



Get the Most From Your

Multitool

Even if you've had an oscillating tool for years, you may not be using it to its full potential

BY KEVIN IRETON

In 1943, Homer Stryker used the motor from a malted-milk machine to build the first oscillating electric saw. An orthopedic surgeon in Kalamazoo, Mich., Stryker was looking for a way to remove plaster casts quickly and safely. He received a patent on the saw in 1947. Why it took 50 years for this tool to reach the job site, I'll never know.

Fein, the German power-tool company, gets the credit for bringing the tool to a larger market. In 1985, the company adapted its plaster-cast saw for use in the automotive industry, where it was used to saw through auto bodies and, after being fitted with specialty blades, to remove windshields that were glued in place with silicone. Fein introduced

an oscillating sander to the woodworking market a year later, but it wasn't until 1995 that the MultiMaster appeared, with all of its cutting, scraping, and sanding accessories.

Even then, Fein didn't see the potential mass appeal of the tool until about 2004, when it decided to market the MultiMaster to DIYers in a TV infomercial. It was an odd choice, promoting the high-end result of German engineering alongside the likes of the George Foreman Grill and Chuck Norris's Total Gym, but it worked. The tool took hold. And when Fein's patent ran out in 2008, every major power-tool company started making oscillating multitools. I put off buying a multitool for a long time, convinced I didn't need one, until I borrowed a friend's

MultiMaster for five minutes. I bought my own the next day. Since then, it has become my favorite tool because of how often it gets me out of trouble.

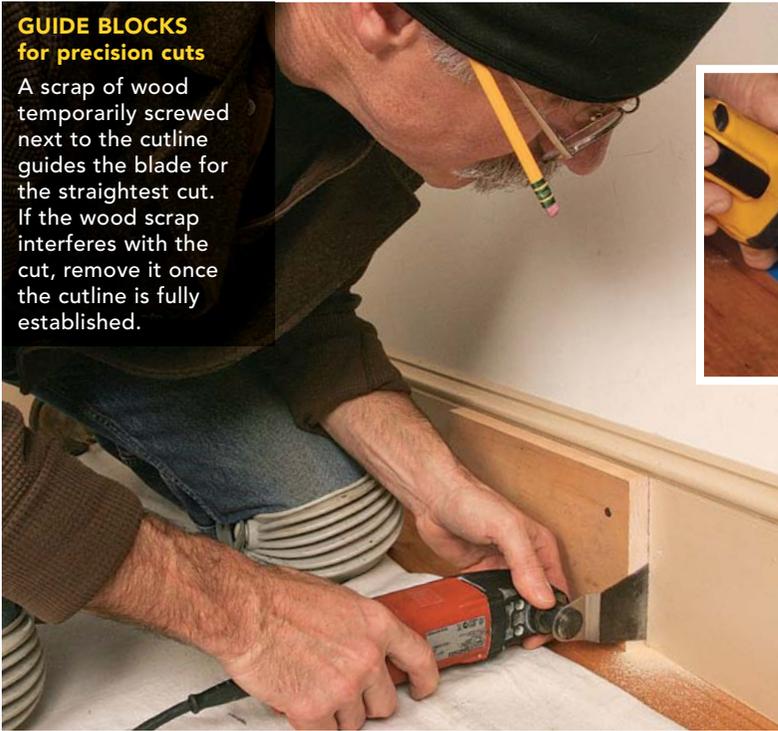
Until recently, I would have said there isn't much to know about using a multitool. But last summer, I was repairing some rotten trim on a 200-year-old house. For whatever reason, one day I mounted the blade at a right angle to the tool's body for the first time. (I guess I'm not the sharpest chisel in the roll.) I knew the MultiMaster had a star-shaped arbor for a reason. But year after year, I kept mounting the blades straight ahead like barber clippers. As it turns out, you have a lot more control on plunge cuts with the blade at a right angle. Well, duh! It made me

COMMON CARPENTRY TASKS

Multitools are great for cutting molding, siding, and trim in place. You'll get the best-looking, straightest cut if you use a block of wood to guide the blade and establish the cut. To prevent overheating the blade, which causes dulling, take a shallow pass the full width of the cut, then gradually work your way back and forth. For vertical cuts, start at the bottom of the cut so the sawdust can fall from the kerf. Trapped sawdust increases friction, which accelerates blade wear.

GUIDE BLOCKS for precision cuts

A scrap of wood temporarily screwed next to the cutline guides the blade for the straightest cut. If the wood scrap interferes with the cut, remove it once the cutline is fully established.



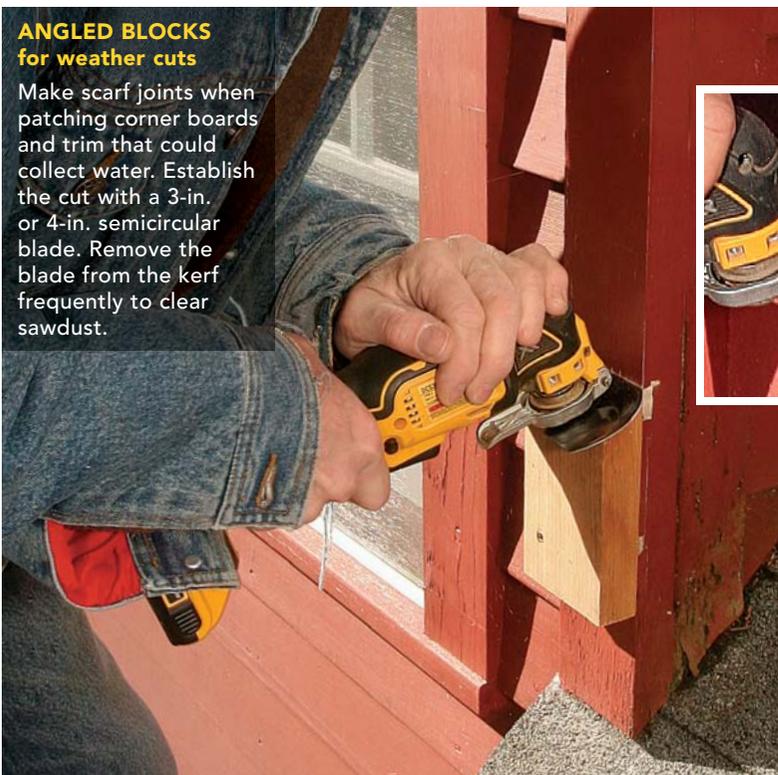
CUT CORNERS

With a straight blade, it's easy to damage adjacent surfaces (such as finished flooring) when finishing a cut. A semicircular blade, with the flat side down, is better. Painter's tape provides extra protection.



ANGLED BLOCKS for weather cuts

Make scarf joints when patching corner boards and trim that could collect water. Establish the cut with a 3-in. or 4-in. semicircular blade. Remove the blade from the kerf frequently to clear sawdust.



GO DEEP

Once you've established the kerf with a semicircular blade, switch to a straight blade, which cuts deeper and costs less. Keep blades cool or swap them often for efficient cutting. For cutting trim in place, use fine-tooth blades.



Must-have blades

Available from most multitool-blade manufacturers, blades like these are indispensable for general carpentry and remodeling tasks. The prices are for individual blades, but you can often save a little money by buying multipacks.



Fine tooth, 1 1/4 in. wide, plunge cutting: \$11 to \$15

Aggressive tooth, 1 3/8 in. wide, plunge cutting: \$13 to \$21

Fine tooth, 4 in., semicircular, flush cutting: \$14 to \$20



Fine tooth, 3 1/8 in., semicircular, straight cutting: \$20 to \$24

TOOLBOX

wonder what else I didn't know about this seemingly simple little tool.

Don't use a multitool when another tool will work better

Multitools aren't designed to be used all day, every day. They are best suited for delicate detail work and for finishing what other, bigger tools have started. For example, Gary Striegler, a trim carpenter in Fayetteville, Ark., uses his multitool to sand handrail connections, where the profile of the fitting and the straight rail don't quite match. But he uses the multitool only on the sides, which are hard to sand any other way. On top of the rail, he's quick to reach for his random-orbit sander because it's much faster.

Likewise, when cutting wood, only use a multitool because no other saw will work. If you've got room to plunge-cut flooring with your circular saw, crosscut a header with your reciprocating saw, or cut a foundation bolt with a grinder, you're better off doing so. The work will go more quickly than with a multitool, and you'll spend less money on blades. In fact, I think it's a mistake to make crosscuts with the multitool when patching hardwood flooring. With a guide block screwed to the piece you're replacing, a properly adjusted biscuit joiner will do a faster, neater job. You can then finish the cut with the multitool. And despite the promotional photos that show multitools cutting copper pipe, a tubing cutter works better. It's fast and makes a clean, square cut. If space is tight, use a mini tubing cutter. If that doesn't work, then you can use your multitool.

Use the right blade

"The blades are too expensive, and they don't last." That's the chief complaint made about multitool blades. And even though prices have come down in recent years, the typical multitool blade still costs more than the one on your circular saw—the one that's been on there for a year and still cuts fine.

According to Richard Tiza, a product-training specialist at Fein, "People tend to use whatever blade is on the tool regardless of what they're cutting." In other words, we buy blades made of high-carbon steel (HCS) because they're cheap. Then we hit a nail, ruin the blade, and complain that the blades don't last. If you think you might hit a nail, use a bimetal blade.

A few other points are worth noting. The smaller the teeth and the narrower the blade,

MORE THAN MOLDING AND TRIM

A multitool is the perfect tool for cutting siding, paneling, and molding in place; with the right technique, you can use it to cut PVC trim as well. It also makes an excellent labor-saving scraper. And it's perfect for making cuts in drywall when there's a risk of hitting a pipe or nicking a wire inside the wall.



LUBRICATE PVC CUTS

Cutting through cellular-PVC trim can be slow with a multitool because heat generated from the oscillating blade melts the plastic, which gums up the teeth. An occasional spritz of water in the kerf keeps the teeth cutting efficiently.

RESTORE SASH SAFELY

Scraping and reglazing a window's worth of glass lites is one of the more onerous jobs undertaken by pros and DIYers alike. You can speed up this tedious, time-consuming task with a multitool and a scraper blade.



MAKE SAFE CUTS IN DRYWALL

Since the blade on a multitool is shorter than that on a reciprocating saw or a drywall saw, there's less risk of damaging pipes and wires that may be behind

your planned cut. A piece of tape on the blade can help you gauge the depth of cut.

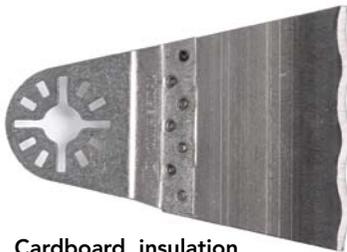


Specialty blades for special jobs

Special-purpose multitool blades and accessories are available for many tasks. Order them online before you need them, because it's unlikely that you'll find them at the local lumberyard.



Grout removal: \$17
rockwelltools.com



Cardboard, insulation, and rubber cutting: \$20
imperialblades.com



Flexible-material cutting: \$8
dremel.com



Mini cut-and-file set: \$32
feinus.com

the more control you have over the cut. Wider, longer blades vibrate more. Also, the wide blades with the Japanese-style teeth cut the most aggressively, but they're better for softwoods. In hardwoods, the teeth tend to break. Finally, it's worth saving dull blades; often they'll work fine for cutting drywall.

Clear away sawdust

Multitools are easy to use, and their oscillating action makes them less likely than other saws to pull or kick back. Perhaps the single most important thing to know about using one is that the blades don't eject sawdust from the kerf effectively, if at all. When sawdust builds up in the kerf, friction increases, blades heat up, and wood starts burning. Of course, the typical response is to push harder on the tool, exacerbating the problem.

If the motor bogs down, back off on the pressure. It's important to keep the RPMs high, and according to Russ Bransford at Imperial Blades, you want to keep the blade moving "like an iron on clothes." When plunge cutting, Bransford says, "rock the blade slightly, and lift it up and down in the cut. The rocking allows the chips to come out of the cut, so you end up making a faster cut with less heat buildup in the blade." Striegler echoes that advice. "Try to give the sawdust someplace to go," he says. "For instance, on a vertical cut, start at the bottom."

Ensure square cuts with guide blocks

When making cuts in existing finish materials—for instance, slicing out a section of baseboard for a built-in cabinet, use a guide block to make sure your cut is straight and square. Attach the block to the piece you're removing whenever possible so that the screw holes or nail holes are a nonissue.

You can also use a square or a straightedge to guide cuts. When you're making precise finish cuts, mount the blade at a right angle to the handle so you can brace your hands on the adjacent surface for more control. Finally, establish the kerf all the way across the face of the material before trying to cut deeply into the wood. The kerf serves as a guide and helps make a cleaner cut.

Slow down when sanding

At top speed, multitools generate more heat, which tends to clog sandpaper with paint, varnish, or simply the resins in the wood. If your multitool is set up for dust collection, use it when sanding, not only for health and

easier cleanup, but because the sandpaper will last much longer. Also, don't concentrate pressure on the pad's triangular point. Doing so can generate so much heat that it melts the hook-and-loop fasteners holding the paper to the pad. Instead, keep the pad flat to the work, which dissipates the heat.

Finally, keep in mind that because of its oscillating action, a multitool leaves more scratches than a random-orbit sander does. For that reason, it's important to work through the various sanding grits from coarse to fine.

Use it for stuff other than wood

"The best thing since sliced bread." That's what tilesetter David Smith of Rogers, Ark., says about using a multitool for removing grout. He likes Imperial's boot-shaped carbide blades for grout removal. Also, a multitool fitted with a grout blade will remove thinset that has oozed up between the tiles before grouting, although it's still better to avoid that squeeze-out in the first place or to clean it out before it hardens.

Jeff Longo of Marbledale Plumbing in New Milford, Conn., says, "I use my Multi Master to make nice, neat holes in drywall when doing shower-valve replacements." A multitool makes less mess than a drywall saw, especially if you make the cut, like Longo, with a vacuum hose in the other hand.

A multitool's lack of vibration makes it the best choice for cutouts in plaster walls for things like a new outlet or a medicine cabinet. I've had good luck cutting through the plaster with a grout blade and then switching to a wood-cutting blade for the lath.

Isaak Mester, a carpenter who specializes in kitchens and baths, calls his MultiMaster the perfect tool for separating an undermount sink from a granite counter. "A stiff scraper blade cuts right through the silicone," he says.

I said earlier that you shouldn't use a multitool when another tool will work better, but there are also times you may not be thinking of the multitool when it's the best way to get you out of a jam. With the right blade, a multitool cuts through carpet, window glazing, asphalt shingles, rigid foam, aluminum flashing, and a lot more. If the right blade isn't hanging on the wall at your local lumberyard or big-box store, go online for a much more exotic selection. □

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