BY JOHN SPIER

Jack of All Saws

One of the first and most versatile power tools a new carpenter is likely to buy is a reciprocating saw. Milwaukee didn't invent the tool, but for many years, the manufacturer's reciprocating saws have been some of the best, and its trademarked name, Sawzall, has become a generic term for the tool.

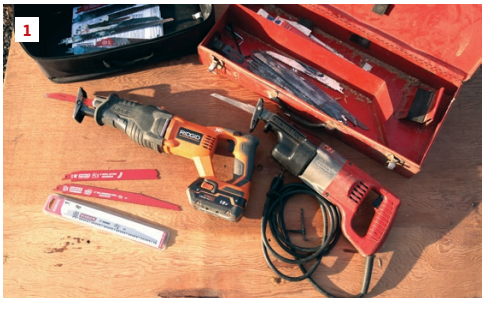
Most professional-grade recip saws are powerful 5-amp to 8-amp beasts with orbital action, adjustable feet, variable speed, and other helpful features. In recent years, cordless technology has improved to the point that I often leave my corded recip saw in the shop, in favor of a cordless version on the jobsite **(1)**.

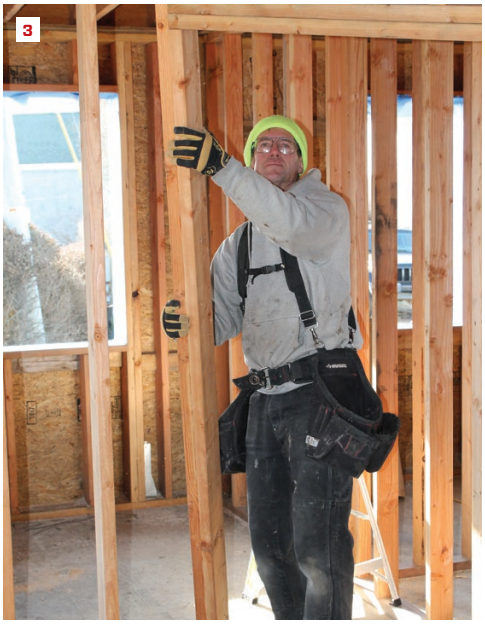
BASIC OPERATION

There's no science to using a recip saw—just get a good grip on the tool and cut away. As with any other type of power saw, keep the physics of the saw in mind, cutting so that the kerf doesn't pinch and bind up the blade. And stick your head around the other side of whatever you're cutting to make sure there are no pipes, wires, or gas lines in harm's way. Use the foot to push against the work, to keep the saw from shaking and to transfer maximum cutting power to the teeth. I often start a cut with a circular saw because it's faster and cuts straighter. Then I use the recip saw to finish the part of the cut that the circular saw couldn't reach.

Many recip saws have adjustable feet that you can extend or remove altogether. Adjusting the foot out in increments lets you use a fresh part of the blade as the teeth wear out from cutting metal or other hard materials. Also, taking the foot off altogether can give you that bit of extra reach with the blade, but be careful not to damage the blade-fastening components or the end of the tool body when using a recip saw with the foot removed.

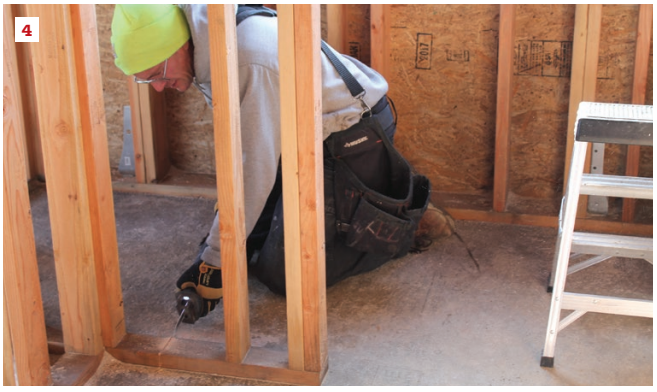
While we are on the subject of blade-fastening components, the keyless chucks that most recip saws are equipped with now are a huge improvement over the old set-screw attachments. But keyless chucks are relatively delicate mechanisms that can load up with dust quickly. Periodically

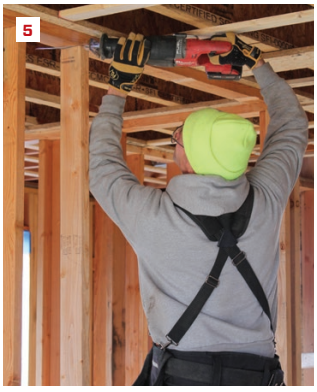


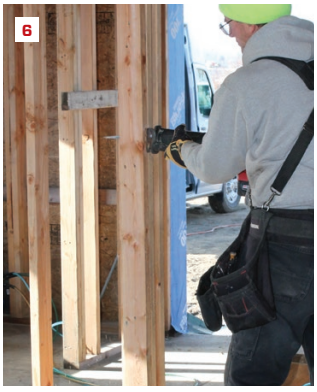


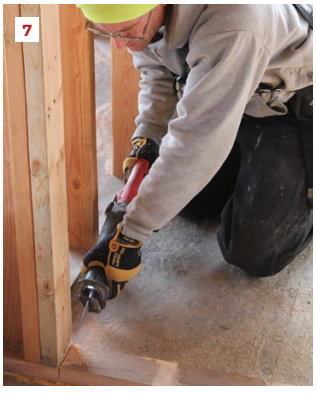
The reciprocating saw on the right in the photo is a corded version from the 1980s, and the cordless saw on the left is much newer and comes with a quick blade-change mechanism **(1)**. An assortment of blades can also be seen in the saw cases. A recip saw can be used to clip the nails at the top and bottom of the studs **(2)** so a framed opening can be removed in one piece **(3)**.

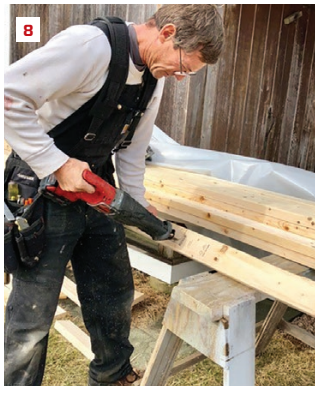
Photos 8, 10, and 12 by Jen Brady; all others by Gabriela Gazo.

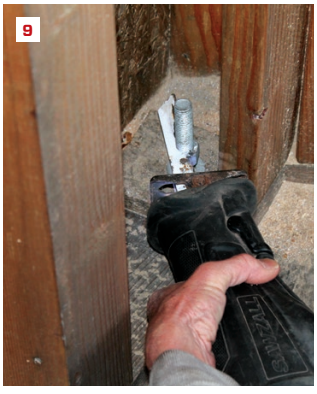












The author slices through a plate to shorten a wall **(4)**. A recip saw makes quick work of removing a stud without damaging it **(5)**. Using wedges to hold the boards apart, the author clips nails to remove a jack stud **(6)**. A recip saw can also cut out a rough sill **(7)** and make a notch in a stud **(8)**. A metal-cutting blade can slice off a bolt **(9)**, or cut through pipe quickly **(10)**.

blasting them out with compressed air and then spraying in some lubricant will keep them functioning smoothly for a long time.

BLADES

Most hardware stores stock a wide variety of blades and other attachments for recip saws. I keep a collection of blades in the truck, mostly bi-metal blades in 6-, 9-, and 12-inch lengths. For cutting through framing, I typically choose bi-metal blades made for wood cutting or general-purpose cutting. They can cut right through nails you encounter as you slice through existing framing. These blades will "clip" nails or drywall screws if you want to remove framing without tearing out the drywall or sheathing. I find that some of the thicker, heavier blades specifically designed for demolition are occasionally useful, but they're also slower. Thinner kerf blades cut much faster, and because recip-saw blades cut on the pull stroke, thinner blades work fine for demolition as long as they don't bind in the work.

For cutting metal, I also keep a collection of bi-metal cutting blades, which are most useful for cutting rebar, pipes, and bolts. Because of their finer teeth, I also use metal-cutting blades when I need to make the occasional clean cut in finish material. Rounding out my collection are scrolling blades that are good for cutting a tight radius and abrasive blades for cutting tile or glass. I even own a scraper attachment and have seen other attachments with anything from files and abrasive pads to a special attachment for removing grout from between tile.

JOBS FOR A RECIP SAW

Few tools are as tough and versatile as a recip saw. It's sort of a jack of all jobs, master of none. Recip saws are mainly used for taking things apart, and they're great for other stuff as well. But for almost every task we use one for, there may be another tool that can do it better, so be selective before automatically reaching for your recip saw. Here are some of the most common uses for these tools:

Making changes. When we make a mistake (or if the client or architect does), the recip saw is our go-to tool for fixing it. Unlike a sledgehammer or wrecking bar, a recip saw can let you disassemble things so that they can be put back together. Sometimes, I'll take an entire assembly out of a wall, such as a misplaced door or window frame, and then reinstall it in a different location **(2, 3)**.

Rework. Similarly, we use our recip saw to make changes to existing work. If I want to add an opening, move or shorten a wall **(4)**, shorten a soffit, shift a joist, or do any of a thousand other modifications, I usually reach for my recip saw.

Demolition. A recip saw is a great tool for destruction, although I've had to show many people that an old circular saw will make most demo cuts much faster and more efficiently if you have access for using it. (There are few things that frustrate me more than seeing someone spend 10 minutes making a cut that I can do in 10 seconds with another tool).

Salvaging material. A recip saw makes it easy to cut out a stud and save it. Just clip the nails at the top and bottom **(5)**. With a couple of wooden wedges and a recip saw, I can take apart almost anything in a house and leave the pieces in re-usable condition **(6)**.

Removing sill plates at framing. Like most framers, I build and stand my interior walls with the bottom plates running through the openings. I always try to make courtesy cuts in the bottoms of the plates before they go up, but either way, the recip saw is the right tool for cutting the plates out of the openings later **(7)**.

Cutting sheathing from openings. If you can cut an opening from the outside, a router or circular saw does a better job. But we often need to make this cut from the inside, and a recip saw works just fine. I use a long blade and use the inside edge of the rough-opening framing to steer the cut so that the cut doesn't become an ugly, angled mess.

Cutting curves. A jigsaw offers more control, but a recip saw is faster. And for many of the curves we need to cut when we're framing, faster is better.

Making holes and notches. Nothing makes a GC cringe like the sight of a subcontractor with a recip saw; those guys can ruin good framing in a blink. That said, a carefully wielded recip saw is often the right tool for getting pipes, wires, ducts, and other components through a structure **(8)**. And sometimes it can be a great time-saver: You can spend a half hour ruining a knuckle-busting hole saw in a nail-infested rim joist, or you can cut a hole in two minutes with your recip saw.

Cutting pipes, wires, cables, bolts, rebar, and other odd material. With the right blade, a recip saw can cut almost anything and often in the most hard-to-reach places, such as a foundation bolt in a narrow bay **(9)**. I've also used a recip saw to slice into existing copper pipe. While a tubing cutter might make a smoother cut, the recip saw can make a quick cut in a pinch **(10)**. And the cordless version might be appreciated if there is water in the pipe. For some of these jobs, a recip saw might be the only tool that works.

Thieving shingles. In my area, almost every house is sided with cedar shingles, and we often need to make changes or repairs to those shingles. The traditional method for removing shingles from underneath overlying courses is to use a miserable hand tool called a thief. This long, flat tool slips up behind the shingle and hooks the nail; then you drive it down to "steal" the nail. But the electric version of this tool is a recip saw with a long bi-metal blade **(11)**.

Sanding or cleaning holes. I sometimes wrap sandpaper around a long blade, tape it securely, and use it to sand the inside of a hole or some other hard-to-reach spot, such as the inside of the dagger board trunks on my catamaran.

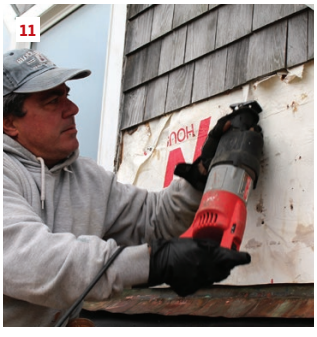
Pruning. A cordless recip saw is perfect for cutting pesky branches out of the way **(12)**. In fact, with one of the new specialized pruning blades, it could become a mainstay of a landscaper's arsenal.

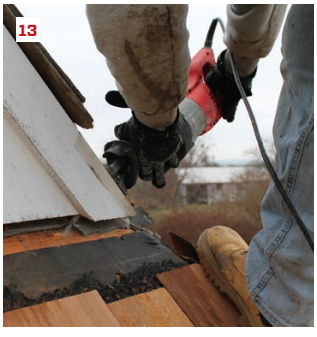
Mechanical work. Many of the carpenters I know work on their own vehicles, and a recip saw will make quick work of a rusty exhaust system, corroded shocks, or seized lug nuts.

Fine finish work. We joke about some guys who put down their chain saws when they're done framing, and grab their recip saws to finish the trim. But jokes aside, a recip saw with a fine-toothed metal blade can sometimes make a smooth cut in a location where other tools can't reach.

Specialty tasks. As mentioned above, there are many different accessories available to adapt your recip saw to other jobs, such as scraping, scrollwork, grinding, or cutting exotic materials **(13)**. Usually, there are better tools for these jobs, but carrying a recip saw with these attachments on the truck can bail you out sometimes.

John Spier owns Spier Construction, a building and remodeling company on Block Island, R.I.





A long blade cuts the nails behind the shingles so the shingles can be removed **(11)**. Here, a special pruning blade turns a recip saw into a landscaping tool **(12)**. The flashing behind this rake trim needed to be replaced; a recip saw clips the nails that were holding the original flashing in place **(13)**.

For a more detailed discussion on reciprocating saws, go to **www.jlconline.com/training-the-trades/jack-of-all-saws**.