



An Extended Guide · No. 1982

Is This an Ethernet Cable? Phone, Network & Coax Cords Identified

A picture-and-plain-words guide
to the cords behind your TV

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Let's sort out the cords behind your TV and internet box

If you have ever crouched behind the television or the internet box, holding a cord and wondering 'is this the internet one, the phone one, or the cable one?' — you are in very good company. This guide helps you tell those three look-alike wall cords apart, calmly and without the jargon.

I'm Bill, and I run Bill's Home Tech here in Portage County, Ohio. I've spent 30+ years helping folks get comfortable with the gear in their homes, patiently and in plain language. Think of this as me sitting on the floor next to you, naming each cord one at a time.

There are really only three families of cord you'll meet along the wall: the network cord most people call Ethernet, the older telephone cord, and the round cable-TV cord called coax. Once you know them by sight, you'll know exactly which ones your internet actually needs.

★ You don't need to memorize a thing

By the end of this you'll recognize all three on sight. If you'd rather have a second pair of eyes, I'm glad to look — bring me a photo or call or text (330) 200-8042 and I'll tell you what's what, free.

The whole guide, on one page

If you remember only these things, you're already most of the way to telling your wall cords apart.

- ❑ **Ethernet (network)** is a wide, clear plastic plug with eight tiny wires inside and a little click tab — it goes into a router or modem.
- ❑ **Telephone** uses the same style of clear plug, only smaller and narrower, with fewer wires — it goes into a wall phone jack.
- ❑ **Coax (cable TV)** is the round metal connector that screws or pushes on, with a single thin pin in the center.
- ❑ Your internet almost always uses an Ethernet cord from the modem to the router, and often to a computer or TV box.
- ❑ Many cable-internet setups also have one coax cord feeding the modem from the wall.
- ❑ The telephone cord is the odd one out — most internet does not need it at all.

✓ One habit that saves you

When someone sets up your internet, snap a photo of the back of the boxes while every cord is plugged in. If one ever comes loose, that picture shows you exactly where it went.

Why these cords look so much alike

It helps to know this isn't your imagination. Two of the three really are close cousins, built in the same style.

Ethernet and telephone cords both end in a clear plastic plug with a little springy tab that clicks when it seats. That shared look is exactly why people mix them up. The giveaway is size: the Ethernet plug is distinctly wider, because it holds eight little wires instead of the phone's two or four.

The coax cord is the easy one — it looks nothing like the other two. It's round and metal at the tip, with a single thin pin poking out of the center, and it either screws on with a knurled collar or pushes on with a snug cap. That's the cord that carries cable television, and in many homes it also feeds the cable-internet modem.

✓ Think wide, narrow, round

If you remember just three words — wide for Ethernet, narrow for the phone cord, and round for coax — you can sort almost any wall cord in a second, before you even look closely.

Ethernet — the wide network plug

This is the one worth knowing best, because it's the cord that carries your internet from box to box.

An Ethernet plug is a clear, squared-off plastic block, wider than it is tall, with eight tiny copper wires lined up in a row that you can see through the clear plastic. On top is a small flexible tab — you press it to release the plug, and it clicks into place when you push the plug home.

The cord itself is usually round and a bit stiff, often flat and thin on newer ones. You'll find Ethernet plugged into a router, a modem, a streaming or cable TV box, a game console, or the back of a computer. Technically the plug is called RJ45, but almost everyone just says 'the network cable' or 'the internet cable.'

✓ The eight-wire tell

Hold the plug up to the light and count the little wires in the clear tip. Eight wires filling the full width means Ethernet. A telephone plug has far fewer, and they sit in the middle of a narrower plug.

Telephone — the smaller, narrower cousin

Built in the very same style as Ethernet, just shrunk down. This is the plug that trips up the most people.

A telephone plug is a clear plastic block with the same little click tab, but noticeably narrower than Ethernet — it holds only two or four tiny wires, sitting in the center rather than spanning the full width. Set the two plugs side by side and the difference is plain; the phone one looks like the Ethernet plug's little brother.

This cord runs from a wall telephone jack to a telephone, an answering machine, or sometimes an older fax. Its plug is often called RJ11. In homes with internet delivered over the old phone lines, a phone-style cord may also run to the modem — but for most cable and fiber internet, the telephone cord has nothing to do with your internet at all.

✓ Width settles it every time

If a clear-plastic plug looks a little too small to be the internet cable, it probably is the phone cable. Narrower plug, fewer wires, phone jack on the wall — that's the telephone cord.

Coax — the round screw-on or push-on cord

The odd one out, and the easiest to recognize once you've seen it named. This is the cable-television cord.

Coax is a thick, round cord ending in a metal connector with a single thin pin standing up in the very center. One common kind screws on with a ridged collar you turn by hand, like a tiny jar lid. Another kind simply pushes on with a firm cap. Either way, that lone center pin is the sure sign you're holding a coax cord.

Coax carries cable TV from the wall outlet to a television or a cable box. In a great many homes it also runs to the cable-internet modem — the box that your internet starts from. So while coax isn't the internet cord itself, it's often the cord that feeds the box your internet comes out of.

✓ Look for the center pin

No other household cord has that single thin pin in the middle of a round metal tip. See the pin and you're certain it's coax — no counting of little wires required.

The three cords, side by side

Here's the whole cast on one page. Keep it handy when you're peering behind the boxes — there's a picture version near the back, too.

Cord	What it looks like	Where it goes
Ethernet	Wide clear plug, 8 wires	Router, modem, TV box
Telephone	Narrower clear plug	Wall phone jack, phone
Coax	Round, center pin	Cable TV, cable modem

Notice that the first two share the same clear-plastic, clicking style and are told apart by width, while coax stands completely apart with its round metal tip and center pin.

★ **Print this page, tape it behind the TV**

A lot of folks tape a little chart like this to the wall behind the television or the internet box. It turns 'which cord is this?' into a five-second glance. I'm happy to help you make one on a visit.

Which of these cords your internet actually needs

This is the part most people really want to know, so let's make it plain. Your internet uses one or two of these cords — rarely all three.

The heart of it is the Ethernet cord. A short Ethernet cord usually runs from the modem (the box where the internet enters your home) to the router (the box that sends it around the house, often with the antennas or the wireless signal). Another Ethernet cord may run from the router to a computer, a smart TV, or a streaming box that you want on a solid wired connection.

If your internet comes over the cable-TV line, a single coax cord feeds the modem from the wall outlet. If your internet comes over the old telephone lines, a phone-style cord feeds the modem instead. Either way, the Ethernet cords are what move the internet onward from there.

! Don't unplug to find out

It's tempting to pull a cord to see what it does, but a loose internet cord can knock the whole house offline, sometimes for several minutes while the boxes restart. Look and trace first; only unplug when you're sure, and put it right back the same way.

Two kinds of households, two sets of needs

Which cords matter to you depends a lot on your house. The cords are the same; where you'll find them is not.

If you have a simple modem-and-router setup

One box where the internet comes in, one box that spreads it around — maybe sitting together on a shelf. Your job is just to know the few cords between them and keep them seated.

- Find the short Ethernet cord running between the two boxes — that's the lifeline of your whole network.
- Note the one cord feeding the first box from the wall: coax for cable, a phone-style cord for old phone-line internet.
- Leave any extra Ethernet ports empty unless you're wiring a TV or computer on purpose.
- Snap one photo of the back of both boxes so you can always put a cord back where it belongs.

If you have an older house with phone jacks and coax everywhere

Phone jacks in several rooms, round cable outlets behind the TV and in bedrooms, and cords from different decades. Your job is to tell the live internet cords from the leftovers.

- Trace the coax that actually reaches your modem — many wall outlets in an old house are dead or unused.
- Treat the telephone cords as separate from the internet unless a phone cord clearly runs into the modem.
- Label the one or two cords your internet depends on so nobody unplugs them by mistake.
- Set aside the mystery cords you can't trace to any working device — see our guide on telling cables apart.

★ Not sure which wall cords are even live?

Old houses collect cords over the years, and half of them often lead nowhere. I can trace each one, tell you what's live and what's leftover, and label the ones that matter — in one calm visit. Call (330) 200-8042.

Where each cord plugs in on the boxes

Knowing the cord is half the job; knowing its socket is the other half. The holes on the boxes are a strong clue to each cord's name.

An Ethernet socket is a wider slot, usually with a little indicator light beside it, and there are often several in a row on a router. A telephone socket is the same shape but narrower, and you'll usually find it on a wall plate rather than on the internet boxes. A coax socket is a round threaded stub that the coax collar screws onto.

So if a cord fits a wide, lit-up slot on the router, it's Ethernet. If it screws onto a round metal stub, it's coax. And if the only thing it fits is a narrow jack on the wall by the baseboard, it's the telephone cord. The socket and the cord always agree — let them confirm each other.

✓ Watch the little lights

Most Ethernet sockets have a tiny light that blinks when internet is flowing through. A dark, still light on a cord you expect to be busy is a gentle hint that the cord, the socket, or the box may need a look.

Ethernet or telephone? Telling the twins apart

When the two clear-plastic plugs are sitting in a tangle together, here are the quick tells I use so you don't need a magnifying glass.

- **By width:** the wider plug is Ethernet; the narrower one is the phone cord. Side by side it's obvious.
- **By the wires:** eight little wires across the full tip means Ethernet; two or four in the middle means telephone.
- **By where it leads:** follow the cord — into a router or modem means Ethernet; into a wall phone jack means telephone.
- **By the device on the end:** a telephone, answering machine, or fax points to the phone cord; a computer or TV box points to Ethernet.
- **By feel:** both click the same way, so don't judge by the tab — judge by the width of the plug.

✓ Your phone camera is a free magnifier

Open your phone's camera, point it at the plug, and pinch to zoom in. The wires and the width jump right out — no reading glasses needed, and no squinting on the floor.

Screw-on or push-on: the two kinds of coax ends

Coax is easy to spot, but it comes with two styles of connector, and knowing both saves a little fumbling.

The screw-on kind has a ridged metal collar you turn clockwise by hand onto a round threaded stub — snug and finger-tight is plenty, never pliers. The push-on kind has a smooth cap that simply pushes straight on and pulls straight off, which is handy for arthritic hands that find the twisting fiddly. Both carry the same signal; only the attaching differs.

Whichever kind you have, the single thin center pin must slide straight into the hole without bending. If the pin is bent to one side, the connection won't work and the cord may need replacing — a bent pin is a common, quiet cause of a snowy picture or a modem that won't come online.

✓ Finger-tight, pin straight

For the screw-on kind, turn the collar until it's snug with your fingers and stop. For either kind, glance at the center pin first — straight and centered is what you want before it goes on.

Following a cord from one end to the other

When the plug alone won't tell you enough, the surest answer is to trace the cord. It takes a minute and it never lies.

Start at the plug in your hand and run your fingers along the cord to its other end. Where it lands tells you what it is: a router or modem means Ethernet, a wall phone jack means the telephone cord, a round wall outlet or the back of a TV means coax. A cord that disappears into the wall and reappears nowhere is one to leave alone and ask about.

If cords are bundled too tightly to trace by hand, gently tug the one you're curious about near its plug and watch for the far end to twitch. A soft wiggle is safe; a hard yank is not. This simple trace sorts out even a bad tangle without unplugging a thing.

✓ Tag as you trace

As you identify each cord, wrap a strip of masking tape near the plug and write what it connects — 'modem to router,' 'TV box,' 'den phone.' You only have to trace a cord once if you label it the first time.

The mix-ups I see most often

A few honest mistakes account for most of the confusion. Knowing them ahead of time means you'll breeze right past them.

- **Phone cord mistaken for Ethernet:** they're close cousins. Remember the phone plug is narrower with fewer wires.
- **Thinking coax is the internet cord:** coax often feeds the modem, but the Ethernet cords carry the internet onward.
- **Unplugging the modem-to-router cord 'to tidy up':** that one short Ethernet cord keeps the house online — leave it be.
- **Forcing a phone plug into an Ethernet socket:** it may half-fit and feel wrong — stop, it's the wrong cord.
- **Assuming every wall outlet is live:** in older homes many phone and cable outlets lead nowhere anymore.

! Never force a plug

If a clear-plastic plug doesn't slide in and click with gentle pressure, it's the wrong size for that socket — a phone plug in an Ethernet hole, or the reverse. Forcing it can bend the little wires or crack the socket. Stop and check the width instead.

Keeping your wall cords working for years

These cords lead quiet lives behind furniture, but a little care keeps them trouble-free.

The weak spot on Ethernet and phone cords is the little click tab — if it snaps off, the plug won't stay seated and the connection drops in and out. Pull a cord out by the plug with the tab pressed, never by yanking the cord itself. For coax, the enemy is a sharp bend or a crushed spot, which can quietly spoil the signal.

Give every cord a gentle, loose path. A cord pinched under a heavy bookshelf leg, kinked tight around a corner, or baking against a hot appliance takes a beating you can't see. A loose loop for the slack is far kinder than a tight twist.

✓ A broken tab is fixable

If an Ethernet or phone plug won't stay put because the little tab broke off, the cord isn't junk — the plug end can be replaced, or the whole cord swapped cheaply. Don't wrestle with a cord that won't click; just retire that end.

Is it the cord, or something else?

When the internet or TV acts up, a cord is a common culprit — but not the only one. A quick, orderly check saves you buying the wrong thing.

First, make sure each cord is fully seated — Ethernet and phone plugs should click, and a coax collar should be finger-snug with its pin straight. A surprising number of outages are just a cord that worked loose. If everything is seated and it's still down, the trouble may be the modem, the router, or the service coming into the house.

Swap or reseal one thing at a time — cord, then box — so you know what fixed it. A classic last resort is to unplug the modem and router from power for a slow count of thirty, then plug them back in and wait a few minutes for the lights to settle. It's the same patient approach I'd use on a visit.

✓ Keep one spare Ethernet cord

A single known-good Ethernet cord in the drawer lets you test in a moment: swap it in for a suspect cord, and if the internet returns, you've found your culprit without guessing.

A simple system so you never wonder again

Naming the cords is step one. A light-touch system keeps them sorted for good — without turning it into a project.

Label the few cords that matter right at the plug: 'modem to router,' 'to TV,' 'cable from wall.' A strip of masking tape and a pen is all it takes. Then keep your spare cords together in one drawer, grouped by type — Ethernet in one bag, the odd phone and coax bits in another.

Tuck a copy of the chart from the at-a-glance page in with your spares, and keep that photo of the back of the boxes somewhere easy to find. Our guide on telling cables apart and our labeling guide take this further if you'd like to make the whole house tidy.

✓ Label before you ever need it

The best time to label a cord is the day it's working, not the day it fails. Two minutes with tape and a pen now saves a frustrating hunt on the floor later, often in the dark behind the television.

Buying a replacement without overpaying

You don't need the most expensive cord, and you don't want a no-name mystery one either. Here's the sensible middle.

For a network cord, ask for an Ethernet cable (you can mention the plug name RJ45 if it helps), pick a length with a little slack, and a plain, reputable one is fine for home internet. For a phone cord, ask for a telephone cable. For coax, bring the old one or a photo so the shop matches the screw-on or push-on end and the right thickness.

Fancy claims on cable packaging rarely matter for ordinary home use — the plain description of length and type is what counts. A sturdy jacket and a plug whose tab clicks firmly are worth more than a flashy name. When it matters, buy from a seller you'd trust for anything else.

★ Text me a photo of the cord before you buy

Snap a picture of the plug you need to replace and the socket it goes into, and I'll tell you exactly what to ask for — so you order once and it just works. No commission, just a straight answer. Call or text (330) 200-8042.

Old phone jacks and cable outlets: what to keep

Older homes carry decades of cords and wall outlets, and plenty of them no longer do a thing. Here's how to tell the useful from the leftover.

A room may have a telephone jack by the baseboard that hasn't carried a phone line in years, and round cable outlets in bedrooms that were wired long ago and never used. None of that is a problem — it's just history in the walls. What matters is the one coax outlet that reaches your modem and the Ethernet cords that carry the internet from there.

You don't have to remove the old jacks and outlets. Simply trace the few cords your internet and TV actually use, label those, and let the rest sit quietly. If you're ever unsure whether an outlet is live, that's a fine thing to have a helper check rather than guess.

! Don't rely on the color or the age

An old cord that looks important may be dead, and a plain new one may be the lifeline. Judge a cord by where it leads and whether its light blinks, never by how old or fancy it looks.

Your quick reference, start to finish

The short version you can lean on any time a cord behind the boxes has you stumped.

- ❑ Wide clear plug, eight wires, clicks into a router or modem = Ethernet.
- ❑ Narrower clear plug, fewer wires, into a wall phone jack = telephone.
- ❑ Round metal tip with a single center pin = coax (cable TV or cable modem).
- ❑ Your internet needs the Ethernet cords; cable internet also needs one coax cord to the modem.
- ❑ Trace a cord end to end when the plug alone won't tell you.
- ❑ Never force a plug, and don't unplug an internet cord just to see.
- ❑ Label the few cords that matter, and keep a photo of the back of the boxes.

★ Keep this guide behind the TV

You don't have to hold any of this in your head. Keep these pages with your cords, and when in doubt, I'm a phone call away at (330) 200-8042.

Common Questions

The questions I hear most about wall cords, answered plainly.

Q: How do I tell an Ethernet cord from a phone cord?

Look at the clear plug: Ethernet is distinctly wider with eight little wires across the tip, while the phone cord is narrower with just two or four wires in the middle. Side by side the difference is plain. Where the cord leads also tells you — a router or modem means Ethernet, a wall phone jack means telephone.

Q: Does my internet need the coax cable?

If your internet comes over the cable-TV line, yes — one coax cord feeds the modem from the wall. But the coax isn't the internet cord itself; the Ethernet cords carry the internet onward from the modem to the router and your devices.

Q: Can I plug a phone cord into the internet box?

The plug may look close, but a phone cord is too narrow for an Ethernet socket and won't click in properly. Don't force it. The exception is internet delivered over old phone lines, where a phone-style cord does run to the modem — check where the cord actually leads.

Q: What's that round cord with the pin in the middle?

That's coax — the cable-television cord. The single thin center pin and the round metal tip that screws or pushes on are its sure signs. It runs to a TV, a cable box, or a cable-internet modem.

Q: One of my cords is loose — which ones can I safely unplug?

Be careful with any cord running between the modem and the router, or from the wall to the modem — unplugging those can take the house offline. If a cord is clearly loose, reseal it gently the same way it came out. When in doubt, trace it first or give me a call.

★ Still holding a mystery cord?

Sorting out the cords behind the TV is one of my favorite little jobs — quick, satisfying, and it clears a real worry. Call or text (330) 200-8042 and we'll name every one of them.

You don't have to do this alone

You just have to remember that a friendly, patient person is one call away.

I hope this guide made identifying the cords behind your TV and internet feel a little less daunting and a lot more doable. Keep it in a drawer with your other home papers, come back to a page whenever you need it, and don't worry about memorizing anything.

When you'd rather have a hand, that's exactly what I do. I come to your home, work at your pace, and never make you feel rushed or silly for asking. A first visit is a flat \$99, and for the parts that don't need me on-site I can often help right on your screen for \$49. Every visit comes with a 30-day, come-back-free guarantee. I don't do licensed electrical, gas, or appliance-repair work myself — for that I'll help you line up a trustworthy local pro.

★ Bill's Home Tech — real help, close to home

Call or text me at (330) 200-8042, or visit BillsHomeTech.com. Serving Atwater and all of Portage County. 30+ years of patient, plain-English tech help — and if you're ever not 100% happy with a visit, I'll make it right or refund it. That's a promise. — Bill

The Three Wall Cords You'll Meet

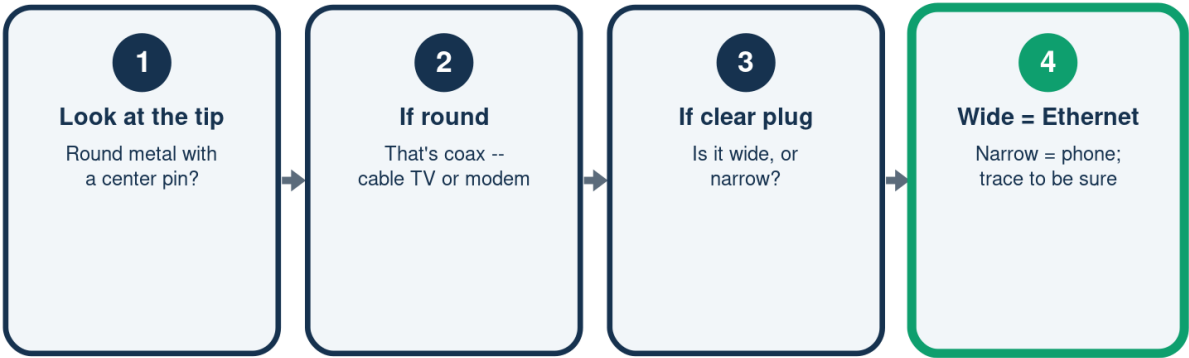
Learn these by shape and the tangle stops being a mystery

	What it looks like	Where it goes
Ethernet	Wide clear plug	Router, modem
Telephone	Narrower plug	Wall phone jack
Coax	Round, center pin	Cable TV, modem

Ethernet and phone share a style; coax stands apart.

Naming a Wall Cord, Step by Step

A quick way to place a cord without squinting on the floor



When unsure, follow the cord to its far end.

Ethernet or Telephone?

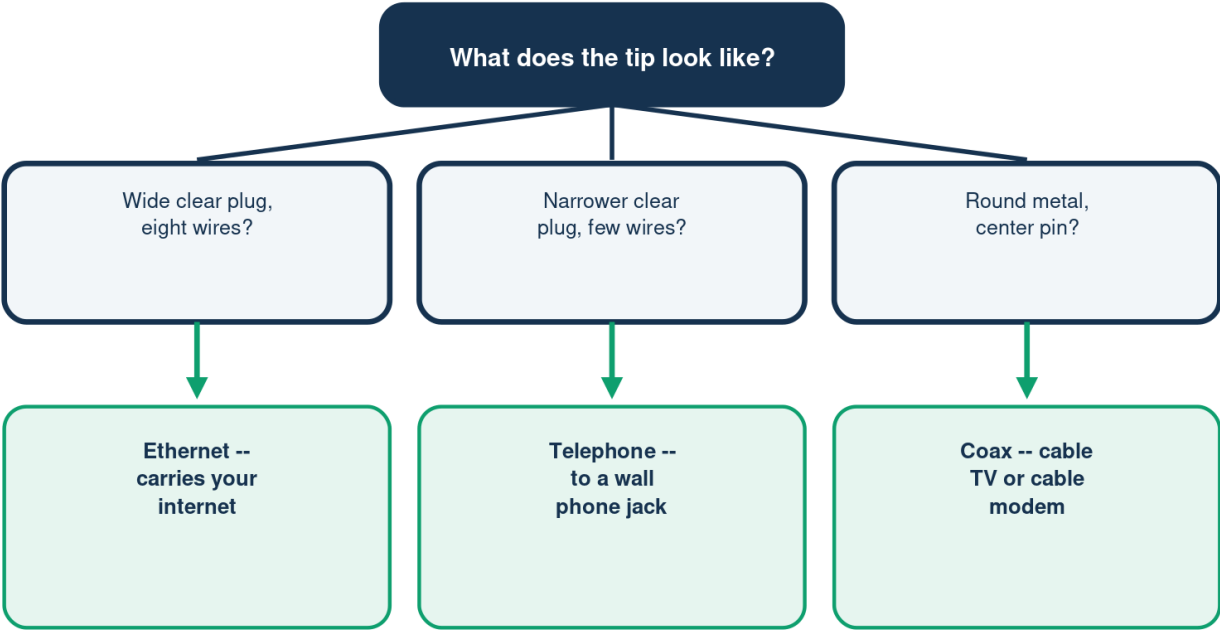
The two clear-plug look-alikes, told apart

	Ethernet	Telephone
Width	Wider plug	Narrower plug
Wires inside	Eight wires	Two to four
Leads to	Router, modem	Wall phone jack
Also called	RJ45	RJ11

Set them side by side and the width settles it.

Which Cord Is This?

Start with the shape of the tip in your hand



Your internet needs the Ethernet cords; cable also needs one coax.

Illustration - a schematic, not to scale. Your setup may differ.



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A Note From Bill

A quick note from Bill.

I write these guides to make home tech a little less frustrating, and I do my best to keep every step accurate and up to date. Still, every home, device, and setup is a bit different, so I can't promise a guide will match yours exactly or fix your particular problem. These guides are for general information only — they're not professional, legal, or financial advice, and they don't replace your device's own manual or the manufacturer's instructions. Please go slow, use your own good judgment, and use everything here at your own risk. If a step involves electrical wiring, a gas appliance, a water heater, plumbing, or climbing a ladder — or if anything just doesn't feel safe — please stop and call a licensed professional (or give me a call at 330-200-8042). Bill's Home Tech and Bill Davis can't be responsible for any damage, data loss, or injury that comes from using these guides. Thanks for reading, and stay safe out there.

— *Bill*



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