



An Extended Guide · No. 1629

# Matching the Right Fuel to Your Generator

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Gas, propane, or both —  
run what it's made for

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**! Read this first — carbon monoxide is the real danger**

A running generator's exhaust contains carbon monoxide — an invisible, odorless gas that can kill in minutes. Never run a generator indoors, in a garage, in a shed, or on a porch, not even with the door open and a fan going. Run it outside only, well away from the house — the safety agencies say at least 20 feet — with the exhaust pointed away from every window, door, and vent. Put battery-backup carbon-monoxide alarms on each floor and outside the bedrooms. If an alarm sounds, or anyone feels dizzy, sick, or sleepy, get everyone into fresh air first and ask questions later. Whichever fuel your generator runs on, it's still a fuel and it still produces exhaust, so the same distance and carbon monoxide rules apply no matter which one you choose.

## Let's match the right fuel to your generator

Not every generator runs on the same fuel, and running the wrong one can cost you an engine or a cold start when you need it most. This guide helps you understand what your generator is built for, and how to think about gasoline, propane, natural gas, and diesel in plain English.

I'm Bill, and I run Bill's Home Tech here in Portage County, Ohio. One of the more common calls I get is from someone who bought fuel or a cylinder without checking what their generator actually runs on — an easy mistake, and an easy one to avoid.

We'll start with the golden rule, then walk through the fuel families so you know which one describes your machine, and the honest trade-offs of each.

**★ There's no silly question here**

If you're ever unsure which fuel your generator takes, or how to switch between them safely, that's exactly the kind of thing I'm glad to look at. Describe it to me, or I'll come see it in person. Call or text me at (330) 200-8042.

## The whole guide, on one page

If you remember only these things, you'll always fuel your generator the right way.

- ❑ The golden rule: your owner's manual says exactly what fuel or fuels your generator runs on — check it, don't guess.
- ❑ Generators generally fall into families: gasoline-only, propane-only, dual-fuel, tri-fuel, and diesel.
- ❑ Running the wrong fuel can damage the engine or simply keep it from starting.
- ❑ On a dual-fuel or tri-fuel unit, switch fuels only when the generator is turned off, following your manual.
- ❑ Each fuel has honest trade-offs — none is universally best.
- ❑ Diesel is its own family entirely, with its own storage and cold-weather habits.

### ✓ The manual is the whole answer

You don't need to memorize fuel types. Whenever you're unsure, your owner's manual settles the question every time.

## The golden rule: your manual decides

Every generator is built for a specific fuel or set of fuels, and that's not a preference — it's how the engine was engineered.

Your owner's manual will tell you exactly what fuel or fuels your generator is designed to run on, and it's the single most reliable source — more reliable than a guess based on what the generator looks like or what a neighbor's machine runs on.

If you've lost the manual, the manufacturer's website or customer support can usually help, and a generator or small-engine dealer can often identify the fuel type from the model information on the unit itself.

### **! Never guess and try it**

Running fuel a generator wasn't built for can damage the engine, and in some cases it simply won't run at all. If you're not sure what your generator takes, find out before you fuel it up, not after.

## The fuel families, in plain English

Generators generally fall into a handful of fuel families — here's what each one means.

- **Gasoline-only:** runs on gasoline alone, the most common and familiar setup.
- **Propane-only:** runs on propane alone, usually from a cylinder or a larger tank.
- **Dual-fuel:** built to run on either gasoline or propane, with a knob or valve that lets you switch between them.
- **Tri-fuel:** adds natural gas to the mix, so it can run on gasoline, propane, or a home's natural gas line.
- **Diesel:** its own family entirely, running on diesel rather than gasoline or propane.

### ✓ Diesel is its own guide

Diesel generators have their own habits around storage and cold weather. Our diesel storage and winter gelling guide covers that side in full — this guide focuses on the gasoline, propane, and natural gas families.

## Gasoline-only generators

The most familiar setup, and for good reason.

A gasoline-only generator runs on gasoline and nothing else. It's the most common type, and gasoline itself is easy to find almost anywhere, even during a regional outage. The trade-off is that gasoline goes stale over time, so keeping it fresh takes a little ongoing attention.

For the details on keeping gasoline fresh and rotating your supply, see our [how-much-and-rotation](#) guide and our [ethanol-free gasoline](#) guide — both dig into that side well beyond what we'll cover here.

### ✓ Fresh fuel, ready generator

A gasoline generator is only as ready as the fuel sitting in the can. A simple rotation habit is the difference between a generator that starts and one that doesn't.

## Propane-only generators

Propane trades a little power for a lot of peace of mind about fuel freshness.

A propane-only generator runs on propane, typically from a cylinder or a larger tank. Propane stores for years without going stale, which is a real comfort for a generator that mostly waits between outages. It typically delivers a little less power than the same generator would on gasoline, and it can struggle to vaporize properly in bitter cold.

For more on cylinders, tank sizes, and cold-weather propane behavior, see our propane cylinder storage guide, our propane tanks guide, and our cold-weather propane guide.

### ✓ Why many folks lean on propane

For backup power you hope to rarely use, not having to worry about stale fuel is a real advantage. It's one reason dual-fuel generators are popular — you get propane's shelf life and gasoline's availability.

## Natural gas: no storage, but a pro hookup

Natural gas is the one fuel family here you don't store at all.

If your generator is fed by a home's natural gas line — either a tri-fuel portable or a dedicated standby unit — there's no tank or can to keep fresh, because the fuel is piped in continuously. That's a genuine convenience, especially for a long outage.

The trade-off is that connecting a generator to a natural gas line is a licensed-pro job, not a do-it-yourself project. Our natural gas basics guide covers the fundamentals and staying safe; I'll help you plan the project and line up a licensed pro for the hookup itself.

### ★ I coordinate the pro work

I'm a tech helper, not a licensed gas fitter, so I won't do the gas hookup myself — but I'm glad to help you plan the project and line up a trustworthy local pro to do it safely. Call (330) 200-8042.

## Dual-fuel and tri-fuel: switching between them

Having options is wonderful, as long as you switch the right way.

A dual-fuel or tri-fuel generator gives you real flexibility, but switching fuels isn't something to do on the fly while it's running. Follow your owner's manual, and as a general rule, switch fuels only when the unit is turned off.

- Turn the generator off before switching fuel sources.
- Follow your manual's exact steps and order for the switch — they vary by model.
- Let the engine fully use up the fuel it was running on, where your manual calls for that, before switching.
- If a switch doesn't go smoothly, don't force it — that's worth a call to the manufacturer or a qualified technician.

### **! The manual has the last word**

Every dual-fuel and tri-fuel generator switches a little differently. Trying to improvise the switch, rather than following the manual, is how people damage an engine or strand themselves without power.

## Why the wrong fuel causes real trouble

This isn't a small mismatch — it's worth understanding why it matters.

An engine built for one fuel is tuned for how that fuel burns. Put in a fuel it wasn't designed for, and at best it simply won't start or run properly; at worst, it can cause lasting engine damage that's expensive to fix and entirely avoidable.

This is why the golden rule from the start of this guide matters so much: check your manual, know your generator's fuel family, and never assume based on what a similar-looking generator runs on.

### **! Don't experiment to find out**

If you're not certain what fuel your generator takes, don't fuel it up and see what happens. Check the manual, call the manufacturer, or ask a dealer or me before you try it.

## Honest trade-offs, side by side

There's no single best fuel — just the one that fits how and where you'll use your generator.

|              | Gasoline          | Propane                     |
|--------------|-------------------|-----------------------------|
| Availability | Everywhere        | Needs supply or exchange    |
| Power        | Full rated power  | Slightly less               |
| Shelf life   | Goes stale        | Stores for years            |
| Cold weather | Handles cold well | Can struggle in bitter cold |

Natural gas and diesel are worth a quick word too: natural gas needs no storage at all, but only if you already have, or install, a line to the generator; diesel is a different family entirely, covered in its own guide, with its own storage and cold-weather habits.

✓ **Every fuel has a dedicated guide**

This page is the honest quick-comparison. For real depth on any one fuel — rotation, cylinders, cold weather, natural gas basics, or diesel — this guide set has a dedicated one for each.

## Two kinds of homes, two sets of needs

The fuel that makes sense for your generator often lines up with where you live.

### If you live in town or the suburbs

In town or a close-in suburb, a gasoline or dual-fuel generator is common, since a station or an exchange cylinder is usually a short trip away, even mid-outage.

- A gasoline or dual-fuel generator covers most in-town needs, with propane as a fresh-anytime backup.
- A small propane cylinder or two is easy to store in a tighter space.
- If natural gas is already piped to your home, a tri-fuel or dedicated natural-gas standby unit is worth considering.
- Check any city or neighborhood-association rules on fuel storage before choosing a setup.

### If you are out in the country on a well

Out in the country, a longer drive to a station and longer outages often point toward propane or natural gas, especially with a bulk tank or a delivery-dealer relationship.

- A larger propane tank or a delivery relationship with a local dealer supports longer runtime without a station trip.
- Dual-fuel or tri-fuel flexibility is valuable when a supply run is a real drive.
- Diesel is common for farm equipment and larger generators — see our diesel storage guide for that side.
- Ask your fuel supplier or dealer about sizing a tank or delivery schedule for your actual runtime needs.

#### ★ Not sure which setup fits you?

Tell me what you're running and how far you are from a fuel supply, and I'll help you think through gasoline, propane, or both. Call (330) 200-8042.

## Checking what generator you already have

If you're not sure which family your generator belongs to, here's how to find out.

- Check the owner's manual first — it will say plainly what fuel or fuels the unit runs on.
- Look at the generator itself: a fuel tank and gas cap point to gasoline; a regulator and hose fitting point to propane; a knob or valve suggests dual-fuel or tri-fuel.
- The manufacturer's website or customer support can help if you have the model information but not the manual.
- A generator or small-engine dealer can often identify the fuel type in person.

### ★ I'm glad to help you sort it out

If you're staring at a generator and genuinely not sure what it runs on, that's a quick thing to sort out together. Call (330) 200-8042.

## If you're choosing a generator, not just fueling one

This guide is mostly about the generator you already have, but a word for anyone shopping.

If you're in the market for a generator, think honestly about which fuel fits your life: how far you are from a station, whether you already have a propane setup or a natural gas line, and how much you want to think about fuel rotation. There's no wrong answer, only the one that matches your situation.

I won't steer you toward a specific brand or model — that's not what I do — but I'm glad to talk through the fuel-family question with you before you buy, so the generator you choose actually fits how you'll use it.

### ★ Let's talk before you buy

A quick conversation before you purchase can save you from a mismatch you'll regret later. Call or text me at (330) 200-8042.

## Common mistakes people make

A handful of avoidable mix-ups account for most fuel-matching trouble.

- **Assuming a generator is dual-fuel** when it's actually gasoline-only, and trying to run propane through it.
- **Switching fuels while the generator is running** instead of turning it off first.
- **Buying propane or gasoline before checking the manual**, then discovering it's the wrong fuel entirely.
- **Assuming a similar-looking generator runs the same fuel** as a neighbor's or a past model.
- **Skipping the natural gas hookup planning** and assuming it's a simple do-it-yourself job.

### **! When in doubt, check before you fuel**

Every one of these mistakes is avoidable with one look at the manual. It's a small habit that prevents real engine damage.

## A note on power, without the numbers

I won't hand you a wattage chart here, and I have a good reason.

You'll sometimes hear that a generator makes a bit less power on propane than on gasoline. That's generally true, but the exact difference varies by model, so I won't put a number on it here — your owner's manual is the accurate source for your specific generator.

What matters practically is this: if you plan to run your generator mostly on propane, it's worth checking your manual for how that affects what it can power, rather than assuming gasoline-rated numbers apply across the board.

### ✓ Your manual has the real numbers

For wattage, runtime, and fuel-consumption figures, your owner's manual is the one accurate source — not a general rule of thumb, and not what a similar model claims.

## Diesel: worth its own mention

Diesel generators don't fit the gasoline-propane-natural gas picture at all, and that's by design.

A diesel generator runs on diesel exclusively — it's not something you switch to occasionally the way you might toggle a dual-fuel unit. Diesel has its own storage habits, including keeping water out and getting ahead of cold-weather gelling.

If diesel is part of your setup, our diesel storage and winter gelling guide is the right next read — it covers containers, cold weather, and the habits that keep diesel ready, in the same plain-English style as this one.

### ✓ One engine, one fuel

Unlike dual-fuel or tri-fuel units, a diesel generator isn't built to flex between fuels. Plan around diesel on its own terms.

## Questions worth asking

Whether you're asking a manufacturer, a dealer, or me, these get you real answers.

### **Q: How do I know what fuel my generator takes?**

Check the owner's manual first. If you don't have it, the manufacturer's website, customer support, or a generator dealer can usually identify it from the model information.

### **Q: Can I run propane through a gasoline-only generator?**

No. Running a fuel your generator wasn't built for can damage the engine or simply keep it from starting. Only use the fuel or fuels listed in your manual.

### **Q: How do I switch fuels on a dual-fuel generator?**

Turn the generator off first, then follow your manual's exact steps — they vary by model. Never try to switch while it's running.

### **Q: Is propane or gasoline better for a generator?**

Neither is universally better — gasoline is everywhere and gives full power, while propane stores for years and runs cleaner but a bit less powerfully and can struggle in bitter cold. Many people like having both with a dual-fuel unit.

#### **✓ There's no silly question**

Fuel families and switching steps can feel more complicated than they need to be. Ask until you're confident — that's exactly how you protect your engine.

## A simple fuel-matching checklist

Walk through this once and you'll never second-guess a fuel choice again.

- ☐ I know for certain which fuel or fuels my generator is built to run on.
- ☐ I checked the manual, not a guess, a neighbor's setup, or a similar-looking model.
- ☐ If my generator is dual-fuel or tri-fuel, I know the manual's steps for switching safely.
- ☐ I only ever fuel it with what the manual lists — nothing else.
- ☐ If it runs on natural gas, the hookup was done, or will be done, by a licensed pro.
- ☐ If it runs on diesel, I've read our diesel storage and winter gelling guide.

### ★ I'll help you confirm it

If you'd like a second opinion on what your generator takes or how to switch it safely, that's a quick, worthwhile visit. (330) 200-8042.

## Whatever the fuel, the exhaust rule doesn't change

This is worth repeating on its own page, because it's easy to assume otherwise.

Gasoline, propane, natural gas, and diesel generators all produce exhaust with carbon monoxide, and the safety rules are identical no matter which fuel you've matched to your machine: run it outside only, well away from the house, with the exhaust pointed away from windows, doors, and vents.

Don't let a cleaner-burning fuel like propane or natural gas tempt you into running a generator somewhere you wouldn't run a gasoline one. The rule is the same for all of them.

### **! No fuel is safe to run indoors**

Never run a generator of any fuel type in a garage, shed, porch, or any enclosed or partly enclosed space, even with a door or window open. Outside only, well clear of the house.

## Common Questions

The fuel-matching questions I hear most often, answered plainly.

**Q: What happens if I put the wrong fuel in my generator?**

At best it won't start or run properly; at worst it can cause real engine damage. Always check your manual and use only the fuel or fuels it lists.

**Q: Can I convert a gasoline-only generator to run on propane?**

Some conversion options exist for certain models, but that's a decision to make with the manufacturer or a qualified technician, not a guess — it's outside what I'd do myself.

**Q: Does a dual-fuel generator run equally well on both fuels?**

Generally it runs at full strength on gasoline and a bit less on propane, though the exact difference depends on the model. Your manual has the specifics for yours.

**Q: Do I need a professional for a natural gas generator?**

Yes, for the gas line hookup itself — that's licensed-pro work. I can help you plan the project and line up a trustworthy local pro.

**★ Still have a question on your mind?**

That's what I'm here for. Call or text me at (330) 200-8042 and I'll give you a plain, honest answer — and if it's easier to just show me, I'll come take a look.

## How this fits with the rest

Matching the right fuel is the first decision — here's how the rest of the pieces connect.

This guide focused on knowing your generator's fuel family and switching safely. For depth on any one fuel, see our [how-much-and-rotation](#) guide and our [ethanol-free gasoline](#) guide for gasoline, our [propane cylinder storage](#), [propane tanks](#), [home propane supply](#), and [cold-weather propane](#) guides for propane, and our [natural gas basics](#) guide for a piped-in supply.

If diesel is part of your setup, our [diesel storage and winter gelling](#) guide covers that family in full. You don't have to read everything at once — start with the fuel your generator actually uses.

### ★ One call sorts it all out

You don't have to sort out which guide answers which question. Call or text me at (330) 200-8042, describe your setup, and I'll tell you plainly what you're doing well and what's worth changing.

## 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 matching the right fuel to your generator 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 the licensed electrical or gas 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 Fuel Families at a Glance

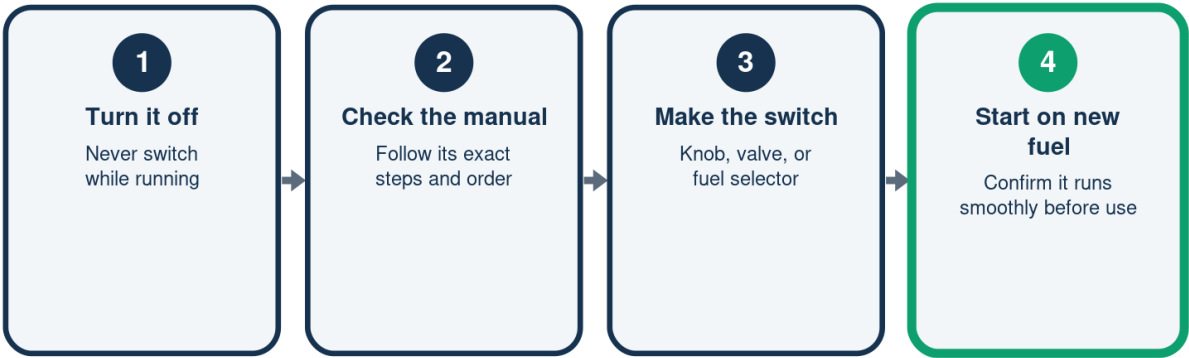
What your generator runs on shapes everything else

|               | Runs on            | Switch fuels?  |
|---------------|--------------------|----------------|
| Gasoline-only | Gasoline           | No             |
| Propane-only  | Propane            | No             |
| Dual-fuel     | Gas or propane     | Yes, off first |
| Tri-fuel      | Gas + propane + NG | Yes, off first |
| Diesel        | Diesel only        | No             |

Your manual says which family your generator belongs to.

# Switching Fuels on a Dual-Fuel Generator

Always in this order, never while it's running



Every model switches a little differently -- the manual is the guide.

## Honest Trade-offs: Gasoline, Propane, Natural Gas

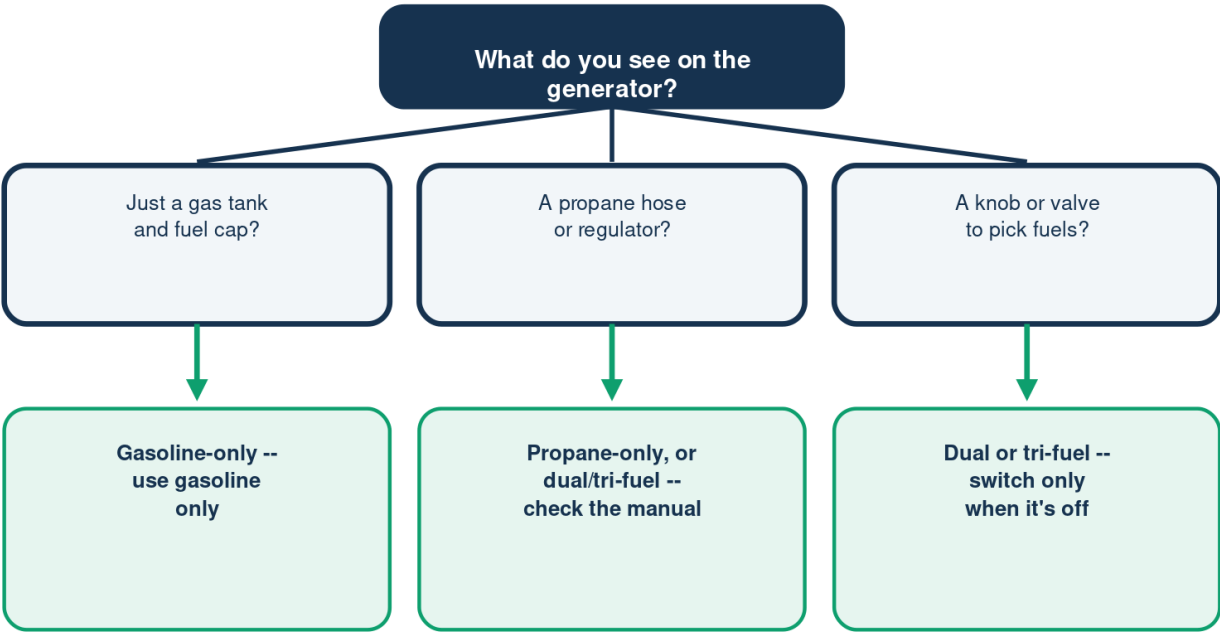
No single best fuel -- just the one that fits you

|                | Gasoline       | Propane             | Natural gas  |
|----------------|----------------|---------------------|--------------|
| Availability   | Everywhere     | Cylinder or tank    | Piped in     |
| Storage needed | Yes, rotate it | Yes, but keeps long | None         |
| Power          | Full rated     | Slightly less       | Full rated   |
| Cold weather   | Handles well   | Can struggle        | Handles well |

Diesel is its own family -- see our diesel storage guide.

# Which Fuel Family Is Your Generator?

A quick way to think it through -- the manual has the final say



Still not sure? Your owner's manual or the manufacturer can tell you for certain.

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



## Need a Real Person?

You do not have to remember all of it.  
You just have to remember you can call.  
Friendly, in-home tech help -- I come to you.

### BILL'S PROMISE

If you are not 100% happy with a visit, I will  
make it right -- or refund it. No awkwardness,  
no fine print. That is how I would want to be treated.

**(330) 200-8042 · BillsHomeTech.com**

Bill@BillsHomeTech.com · Mon–Sat 9:00 AM – 7:30 PM

— Bill

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### Prefer help without a visit?

Bill can screen-share and fix many things remotely — a flat \$49, free for Support Plan members.



## 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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