XUGHv7>
- 5-gallon bucket
- (2) washing machine female, female $\frac{3}{4}$ hoses
- White vinegar (4 gallons)
- Screwdriver (if needed to remove panels)



Safety Precautions:

- Ensure the water heater is off before starting.
- Use safety gloves to protect your hands from hot water and surfaces.
- Be cautious of hot water and steam during the process.

Procedure:

1. **Turn Off the Tankless Water Heater:**
 - Turn off the power to the unit. Unplug water heater AND, turn the gas valve to the "Off" position.
2. **Prepare the Service Valves:**
 - Ensure that the service valves on both the cold-water inlet and the hot-water outlet are closed.
3. **Connect the Hoses:**
 - Attach one hose to the cold-water service valve and attach the other end to the submersible pump. Place pump in bucket.
 - Attach another hose to the hot water service valve and place the other end in bucket also.
4. **Solution:**
 - Fill the bucket with 4 gallons of white vinegar. This will act as the cleaning solution.
5. **Check the filter:**

- Check manufacture instructions to remove and clean the filter off the cold side of the water heater.
- 6. **Open the Service Valves:**
 - Open both the cold water and hot water service valves to allow the vinegar solution to circulate through the water heater.
- 7. **Flush the Heater:**
 - Turn on the submersible pump. The vinegar will circulate through the tankless water heater and remove mineral buildup.
 - Allow the pump to run for 45 minutes to 1 hour.
- 8. **Drain the Vinegar Solution:**
 - After the flushing process is complete, turn off the submersible pump.
 - Close the cold water service valves and carefully disconnect the cold hose.
- 9. **Rinse the Heater:**
 - Place the free end of the hot hose near a drain or outside area.
 - Open the cold-water supply valve and let fresh water rinse through the system for 5-10 minutes to remove any remaining vinegar solution.
- 10. **Close the Service Valves:**
 - Close the cold-water supply valve and the hot water service valve.
 - Disconnect hot hose.
- 11. **Reconnect the Water Supply:**
 - Reopen the main cold and hot water supply valve to the tankless water heater.
- 12. **Turn On the Water Heater:**
 - Restore power to the tankless water heater. Electric and gas.
- 13. **Check for Proper Operation:**
 - Run hot water from a tap to ensure the tankless water heater is functioning correctly and to remove any remaining air from the system.

Final Checks:

- Ensure there are no leaks at any of the connections.
- Verify that hot water is available at taps.
- Dispose of the used vinegar solution safely and clean up any spills.

Maintenance Tips:

- Repeat this process every 6-12 months to maintain your tankless water heater's efficiency.
- Consider scheduling professional inspections annually to check for any issues not visible during a DIY flush.

Check with manufacture about other needed maintenance, such as filters.



Flush completed!



Age makes it worrisome to flush



No isolation valves, can't flush until installed

Fun Fact

There is a bill in works right now that would make every home in America have to install high efficiency heat pumps or tankless water heaters in 2029.



Emergency Drain

- **Importance:** One day you will have a leak. And having a drain that you know works will save a lot of money.
- **How to Check:** Test drain is working. Fill a 5-gallon bucket and pour it slowly in the drain. Make sure it is draining quickly! This will prevent flooding in case of an emergency.
- **Where are they?** They will be under your washing machines and in your mechanical room by the water heater and furnace.
- **So I have to pour water if its new?** Yes! At the bottom of the drain is a “P-Trap” this keeps water in it and keeps the sewer gasses from coming back up. Over the years the water will evaporate out and have you calling a plumber to solve the disgusting smell.
- **What if I don’t have one?** If you don’t have a floor drain close to a 50-gallon tank like a water heater it can be a big problem. Call a plumber.



Drains quickly without problem



Drains but slowly. Full of rust and corrosion.



Extremely slow draining or plugged up/ Not near water heater

Pro Tip

Water will evaporate out. But baby oil wont! If you want to set it and forget it for your trap under your washing machine pour a big bottle of baby oil in it. The oil is mild enough to not hurt the integrity of the pipe. And won’t go rancid like other oils.

Water Softener Condition

- **Importance:** Because you have a softener, doesn't mean that its working.
- **Questions to ask:** When did you last fill it with salt? How often do you fill the softener?
 - If the softener is full of salt but you never fill it, it probably has a salt bridge.
 - If it has been empty for a long time 1+ years it should be serviced or replaced.
- **How to Check:** There are a few things that we are looking for on your softener.
 - **Does the bypass work?** Every softener has a "bypass" incase the softener has a catastrophic failure you can stop the leak without shutting off the water to the whole home.
 - **Is there an air gap?** Your softener has a discharge hose that is running to a floor drain. The problem is that if you have a sewer back up that sewage water can siphon into the softener and contaminate your drinking water making your family very sick. For that reason, by code, you must discharge into an airgap.



Air Gap



No Air Gap

- **Is the brine tank in the most effective location?** Salt is heavy. In a lot of Utah homes, we can move your brine tank to the garage. So, you just unload the salt and avoid all the stairs.
- **Is the brine tank clean?** Salt comes with a lot of impurities that sit in your brine tank get it dirty and gross. Its recommended you clean your brine tank with a mild dish soap once every 2 years.
- **Is it plumbed in properly?** Unfortunately to many homes in Utah are not plumbed correctly. Even by professional plumbing companies. If you water your plants with softened water, it can kill your plants. So, your hose bibs should hard water. and so should the cold side of your sink to avoid sodium in your drinking water that will make it hard to satisfy your thirst.
- **Pro tips:**
 - Allow the salt to get down to 1/4 or 1/3 of the brine tank before refilling it. DO not keep it full and keep topping it off or you will get a salt bridge.
 - The cleaner salt you get the cleaner the salt tank will stay. Otherwise, it will develop a slime on the side.



- If you have high iron in your water, maybe on a well, you need to add iron out to your maintenance.
- Know how to bypass your water softener in case of an emergency.

Once a year when salt is at its low point empty out the remaining slat and clean sides of the salt barrel with mild dish soap and rag.
This is more important if using low quality salt.

If Chlorine levels are high, it will deteriorate the resin beads of the softener very quickly. With proper maintenance and low chlorine your softener should last 20 years +.

	Clean tank. Bypass works. Air gap. Placed in a good place.
	Has not been maintained or plumbed in correctly but isn't dangerous
	Salt bridge. Not working. Can't bypass. No airgap.

Fun Fact.

There is good evidence that children raised with soft water are significantly less likely to develop eczema.

Water Filters

- **Importance:** Most water filters including your fridge should be replaced at least every year. If not it can harbor bacteria or reduce your water pressure.
- **How to Check:** Replace filters according to the manufacturer's schedule. (typically, once a year)
- **Most common filters to replace**
 - **Whole home sediment filter.** Found typically near the main water shut off. Once a year.
 - **Reverse osmosis filters.** Typically, once a year
 - **Nuvo.** Found before tankless or near main water shut off. (every 1 to 2 years)
 - **Phosphate filters.** Also found before tankless or near main water shut off. (every 1 to 2 years)
- Note the filters you have here. _____
- _____
- _____
- _____
- _____

<input type="checkbox"/>	Filters Replaced
<input type="checkbox"/>	Filters ordered follow up scheduled.
<input type="checkbox"/>	Can't find replacement filters.



THE HERD YOU CAN TRUST!

Disposal

- **Most common problems**
 - **Not used enough.** Despite what you have heard you should use your disposal. When I disposal has water run through it but is not used it will rust together making it worthless. This is most common in homes with kitchenets. Using it keeps all the parts working.
 - **Sink replaced:** To often we go into homes that the sink was replaced for a deeper one. But the contractor didn't lower the drain appropriately. So the disposal has a small amount of water always sitting in the bottom causing it to rust out prematurely.
 - **Undersized for the workload.** 85% of homeowners overload their disposal. A 1/3 or 1/2 horsepower disposal is very limited on what it can chop and not give you issues down the line. Where having a more powerful, quitter disposal would allow them to have less problems when they try cooking for everyone thanksgiving. They also have a 12-year warranty instead of a standard 3 years.
 - **Rattles its way loose.** This is a vibrating machine. And over the years it can rattle its way loose and cause issues.
- **Check for leaks**
 - Check the wood of the cabinets under disposal for signs of swelling.
 - Check underside of disposal for rust and signs of slow leaks.
 - Check where disposal mounts to sink for leaks
 - Check tightness of the three screws that hold the disposal on that they didn't rattle loose.



Great working condition.



Signs of leaking but can't replicate. History of jamming.



Won't turn on/ Leaking



Pro Plumbing Tip

Clean your disposal by putting ice in it and turning it on with water. The ice will act as sandpaper getting into all the cracks and cleaning grease and trapped food particle. As it melts it will drain!

Kitchen Shut Offs

- **Importance:** Essential for stopping water flow in case of emergencies.
- **How to Check:** They will be under the sink. They need to be able to turn all the way on and off so you don't have to shut off the whole home when disaster strikes.
- **How often:** These valves should be exercised once a year
- **Biggest problems:** Shark Bite, multi turn, Plastic or CPVC.
- **1/4 Turn vs Multiturn.** I Highly recommend you have a 1/4 turn valve. They are more reliable and less likely to fail in an emergency. Gate Valves can leak from packing under heavy use.



CVPC. If the pipe attached to your shut offs, are this yellowish plastic. Don't try to turn it off. It is very brittle and can break if you're not careful.

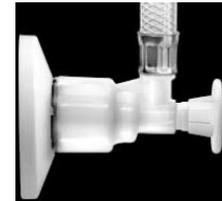
CPVC



■ 1/4 Turn



■ Multi-turn



■ Plastic



1/4 turn or multiturn. Great working condition. No corrosion.



Multiturn Hard to turn but works.



CVPV, Plastic shut off, shut offs don't work.

Ice Line

- **Importance:** one of the leading causes to kitchen floods and insurance claims in Utah.
- **How to Check:** Check the line for kinks and age.
- **Materials**
 - **Copper:** Great pipe. Prone to kinking (15-year life span)
 - **PEX:** Great pipe (15-year life span)
 - **Plastic, non-pex** (5 years max life)
 - **Stainless steel Braided** (5 year warranty) depending on brand. 5–15-year life.



PLASTIC



STAINLESS



PEX



COPPER



Great condition. No problem points.



Approaching end of lifespan. Signs of past kinking.



Past life span.



Biggest red flags. If you have the clear plastic line I would replace it immediately. It is the most likely to leak out of all these lines

Kitchen Faucet

- **Importance:** It's crazy how many people have leaking kitchen faucets and ignore it until it becomes catastrophic. Check that everything is tight and working. And make sure you love it! The kitchen faucet is the focal point of your kitchen. It is used every day by everyone in the house. Let's make sure it fits your family's needs.
- **How to Check:**
 - In a pull down/out faucet, pull it out just a bit and turn it on. Check the hose to head connection. This is one of the most problematic plumbing connections in your home. Make sure the handle is tight and not leaking.
 - Check the handle that it is tight and not leaking.
 - Does the faucet have enough pressure to handle stubborn dishes?
- **Questions to ask.** Is this still the best faucet for this space? Is it tall enough? Is it the right color? Can you easily fit your dishes underneath to wash.



Tighten here



Great condition. No problem points.



Loose handles. Not best fit for family, style corrosion. Ect.



Obvious signs of leaking from handles.

- **Recommended upgrade** A goose neck tall faucet allows you to
 - Have a beautiful focal point in the kitchen.
 - Have the height to get post and pans under it.
 - Get added pressure for washing.



Pro Tip!

Home Depot Faucets are NOT the same quality as a professional faucet. They have much more plastic than brass. BUT They do have the same life time warranty. If shopping at Home Depot for a faucet only buy Delta or Moen. They are the only ones that will last. I prefer Delta.

Rare Breed Is an authorized Pro for Delta, Moen, and Kohler

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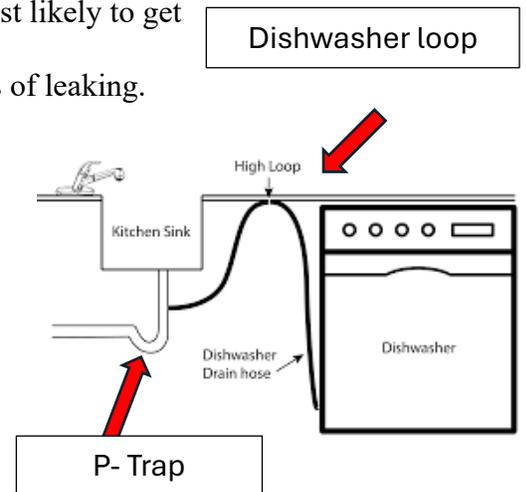
385.308.7471



Kitchen Drain

- **Importance:** This is the hardest used drain and is the most likely to get clogged.
- **How to Check:** Check for proper slope and for any signs of leaking.
- **Things to check**
 - P-Trap
 - No “Accordion pipe”
 - Dishwasher loop
 - No signs of leaking.

	Great condition. No problem points.
	Slight signs of leaking nothing active.
	No trap, no loop, active leak



Draino Is a NO-NO

Draino is an aggressive acid. That will eat through your metal pipes and lead to leaks in your walls and under your floors.

Instead of being reactive just use an enzyme cleaner like Bio-Clean. <https://amzn.to/4eSgCDE> Its safe for your home and takes care of the problem before it happens.

Also Rare Breed has its own liquid enzyme cleaner that we feel is better than Bio clean that we do sell! Call us for availability!



Toilet

- **Importance:** In most homes the toilets are the largest consumer of water in the home.
- **How to Check:**
 - **GPF (gallons per flush)** On the underside of the lid of the tank you might find how many gallons per flush the toilet uses. Toilets used use 5-7 gallons per flush! That's so wasteful! Modern toilets only use 1.28-1.6 GPF.

Utah has a \$150 Rebate on your toilets! Talk to your Rare Breed plumber to see if you qualify!

<https://www.utahwatersavers.com/toiletreplacementprogram>

- **Dye Test.** Put a few drops of food coloring in the tank of the bowl. And then walk away for 15 min. If when you come back any of that color is in the business part of the toilet you probably need to replace the flapper.
- **Wobble test:** Your toilet should have minimum "wobble" when you shake it. It sits on a wax ring and if it wobbles the seal will break causing big problems with nasty water.
- **Questions to ask:** Is this toilet comfortable for your family. Would a taller toilet be better for your age/ comfort? Would a soft close seat be an improvement? Does the toilet clog constantly?



No signs of leaking. Good GPF. Not excessive clogging.



High GPF but working



Leaking. Clogs constantly. Significant wobble.

Pro Tip

Do not use the drop in tank toilet cleaners. The chemicals in them will break all the working parts of your toilet. Instead get a cleaner that only touches the business end of the toilet like the Fluid Master Flush and sparkle.

<https://amzn.to/4dDAfhW> This system keeps your toilet clean but never comes in contact with the rubber on the toilet to cause it to fail.

Toilet Shut Offs

See [Kitchen Shut Offs](#) Above

Lavatory (Lav) & Supply Lines

- **Importance:** Supply lines are only supposed to last 10 years according to the manufacture. But they should last much longer than that. When they do out though they can pour gallons of water into the home before anyone can stop it.
- **How to Check:** Do a visual inspection for corrosion. Is it something that you trust? A lot of homeowners keep harsh chemicals under the sink and cause the supply lines to oxidize and fail quicker.
 - Does the faucet have good flow?
 - Are the handles leaking?
- **Questions to ask:** have any of your other supply lines failed?



Supply lines



Looks great no problems or history of leaks.



Low pressure, clogged aerator



Other supply lines have leaked, faucet leaking.

Pop Up/Lav Drain

- **Importance:** Keeps you from dropping your wedding ring down the sink.
- **How to Check:** Does the pop-up work? Will the sink with water and walk away for 5 minutes. Did the pop up do its job and retain water. Can you use it to shave as its designed.
- **Check drain for slope and signs of leaking**



Works great. Holds water. Minimal clogging



Pop up doesn't work but no leaks, clogs often.



Leaking!



Lav Shut Offs

See [Kitchen Shut Offs](#) Above

Shower Head

- **Importance:** There is no better way to unwind than with a relaxing shower. And a showerhead is one of the cheapest ways to improve your quality of life! Even adding a handheld shower is affordable
- **Things to check**
 - **Pressure.** Is the pressure acceptable? Or are you conditioned to think that's what it should be.
 - **Storage.** People sometimes hang their soaps and shampoo bottles from the shower head. PLEASE STOP! It breaks the pipes in the wall and can be very costly
 - **Height:** A lot of homes built before the 80s have very low shower heads so you have to duck down to have a proper shower.
 - **Build up:** Hard water build up can cause the streams of water to shoot out of the shower causing damage. Scrape the build up with your thumb or attach a sandwich bag with white vinegar to the head and tape it there for 24 hours to clean it.
- **Cheapest upgrade.** This is the cheapest best upgraded shower head you can get for your home <https://amzn.to/3TWvqcf>



Great pressure. Nothing heavy hanging from the head.



A lot of corrosion. Hanging shampoo bottles. Ready for upgrade



Not functional

Tub/Shower Drain

- **Importance:** The drain should be able to keep up with a shower! Don't stand in your own mess.
- **What to check.**
 - Does the drain keep up with a shower?
 - On tubs does it hold water.
 - Is there significant corrosion?
 - Does the homeowner know how to clean out hair when it builds up?
 - For a Tub is it a trip lever of lift and turn?
 - Does it clog constantly?



Lift and Turn



Trip Lever



No clogging works great. Homeowner can maintain it if they want



A lot of corrosion. Trip lever.



Drain backs up. Or doesn't hold water.

Why do tubs clog so often?

They are designed to! Because we don't want your hair getting in the drains and clogging where you need expensive equipment to fix it. Your drains are designed with a cross on them to catch the hair so you can easily clean them. You should know how to clean your own tub drain

Laundry Shut Off

- **Importance:** Shuts off water to the laundry machine if there is an emergency.
- **How to Check:** Like all shut offs test it once a year to make sure it works.



Shuts off, ¼ turn.



Multiturn. Stiff to shut off.



Won't shut off.

Laundry Drain

- **Importance:** New washing machines have more powerful pumps. So it discharges the water faster. So older laundry drains often cant keep up with new machines and then 10-30 gallons of water pours on the floor instead.
- **New code:** A laundry drain should be 2” and not connect to anything else until it hits 3”
- **What to look out for:** In A lot of homes the laundry is right below the kitchen an the grease from the kitchen combined with the high output of water from the washing machine can cause big problems. Please use an enzyme cleaner <https://amzn.to/4eSgCDE> or Rare Breeds Total C, (call to check availability.)



2” drain line, proper slope, not hooked to kitchen



Laundry is below the kitchen; older line may need enzymes.



1.5 “ drain line, corrosion. History of backing up.

Washer Hoses

- **Importance:** Another very common place to experience a flood is burst washing machine hoses.
- **How to Check:** Age. Many experts recommend replacing the hoses every 5 years. This is great advice and for only \$20 every 5 years its great peace of mind. I would personally not allow them to age over 10 years.

Note: Hoses often burst with no sign of corrosion beforehand. So don’t wait until they look bad and its to late. Go off age alone.



1-5 years old, no corrosion.



5-10 years old, or corrosion at the connections



10+ years old. Corrosion on the hose.

Curb Shut Off

- **Importance:** This is the city's shut off at the street. If you get a bust pipe underground it could spray hundreds of gallons per hour. Causing the water to push into the home. We already checked out emergency shut off in the home, but this one is out in the yard.
- **Is this my meter?** No! It should only be used in extreme emergency and is illegal to touch otherwise. This is actually the property of the city. So if you have a leak on the meter itself it is they city's responsibility. But anything after the meter is yours.
- **What to Check:** We just want to know where it is. To many home owners allow grass to grow over the meter. Of they don't know where it is after we have snow. Knowing where your meter is at is a huge benefit in an emergency!



Knows right where it is at! Keeps grass trimmed around it.



The grass is growing over the meter



Cant locate the meter. Its grown over or buried. Call the city.

Pro Tip!

How to check if your water main is leaking into the home?

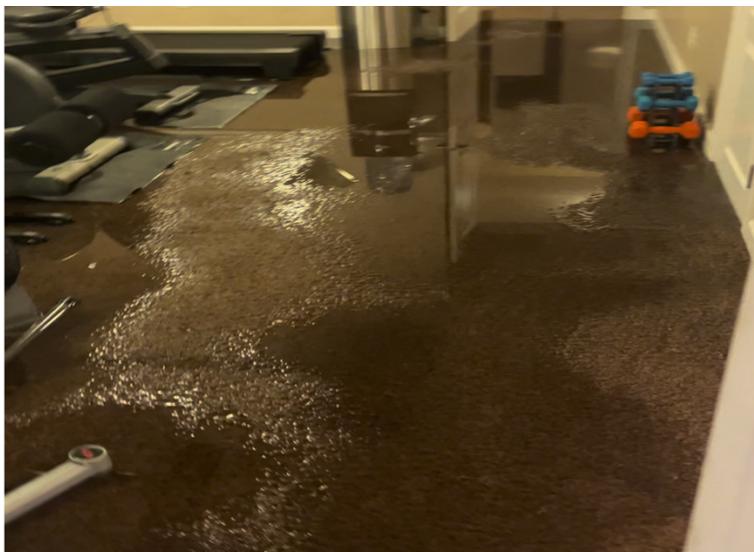
1. Make sure no one is using water in the house. But the water main is turned on.
2. Open the meter box and check the dial. (Note Beware of spiders and snakes.)
3. Determin if you have an analog meter or a didgital. If you have a didgital use a BRIGHT flachlight to activate the solar pannal so the numbers activate.

4. Determine that the meter is reading a flow of water. On the analog watch the low flow indicator for about a minute to see if it moves at all. On the digital look for a change of numbers after a few minutes.



5. Shut off the water inside the home. So we know the leak isn't somewhere after that shut off.

Repeat step 4. If the meter is still moving you have a leak in your water main, or sprinkler system. Call a professional! If it stops moving it's inside the home. Likely a toilet flapper. Do a dye, [Toilet](#)



A 12 year old home that couldn't find the curb shut off

Water Lines Condition

See [Types of Water Pipe](#)

Outside Hose Bibs

- **Importance:** Hoses MUST have the hose unhooked during the winter to make sure the ice doesn't burst the pipe and cause flooding.
- **How to Check:** Visual inspection. Is it leaking. Is it operational. If we are close to winter is the hose unhooked.



Hose disconnected during winter. Good working condition.



Hose was hooked up, we removed it.



Doesn't work. Hose cant be removed

Our Most Popular Upgrade!

Having a hot and cold hose in the garage of your home is a game changer. Especially if you have it hooked to soft water. Washing cars and toys after camping with warm water! Spraying down car seats! Spraying out the garage!

And because its soft it doesn't leave as many hard water spots.

If you enjoy Wild Utah this is a must have!



Sump/Sewer Pump

- **Importance:** Prevents flooding!
- **How to Check:** As a professional we will often look inside for excess grease build up but as a home owner this is what I would do!
 - **Track the age:** Because this is such a catastrophe when it doesn't work I recommend replacement every 10-12 years.
 - **Cycle the pump.** Pour water into the system and see if the pump turns on
 - **Check electrical.** Is the pump the only thing on the outlet? It needs to have a dedicated power source so it's less likely to trip a breaker in an emergency.

If your worried call a professional.

	Float activates, Dedicated power, Minimal grease build up.
	Over 10 years old. Can't check grease or minimal grease
	Doesn't work. No dedicated power. Extreme grease

Water Alarm

- **Importance:** Most homes I recommend a water alarm. If you rely on a sump/sewer pump you absolutely need an alarm!
- **What is an alarm?** It will let you know if water is present. You need them if you have a questionable floor drain, history of flooding, bad piping, sewer pump.
 - **Watch Dog:** for \$15 this is a no brainer. Works like a smoke detector. So if something starts to flood it will put off a loud noise so anyone in the home can hear it. <https://amzn.to/4dFIKsS>
 - **Moen Flo:** My personal favorite. It's a smart water shut of and a flood detector. So if there is water it will send you an email or text and shut the water off for you! it is our most popular option.
 - **WIFI Sump alarm.** Made specifically for sump and sewer pumps. This lets you know there Is a problem before water starts overflowing. It can send you a notification as well so if you're not home you can act fast.



	Working water alarm or almost no risk.
	No alarm with low risk
	No water alarm with high risk

Water Taste

Quick question: Do you drink the tap water?

See [Chlorine/ Contaminants](#)

Boiler

- **Importance:** Boilers can very effectively heat your home; they can be used for snow melt systems in drive ways. They are incredible! But even most master plumbers have no business touching a boiler in Utah!
- **How to Check:** Call someone with A LOT of boiler experience. These are 20–200-thousand-dollar units. Always have a master boil tech work on them.

At Rare Breed Plumbing we have one of the best boiler guys in the state! Give us a call!

Sewer Main

See [Types of drainage](#)

If your home is over 50 years old and you haven't had a camera inspection in the last 3 years give us a call!

A free annual camera inspection is included in our herd membership!

Code Compliance

As a professional plumber if anything stands out to us as unsafe we will bring it to your attention.

Backflow

As a professional plumber if anything stands out to us as unsafe we will bring it to your attention. Checking for leaks and proper operation. Warning you about winterizing.

Other

Steam showers, special fixtures, bidets. If anything is unsafe we will bring it to your attention.

Conclusion

Regular inspections using this manual will help maintain your home's plumbing and water systems, ensuring safety and efficiency. For any issues you cannot resolve on your own, contact Rare Breed Plumbing for professional assistance.

Herd Membership Perks and Pricing

- **10% Discount on repairs!** No maximum limit!
- **Priority Scheduling!**
- **Save for latter!**
 - Earn a \$100 Annual Replacement Credit for each year you are a member. Up to \$1,000!
- **Waived service fee!**
 - If we do work, the call-out fee is waived! Including Saturday and Holidays, giving you maximum peace of mind.
- **Salt Delivery Service!**
 - With our salt delivery services, you can let us know how much salt you need on any visit! You pay for the salt, but you save your back from hauling it around! (Residential softeners only.)
- **Herd savings!**
 - Get exclusive deals, coupons, tips, and tricks that you won't get anywhere else to save money!
- **Annual Camera Inspection!**
- **One Free Secondary Drain cleaning!**
 - Get that tub or kitchen line flowing on us!
- **Annual Peace of mind inspection**

