

So...Now You Own A Home

The Thrill of Home Maintenance in Southern Arizona



Alex Byron,
Home
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Mojo,
The Home Pro

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Introduction

As a home inspector here in Tucson, Arizona, my job is to inspect homes for home buyers, sellers, and owners for defects, damage, and deficiencies. Over the years, I've seen many, many homes. In these homes, I've seen many crazy, scary, funny and dangerous things. I have stories. Oh boy, do I have stories...

Every home is unique and has its own character, features, and flaws. This is something I really like about the job because there is no routine. Every home is different and has some kind of surprise for you. It keeps you on your toes. It keeps life interesting.

There was one thing, though, that almost all of these houses had in common, with very few exceptions: something we in the business politely refer to as "deferred maintenance."

Deferred maintenance means that the homeowner didn't take care of the home like they should have. This caused components of the house to age or fail prematurely. This resulted in a big headache for the homeowner in form of inconvenience, wasted time, and, most importantly, expensive repairs.

The reason for the deferred maintenance is usually simply lack of knowledge. When you buy a house, they give you the keys and wish you all the best. Unfortunately, nobody gives you a manual for how to take care of your house—the biggest purchase of your life!

As a result, homeowners usually learn the hard way that they should have taken care of something—after it breaks and they call a professional for repairs, who tells them about maintenance.

It pains me to see deficiencies in homes that could have been easily avoided by basic maintenance, had the homeowner known about it. So I decided to do something about it and write this book.

The information in this book is about the most common maintenance issues I have seen over the years. It's not all-inclusive (that would be almost impossible) but it covers about 95% of home maintenance tasks that homeowners need to know about.

This book is divided into two sections:

The first section describes in each chapter a major component or area of the house, what kind of maintenance it requires, when to do it, and what happens if it is neglected. This section is for people who want to take the time to learn and understand.

The second section is a practical annual home maintenance schedule. It contains a list of home maintenance tasks for the entire year. This section is for people who want to dive right in and just know when to do what. It references chapters in the first section of the book where applicable if you want to know more.

Some of the maintenance tasks described in this book will provide steps on how to perform the task. However, some of them refer you to the manual provided by the manufacturer of a component, or to a trained professional.

You might ask, "Why am I reading the book when it is not giving me step-by-step instructions for every single task and instead making me read manuals or call a pro?"

"Well," I might answer, "Each home has so many different components from so many different companies, that covering every single one is way beyond the scope of this book (and pretty much impossible)."

The good thing is that most manufacturers provide manuals in PDF format as a free download on their website. It's pretty easy to find the information specific to the components in your home.

Second, some of the home maintenance tasks described in this book require the experience, the training, and the expensive tools and shiny toys only a qualified professional has.

Third, even if I really wanted to write more, Mojo The Home Pro demanded belly rubs and walkies. That, of course, was more important...

This book arms you with the knowledge necessary to be a good homeowner. It teaches you what your home requires to function well and keep functioning for a long time.

Reading this book gives you the power to be proactive about home maintenance. It prepares you for what's ahead so you can act instead of react. This enables you to prevent unpleasant surprises, make components of your house last longer, and potentially save you a lot of money over time. Money you could spend on traveling (when there's no pandemic) or alcohol and snacks (when there is a pandemic).

Please don't be overwhelmed by the size of the book, the number of chapters, or the number of home maintenance tasks in the annual schedule. The suggested maintenance schedule spreads out home maintenance tasks over the course of a year to make it more manageable for you.

More importantly, many tasks are actually really easy:

- Most tasks can be completed in 15 minutes or less.
- Some tasks just require you to pick up the phone.
- Some tasks just require you to push some buttons.
- Some tasks just require you to grab a flashlight and look at stuff.

When you get ready to tackle a home maintenance task listed in this book, I encourage you to use good judgement. Some people are good with tools, have the knowledge or like to learn, and the confidence to tackle home projects. Other people have different talents or comfort levels.

If you are daunted by a task, do not own the proper tools, or have other physical or mental limitations, be honest with yourself and call a professional instead. There is no shame in knowing your limits. And, of course, you want to make sure you don't cause any damage or injury.

I really hope you find this book helpful. I want you to be a good homeowner and have many happy years in your home. I hope that sharing my experience with you in this book will empower you to take good care of your home and save you money.

And should you decide to sell your home sometime down the road, the work and time you put into maintaining your home will pay off. A well-maintained home is more likely to sell and will fetch more money. You like more money, right?

If you have any feedback about the book, I encourage you to contact me at info@desertdiamondhomeinspections.com. My trusty companion, Mojo the Home Pro, and I would love to hear from happy homeowners how we can make this book even better.

Happy home maintenance!

Alex Byron, Home Inspector

Mojo, The Home Pro

Home Maintenance – Safety First!



Before getting started with the actual home maintenance, let's talk about safety first! Many homeowners (and ER doctors) will tell you: It's easy to get injured while taking care of your home.

Before starting any home maintenance project, you should don the appropriate safety gear. This helps you avoid additional holes in your body or unintended relocation of blood to the exterior of your body. Here's a list of gear and knowledge every home owner should have.

Safety gear

Hat—To protect your head from sunburn or minor injury. For work in an attic or crawlspace, a helmet is even better. There are many pointy or hard objects that will not be kind to your head. I have the scars and lumps to prove it...

Safety goggles—To protect your eyes from dirt or injury. Specifically, designated safety goggles that wrap around the sides and are ANSI Z87.1 certified for impact protection.

Ear plugs—To protect your hearing when it gets loud. Leaf blowers, drills, nail guns, etc. can all damage your hearing. And once the hearing is gone, it's gone. Trust me on this—I've been to a lot of heavy metal concerts. Ear plugs also come in handy if you have a significant other nagging you to do your home maintenance tasks already...

Respirator or face mask—To prevent inhalation of particles that do not belong in your lungs such as dust or fiberglass. Depending on the task at hand, use either a N95 mask or a P100 respirator. This is especially important when working on older homes that might contain asbestos.

Coveralls—To protect your body and make clean-up easier. Also adds a layer when it's cold outside. For extra pizzazz, feel free to bedazzle them with a portrait of Bob Vila or Tim "The Toolman" Taylor.

Gloves—To protect your hands. Leather gloves will protect against minor injuries. Nitrile gloves protect against chemicals and yucky stuff.

Boots—To protect your feet (bonus points for steel-toed boots) and for better purchase or grip on whatever surface you're walking or standing on.

Phone—If you're working alone, be sure to have your phone with you. If something happens, you want to be able to call for help or take photos for the insurance claim.

Knee pads—Depending on the job, knee pads can help protect your knees and make the job more comfortable. Knee pads can also come in handy when you mess up and have to beg your significant other for forgiveness...

Headlamp—Light is always good. Having a hands-free light is even better, especially for those jobs in poorly lit areas.

Non-contact voltage tester—If you're working on anything electrical, be sure to use a non-contact voltage tester to ensure that things are safe to touch—BEFORE you touch them! Helps avoid unpleasant surprises and sudden changes in hair style.

First-aid kit—If something does go wrong, take proper care of that injury. No, duct tape is not a proper bandage.

Knowledge

Knowledge is power. In this context, the power to keep yourself safe. Here are a few safety tips to ensure that your first-aid kit can continue to accumulate dust for the foreseeable future.

Know your limits: If you have physical limitations that might prevent you from performing a task safely, hire somebody. Or, if you have mental limitations like fear of heights, fear of tight spaces, or fear of tools, hire somebody. If you're not very good with tools, hire somebody. If you're not familiar with basic components and terminology, hire somebody.

Look before you touch: Situational awareness is key in life. Look first for any potential safety hazards such as puddles, slippery surfaces, sharp or pointy things, obstacles, or obstructions. Listen for sounds of possible danger like dripping, crackling, hissing, humming, etc.

Learn ladder safety: If you have to use a ladder, make sure that the ladder is in good condition. Put the ladder on a firm and level surface. Do not lean out to the sides. Keep your hands free. Always have at least three points of contact with the ladder, meaning two hands and one foot or two feet and one hand. One head does not count as a point of contact.

Have assistance: If possible, have an assistant with you. A second person can hand you things, keep an eye out for your safety, and provide advice, input, or entertainment. Mojo The Home Pro thinks that dogs make great assistants!

RTFM: If you're not sure about the task or tool at hand, take the time to look up instructions or read the, uh, fine manual. It will greatly reduce the amount of cursing during your project.

Home Maintenance By Component

Chapter 1: Roof Maintenance



Yes, roof coverings can last 10, 20, or 30 years or more (depending on type). However, they'll only last that long **if you maintain them**. Even a new roof can leak after just a few years if neglected. It's imperative that you inspect your roof every year for the following issues and have it repaired promptly by a qualified licensed roofing professional.

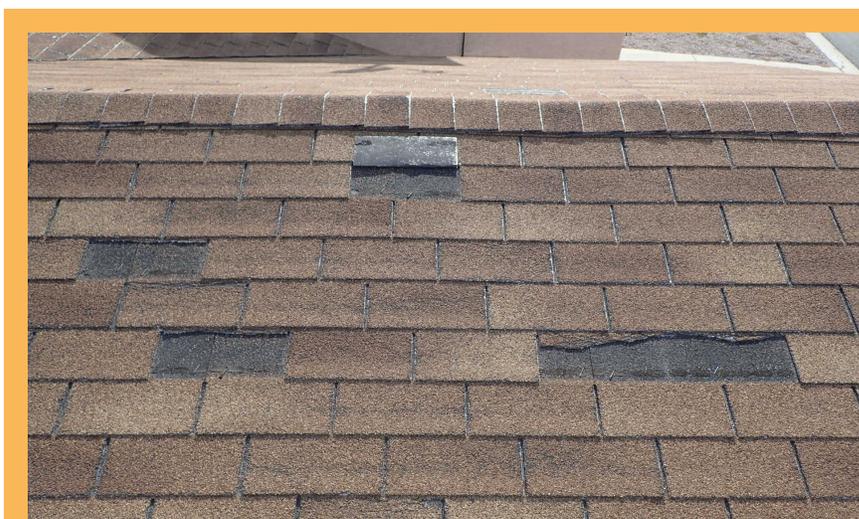


Mojo The Home Pro says: "I haven't learned yet how to climb ladders, so you're on your own, buddy..."

Damage

Every roof will experience damage—period. This could be due to normal wear-and-tear, extreme weather like hail or windstorms, poor installation, or lack of maintenance. If you catch the damage early and repair it right away, the repair will be cheap, and it will prevent bigger issues such as leaks.

Asphalt shingle roofs: Wind can lift and tear off individual shingle tabs. Tree branches rubbing on shingles for a long time can damage or wear through them. Replace any missing or damaged shingle tabs.



Torn off shingle tabs on asphalt shingle roof

Concrete tile roofs: Concrete tiles can break from exposure to the extreme temperatures and age or wind rattling them around. If not properly fastened in place, they can also slip out of place, exposing the underlayment as a result. Replace any broken and secure any slipped tiles.

The concrete tile is actually mainly decorative. Water will always get underneath the tile. It is the underlayment under the tile that is the waterproof membrane. The underlayment deteriorates slowly over time and requires replacement after 20-ish years. If a concrete tile slips and exposes the underlayment to the sun, the underlayment deteriorates very quickly.

In turn, this exposes the wood decking underneath which will rot when rained on, leading to leaks into the attic and house. Keeping the underlayment protected and in good repair is essential.

Clay tile roofs: Clay tile roofs face many of the same issues as concrete tile roofs. Except the clay tiles are much more fragile than concrete tiles.

Flat roofs: The membrane on flat roofs can experience damage from hailstorms, prolonged exposure to moisture, and deterioration of the roof coating. Repair any damaged areas promptly so water cannot find a way underneath. Apply two coats of quality elastomeric paint to the roof every five years.

Skylights: While skylights last a long time, they will gradually deteriorate due to heat and sunlight, resulting in cracks. They can also experience damage from hail. Examine all skylights and replace any damaged domes. No, duct tape is not an approved repair method for skylights...



Slipped concrete tile, exposing the underlayment



Deteriorated coating on a flat roof



Broken skylight dome

Debris

You'd be surprised by how much debris from trees and bushes ends up on roofs. Debris is bad for roofs for several reasons. When it collects in drainage channels such as scuppers or valley flashings, it blocks the flow of water from running off of the roof like it should. As a result, the water will find another way to go. Usually not where you want it to go. On flat roofs, debris collects in big clumps that act like sponges. They store water, preventing the roof from drying, leading to quick deterioration of the roof covering. Remove any tree debris from your roof and keep it clean.

Drainage

When it rains here in Arizona, it usually rains hard. You want to make sure that all that water can get off of your roof quickly and follows the path it should take. Ensure that the drainage paths such as valley flashings, scuppers, gutters, and downspouts are clear and in good condition.



Tree debris accumulating on a flat roof



Scupper blocked by tree debris, trapping water on flat roof



Sludge build-up in gutters

For flat roofs, there are a few additional issues that can negatively affect drainage: ponding and damming.

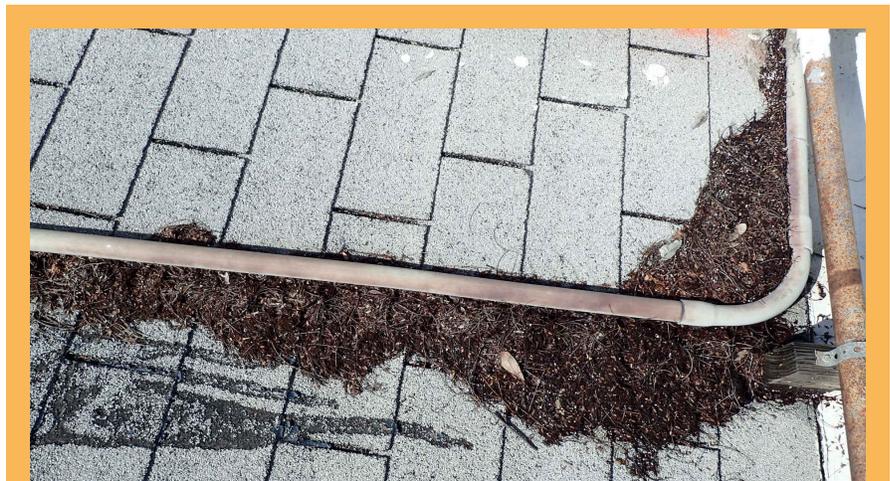
Ponding: If a flat roof is properly pitched, water can run off by gravity. Water never remains on the roof after a rain and it can dry quickly. However, there are many flat roofs that have spots that are wavy or have slight depressions. As a result, water will pool or pond in those areas instead of running off. After the rain stops, these areas will retain water for hours or days until it eventually evaporates, leaving a layer of dust or dirt behind. In those areas, the roof is exposed to moisture much longer, which leads to much faster deterioration. You must monitor these areas regularly and keep them clean and sealed.



Water ponding on a flat roof

Damming: There should never be any objects lying directly on the surface of a flat roof. However, there are many flat roofs with cables (e.g. for TV), pipes (e.g. AC condensate drain pipes), or conduits (e.g. for electrical cabling) in direct contact with the roof surface. They will stick to the roof coating, trap tree debris, and act like a dam, preventing water from running off of the roof as intended.

You must either remove such objects from the roof if they are no longer needed, or elevate them with wood blocks so water can pass underneath.



Conduit lying on roof surface, trapping debris, and preventing drainage



When

Put an annual reminder on your calendar for March or April to inspect your roof. You want to do this before monsoon season starts for two reasons:

1. Have your roof in good shape before the storms start and have peace of mind that you won't have to worry about leaks.
2. If the roof needs repairs, it is pretty easy to schedule a roofer during this time. However, if you wait until after the storms start, it could be weeks before a roofer will be able to come out.

Conclusion

Annual roof maintenance is extremely important. If you spend a little bit of time and money every year to keep your roof clean, your roof will last a long time and keep you and your house dry. It will also prevent unpleasant surprises such as unexpected leaks and resulting repairs that could cost thousands of dollars.

Annual Home Maintenance Schedule

SECTION TWO:

Week 2: Test GFCI outlets and AFCI breakers

How—GFCI outlets:

1. Identify the locations of all GFCI outlets in your home, for example:
 - Bathrooms
 - Kitchen
 - Laundry room
 - Garage
 - Exterior
2. Plug in a device (e.g. a lamp) into the GFCI outlet or a protected outlet on the same circuit.
3. Press the Test button on the GFCI outlet and verify that the device turns off.
4. Press the Reset button on the GFCI outlet and verify that the device turns back on.
5. Repeat for each GFCI outlet/GFCI protected circuit.

How—AFCI breakers (or GFCI or combo breakers):

1. Turn off any devices on AFCI protected circuits that might not like a sudden power loss, e.g. desktop computers.
2. Plug in a device (e.g. a lamp) into an outlet on each protected circuit.
3. Identify the locations of AFCI breakers in your home (if applicable) in the main panel and any sub panels.
4. Press the Test button on the AFCI breaker.
5. Verify that the breaker handle moved to the middle/tripped position.
6. Verify that the device has turned off.
7. Move the breaker handle to the Off position and then to the On position.
8. Verify that the device has turned on again.
9. Repeat for each AFCI breaker/AFCI protected circuit.

Details:

See Chapter 7: Testing GFCI Outlets And AFCI Breakers for more information.

Week 3: Clean sink drains

How:

1. Place a bucket under the P-trap of the sink drain pipe.
2. Unscrew the connectors so you can remove the P-trap. This might require a pipe wrench.
3. Clean out the gunk in the P-trap.
4. Use a long screwdriver or similar object to clean out the build-up in the pipe coming down from the sink. Remove the sink stopper if necessary for better access.
5. Reassemble everything.
6. Run water and check for leaks.
7. Give your pet a treat.

Date	Completed By	Notes

Acknowledgments

This book has been a lot of fun to write. It also took a lot of hard work and countless hours to put together. Many great people helped me to make this possible and bring it across the finish line.

Thanks to the eternally happy Stephanie Rising for keeping me focused and on track.

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Thanks to the beautiful and awesome Mel Blumenthal for her input, support, and feedback.

Thanks to his royal furriness, Mojo The Home Pro for his moral support and hilarious antics to keep me entertained, and help make this book a lot funnier than it originally was.

I am grateful to all of their positive energy and support and wisdom.

Teamwork makes the dream work.

About the author

Alex Byron has been a successful home inspector in Tucson, Arizona since 2015. His company is Desert Diamond Home Inspections. He performs home inspections for home buyers, home sellers, and home owners to ensure that they know everything there is to know about the home and its condition. He is an ASHI certified home inspector.

He is passionate about helping people. He spends many hours educating homeowners to ensure that they can take care of their home, avoid unpleasant surprises, and enjoy their home with their family.

Alex is originally from Germany. He brings to the job his German sense of organization and attention to detail, technical aptitude, and ability to explain technical concepts in an easily understandable manner.

Before launching his home inspection career, Alex enjoyed a successful career in the computer hi-tech industry spanning almost two decades. He worked hands-on with computers and writing technical documentation, providing help and instructions to computer users around the world.

In his free time, Alex enjoys listening to and playing music, working out, movies, hanging out with friends, and spending time with Mel and Mojo.

Mojo The Home Pro says: “Sheesh, that was a dull bio. Is that the best he could do? I thought he used to get paid a lot of money to write stuff. Looks like I'm gonna have to help him out here yet again, so here we go:



To be honest, it hasn't been that long since Alex and Mel busted me out of doggie jail (a.k.a. the shelter—I really did not like that place, even though there were many nice people there walking me and giving me treats).

But since the day they brought me home, Alex has been awesome! He has given me so many belly rubs, taken me on so many walkies, fed me so many treats, and spent so much time teaching me stuff.

Anybody who is this nice to a rescue mutt like me is the bestest person in the whole wide world in my book.

The home I live in now with him is great. It's really nice and clean, and everything works. I get the distinct impression he really cares about this home and takes really good care of it. Looks like he really knows his stuff about home maintenance and isn't just talking out of his butt. So you can trust that what he wrote in this book is legit.

It seems like he is really good at his job, too, because people call him all the time to inspect homes for them. He works a lot.

I confess, I don't like it when he goes inspecting homes, because that means less time spent giving me belly rubs, walkies, and treats. That's OK though. I enjoy snoozing on this really comfy couch when he's gone. What's important is that he always comes back home to me, and frequently brings home food and toys for me. Yay!

People apparently really appreciate how hard he works for them, because they keep giving him 5-star reviews online. He really appreciates that and it makes him happy. If I knew how, I would give him 5 stars, too, for being so nice to me.

In addition to spending time with us, he also seems to enjoy listening to and making music. When he plays the piano, I chill on the couch and watch and listen. He does OK but he still needs to practice more. I'd give him 3 stars for that. I hope he doesn't quit his day job.

He also has a guitar that he plays occasionally. That thing scares me though. When he picks it up, I bark at it to make sure it knows who's the boss around here. Can't trust something that's hollow and doesn't have any fur. How weird is that.

He also likes playing drums. It's fascinating to me but a little loud so I prefer to keep my distance.

Anyway, where was I going with this? I have no idea. I'm just a dog with the attention span of a goldfish. Doesn't matter.

Oh yes, I remember. Alex is a good dude, and he wants to help you be a good homeowner. So listen to him, read the book, and follow his advice. You'll be thankful.

I'm gonna go back now to chasing squirrels. Bye!"



DESERT DIAMOND HOME INSPECTIONS

"This book is dumb. My house doesn't need maintenance."

– Noone, ever –

"What a great idea! Every homeowner needs this."

– Everybody who heard about the idea for this book –

"I should have written this book years ago."

– Me, while inspecting yet another neglected house –

"Woof! I got so many treats during the creation of this book!
This is great! Let's write another one!"

– Mojo The Home Pro –

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