Toolbox

Contortionist Reciprocating Saw

by Patrick McCombe

The new Tiger Claw reciprocating saw from Porter-Cable meets all of my criteria for a truly revolutionary power tool. Not only does it solve the age-old problem of getting the saw housing out of your way during close-quarters cutting, it's also powerful, rugged, and easily the most innovative reciprocating saw since Milwaukee introduced the demo-inducing Sawzall about 50 years ago.

What makes this tool so appealing is an adjustable gear housing that allows users to position the cutting end of the tool in ways that users of other reciprocating saws can only dream about. The articulated housing has two pivot points adjusted by easy-to-use rubber-covered buttons (see Figure 1). The first pivot, just past the motor, swings through a gate-like 180-degree range of motion and converts the tool from an ordinary-looking recip saw to a right-angle shape (both up and down), with 13 different locking positions. The second pivot, just in front of the blade, rotates a full 360 degrees with a dozen detents. This is like inserting the blade upside down on an ordinary recip saw, except that you can insert the blade in any clock position, not just 12 or 6 o'clock. With the back pivot set in an "L" configuration, perpendicular to the motor housing, this saw is only 8 1/2 inches long. Considering the hundreds of cutting positions possible, there aren't too many places this new contortionist saw won't fit.

Specs. The Claw weighs in at over 9 pounds, comparable to PC's model 9737 Tiger Saw and Milwaukee's 1/4 pound lighter Super Sawzall. I prefer these newer, heftier saws for their ability to absorb and cushion the kickback effect notorious in older, lighter recip saws. The Tiger Claw shares appearance and many parts — including the 11.5-amp motor, trigger, and back half of the housing — with other tools in Porter-Cable's recip family. The blade cycles at a variable 0-2,900 strokes per minute with a 1 1/4-inch, nonorbital movement. The blade clamp and shoe both adjust without tools, and a cool, U-shaped adapter for mounting jigsaw blades is included with the kit. If you like the adapter, buy a spare (part no. 12429); it's a very small part and is certain to disappear eventually. The Tiger Claw is double insulated for greater safety and two-prong convenience. Fit and finish are good, and the signature gear housing is wrapped in a grippy and abrasion-resistant plastic covering that doesn't slide around.

Figure 1. Accessible, tool-free buttons make adjustments easy, and a rubber covering prevents dirt and sawdust from gumming things up.

Figure 2. The gear housing's slight offset makes flush cutting easier. Rotating the bottom pivot 180 degrees allows you to cut equally well left or right.

On Site

No power tool worth its weight can get by on coolness alone, so I gave the Claw a workout on my always-improving-but-never-finished homestead. I used the saw to cut all the standard framing materials a recip saw ought to handle. Dimensional lumber, pressure-treated, a Parallam beam, and even a heavy-gauge steel signpost proved little match for the Claw's grasp. With the rear pivot turned down about 90 degrees, I made some scroll cuts in 1/2-inch pine plywood. This cutting position offered better control, and my cuts didn't have the bevel they normally do when I use a recip saw for scrolling. In a pinch, you could use this saw, with the blade adapter, in place of your jigsaw, provided you aren't doing fretwork or expecting absolute precision.

Awkward Cuts

The most obvious benefit of the Tiger Claw is its ability to get into tight spaces and around obstacles. The versatility of the combined cutting positions allows you to get the business end of the tool where you want it, without having the housing and handle in your way. While relocating a couple of window openings, I found it much easier to cut the old framing free with this tool than with my old recip saw. The angled gear housing allowed me to cut studs and headers without cutting into the

existing sheathing. To separate the old framing from the sheathing, I simply angled the tool and cut the nails without dragging my knuckles down the inside of the wall, a considerable improvement over the dubious "bend-the-blade" method.

Ergonomic comfort. Contorting the saw instead of your body enhances operator comfort in many situations. The articulated housing puts the blade end of the tool at a slight offset from the tool's centerline. This makes flush cuts, like cutting a bottom plate free from a floor deck, a little easier (Figure 2, previous page). And you can take advantage of the offset in either cutting direction by turning the lower pivot 180 degrees.

Figure 3. Rotating the saw's bottom pivot 90 degrees brings the top plate of an 8-foot wall within standing reach, no ladder needed, making overhead work faster and safer.

Reach. Another, less obvious benefit of the Tiger Claw's bendable configuration is improved reach. By turning the rear pivot down to about 90 degrees, I could cut the top plate of an 8-foot wall without using a step ladder or stretching (Figure 3). Plumbers and hvac installers are sure to appreciate this attribute for overhead cutting.

The Verdict

Using the Tiger Claw requires some adjustment in technique. When I was first using it, I didn't take full advantage of its adjustability. I tended to adjust my body position and grip instead of adjusting the tool. It took me a couple of days to learn to assess a cutting job and preadjust the tool to match the task. It soon came naturally, however, like selecting the right blade or extension cord.

Despite my initial impression — that this was one cool tool — I wondered how often the articulated housing would actually be useful. I soon discovered that with my old recip saw I had learned techniques that made hard cuts possible but not easy. The Tiger Claw makes hard cuts easy and impossible cuts possible.

No orbital action. Porter-Cable couldn't engineer an orbital action on this saw because of the many possible cutting positions, and although I didn't detect a serious difference in cutting speed without it, some might consider the loss a drawback. My only complaint with the Tiger Claw is the case. I usually carry at least 20 blades, but there is little room in the blow-molded kit box for any blade storage. And stashing the cord involves too much looping and stuffing to get the lid closed.

This tool seems especially well suited to mechanical installers and remodelers and deserves a serious look by anyone thinking about buying a new reciprocating saw. With hundreds of possible cutting positions, greater operator comfort, and the ability to go where no saw has gone before, it might make your life a little easier.

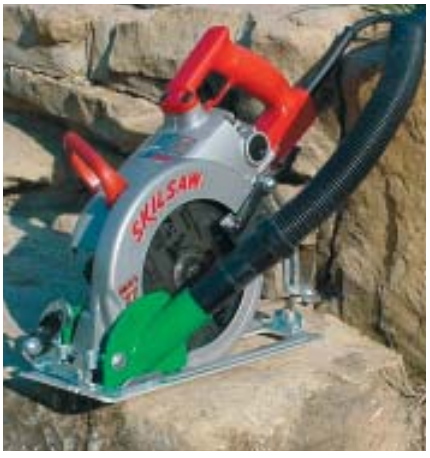
The Tiger Claw costs just under $300, case included.

Less Dust in the Wind

When I realized I had to cut the concrete slab in my basement for three new post footings, I dreaded the cloud of dust my circular saw would kick up. I was sure the fine gray powder would fill not only the house but my lungs, too. The particles are a nuisance and a health hazard, and the gritty powder can destroy any finished surface in proximity. I had visions of the persistent crud blowing through my furnace and ductwork for years to come.

I first came across the Saw Muzzle (Shave Away Europe, San Diego, Calif.; 619/223-2154, www.dustmuzzle.com), a lightweight plastic shroud for worm-drive circular saws, in a masonry contracting magazine. It creates a dust port for connection to a portable shop vac that, according to the manufacturer, will suck up 95% of particles generated when cutting cementitious materials.

Before I plunged into my concrete slab, I gave the Saw Muzzle a test outdoors, where I could make a mess with relative impunity. I made passes in concrete blocks, fiber-cement scraps,



sandstone, and some soft brick.

I found the muzzle a big help in handling the dust from my test materials. Even with my mediocre shop vac, the amount of dust in the air was negligible. I was able to see my work without gritty dirt being thrown into my face, hair, and ears. The claims of 95% particle capture appeared reasonable to my limited and subjective observation.

The muzzle worked well with the fiber cement. And based on the complaints I've frequently heard about cutting the stuff, it could prove to be an effective and budget-conscious way of dealing with fiber-cement grunge. Most carpenters would likely prefer to cut siding materials with a miter saw, but for small fiber-cement jobs like underlayment or trim, a circ saw equipped with a Saw Muzzle might be a cleaner alternative.

With my dust-bowl nightmares laid to rest, I proceeded to cut holes in my basement slab. Although my saw had the capacity to cut only a couple of inches deep, it made a nice score line, and I broke out the rest with a sledge and a brick set. There was some dust floating around, but only a fraction of what I've experienced in the past. The muzzle has the added advantage of keeping bearing-eating particles and grit out of your saw. It's also fairly easy to remove when you don't need it.

Although the Saw Muzzle works well, it does have a couple of drawbacks. Presently, it's made only for worm drives, and the hose and shroud reduce your view of the cut line. The reduced visibility is probably not such a big deal, however, compared to trying to see what you're doing in a dust storm. At less than $60, it's a worthwhile saw accessory and not a big investment. The manufacturer also sells add-on dust collection systems for angle grinders, rotary sanders, and die grinders.

Makita's M-Force Cordless Drill

Recently I had the chance to use Makita's newest cordless drill for a remodeling project.

The 6347D is the 18-volt offering in Makita's new line of "M-force" drills; the manufacturer has introduced a new clutch system that makes switching between drill and screw-driving modes faster and easier. Just forward of the two-position speed selector is another two-position switch. Sliding it to the right engages the drill mode and locks out the 16-position clutch; sliding it back reengages the clutch. It saves time because you can switch between modes without having to rotate the clutch to the drill position and vice versa. The switch has a locking detent so you don't inadvertently change modes while using the tool. The switch works great, but I rarely use the clutch on my drills. The first cordless drill I owned had three clutch positions, which offered little in the way of fine tuning. As a result, I've used drilling mode almost exclusively ever since. However, I do see the advantage of Makita's "Shift Lock System," especially when predrilling and assembling with the same tool, because you can predrill the holes and then quickly switch on the clutch for running in the screws.

The drill has some other nice features as well. The 1/2-inch chuck is the best I've ever used. It holds securely and doesn't loosen when running long spade bits, plus you can tighten and release bits with one hand. The chuck also has a free-spinning ring near the jaws. The sound of it spinning for a fraction of a second after the motor stopped initially confused me. When I finally figured out what the sound was, I discovered I could hold the ring while the chuck spins and help support the nearly 5 1/2-pound drill from its nose. Since the owner's manual makes no mention of the ring, I can only assume that's why it's there. Other standard features include external carbon-brush access, a cushioned rubber grip, and two on-board bit holders.

Specs

The 6347D has two torque/speed settings: Low speed runs at 0-400 rpm with 400 inch-pounds of torque; high speed runs from 0 to 1,300 rpm with a torque rating of 310 inch-pounds. The motor has an electric brake and an easy-to-use and ergonomic forward/reverse switch. I found I could change direction with either hand, and a center locking position keeps the trigger from inadvertently being depressed while you holster the tool. Makita includes two 2.6 amp-hour NiMH batteries that release from the drill and charger without a struggle. Although I didn't keep track, I found I could drive many 3-inch screws before needing a new pack; a completely drained battery charges in a little over a half hour.

I have never owned an 18-volt driver-drill; I've been reluctant because

of the additional weight. But at 5 pounds 7 ounces, the 6347D is only a pound heavier than the 14.4-volt Makita drill I purchased a year ago. Overhead work takes a little more effort but gets easier with conditioning, and 18 volts make a real difference in torque and performance. I was able to turn 1/4x4-inch lag screws with ease, something my smaller drills will do but greatly dislike.

My only concern about the drill was the brown lubricant seeping out from the gear housing when I stored it overnight the first day I used it. The case was upright, which inverts the drill, and I found a little sludge in the case and a trail from the new shift lock selector switch. Although it occurred only once and I haven't noticed increased noise or a change in performance, I intend to pay close attention.

Makita's new cordless drills are being sold in many combinations. One is a drill-only kit, with a sturdy and roomy case, in 12-, 14.4-, and 18-volt platforms. A two-piece set that includes the drill, a rechargeable flashlight, and the same case in 12 and 14.4 voltages is also available. Finally, the company offers an 18-volt, four-tool kit, which includes the drill, a 6 1/2-inch circular saw, a recip saw, and a flashlight with two batteries.

The 18-volt 6347D (no flashlight) I tested has a street price of $239. Although it's more expensive than other 18-volt drills, it's a very nice tool and one you might consider if you're in the market for a new cordless drill.