Panasonic 18-Volt Recip Saw/Drill Combination Kit

by Victor Rasilla

was recently given the opportunity to try out Panasonic's new cordless recip saw/drill combination kit. Panasonic has been making cordless tools for years, but this was their first attempt at 18 volts and the first time they've ever offered a recip saw. I was already familiar with their 15.6-volt drill drivers, so I was interested to see what the new 18-volt tools had to offer. The kit consists of an EY6450 1/2-inch drill, an EY3544 reciprocating saw, a charger, two batteries, and a plastic case.

Recip Saw

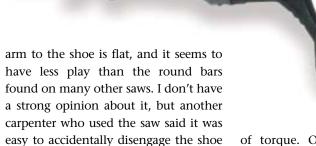
The EY3544 saw is well balanced and weighs $8^{1}/2$ pounds with the battery in. That's heavy for a corded model, but it's about what you would expect for an 18-volt cordless saw.

The front end is over-molded rubber, and the neck tapers down so that it's comfortable to grip. I can get my hand most of the way around the saw, which lessens fatigue in my forearm. The rear handle is also comfortable to grasp because it has soft, cushioned grips and a trigger large enough to engage with two fingers.

This saw has a spring-loaded safety and a variable-speed trigger. It has good power, and with a range of 0 to 2700 strokes per minute, it cuts very quickly. However, the trigger is extremely touchy, so it's difficult to run the tool at lower speeds. This took some getting used to, but eventually I was able to make accurate plunge cuts and cut drywall against solid blocking. Still, it would be better if the trigger were less sensitive.

The adjustable shoe is made from stamped steel and is locked in position by a lever that swings out from under the neck. The design and placement of the lever closely resembles the mechanism found on Makita's recip saws. The





I particularly liked the tool-less blade clamp, which operates by twisting a rotating sleeve. It locks in the open position when the blade is removed and automatically engages when a blade is installed, allowing you to perform a one-handed blade change.

because the lever is right where you grab

Drill/Driver

the tool.

The EY6450 18-volt ¹/₂-inch drill/driver has the power to handle any job you could reasonably ask a cordless drill to do. I used it to drive a ⁷/₈-inch auger bit through dry framing, and it had no trouble doing so. According to the manufacturer, it produces 440 inch-pounds

of torque. Only a couple of newly released 18-volt models produce more torque, and they're bigger, heavier tools.

Panasonic's drill is equipped with a removable neck-mounted side handle and a 15-stage clutch that is sensitive enough to handle light-duty fasteners. The chuck has a very precise ratcheting system, so it doesn't take much force to get a strong bite on the bit.

The EY6450 is well balanced, and the soft, molded grips are comfortable to hold onto. The padding extends onto the back of the tool, which is an area you push when you drill hard materials. With the battery in it, the drill weighs 5.7 pounds. That's heavy for a corded drill, but about average for an 18-volt cordless model.

Run-Time Test

The most unusual thing about any Panasonic tool is the battery. Panasonic is the only tool company that makes their own battery cells, so their tools typically have the latest battery technology and longer-than-average run time. The batteries in this kit contain 3.5-amp-hour (Ah) nickel metal hydride cells. Most other 18- to 24-volt tools have nickel-cadmium batteries with 2.0-, 2.4-, or 2.6-Ah cells.

I feel that I got extraordinary run time from these tools. But who actually counts the number of cuts or holes they make in the course of a workday? A press release from the manufacturer made some claims about run time that were hard to believe, so I decided to see if Panasonic's numbers were accurate by reproducing the test.

According to the manufacturer, the recip saw will make 35 cuts through 2x10 Southern Yellow Pine (SYP) on a single charge. SYP is hard to get in California, so I substituted dry Douglas Fir since it has similar properties. With a

fully charged battery and a 6-inch variable ⁵/8-TPI blade, I was able to make 23 cuts through the 2x10. It was not as many as the manufacturer claimed, but the results were still very good. *JLC* performed a similar test on cordless combo kits a couple of years back (see "Cordless Tool Kits," 3/02), and the best-performing 18-volt recip saw cut the equivalent of just over 18 2x10s.

Panasonic said the drill could make 165 1³/8-inch holes through SYP. With a fully charged battery and a new 1³/8-inch Forstner bit, I was able to make 88 holes through the Doug Fir two-by. Though I wasn't comparing other tools, the results seemed good.

Other Features

The combo kit comes with a universal charger that works with all Panasonic batteries. It does the job, but is bulky and requires 65 minutes to bring a 3.5-Ah battery to capacity. The molded plastic case is okay, but I'd feel better about it if the hinges and latches were

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metal instead of plastic. There's room to stow the saw with a 6-inch blade installed, but you need to retract it.

Both tools are powerful and have superior batteries. If I were in the market for a cordless kit I would give this one a look, but more for the drill and batteries than for the saw. The street price for the EY6450GQKW combo kit is \$399.

Victor Rasilla is a working supervisor for Brinton Construction in San Leandro, Calif.

Water Cooler in a Backpack by Tim Uhler

Throughout the summer, there are two things that I make sure I have every day: waterproof sunblock and lots of water. Last year, one of the other framers on the crew wore a CamelBak portable hydration pack (CamelBak Products, 800/767-8725, www.camelbak.com) whenever he worked in the heat. The CamelBak has a polyurethane reservoir that fits inside a small backpack. You fill it with water and take drinks through a bite valve on the end of a small hose that clips to your belt or shirt.

I didn't think much of it when I first saw my coworker wearing one. He was fresh out of the military, so I assumed it was just a military thing. Recently, though, I noticed that the plumber on



one of our jobs was wearing one, too. He told me he fills his about a quarter full with water and puts it in the freezer overnight. The next morning, he tops it off and has cold water all day.

I started doing this a few weeks ago and was amazed at how much more alert I was at the end of the day. The pack made me feel cooler, and I could get a drink whenever and wherever I wanted. The model I bought, the CamelBak Rogue, holds a little over two liters of fluid. Two liters seemed like plenty for an eight-hour day, but it turned out I was drinking that much by midday. If I refill it at lunch, I have water for the rest of the day. I spent about \$50 for my hydration system, but there are many other sizes, brands, and models to choose from.

Tim Uhler is lead framer for Pioneer Builders Inc. in Port Orchard, Wash.

Smart Features on Job Boss Compressor by Jeremy Hess

ugging a heavy air compressor to and from the job site every day can get pretty old. So when Porter-Cable introduced its new Job Boss Compressor model C3151, I had to give it a try. The portable compressor has 8-inch pneumatic tires and a telescoping handle that makes moving the 85-pound tool much easier. With the big tires, I could pull it over most normal job-site obstacles and even up steps. In fact, the only lifting I had to do was loading it into my truck. There is a version of this compressor without the mobility kit, but I wouldn't buy it. The kit is what makes the compressor unique.

Intelligent Design

Porter-Cable understands how tools get treated in the field, so they made the Job Boss sturdy enough to take most job-site abuse. All the major components are safely protected under a rugged roll cage, including the air lines running to the tank and the pressure switch (see Figure 1). It puts them out of the way so your day isn't spent searching for replacement parts. I've had to replace pieces broken by errant 2x4s and clumsy helpers, so I really appreciate the protection.

The Job Boss also has a removable panel that houses the regulator and gauge and two quick connects. It's a great feature for remodelers because you can leave the noisy compressor outside and adjust pressure from in the house. I'm sure it's also handy for roofers and framers because you can adjust the pressure from a remote location. The panel is held in place with a pair of star nuts and removing it is easy (Figure 2, next page). Besides making adjustments more convenient, it also keeps the working pressure more consistent because it keeps the regulator closer to the tool, resulting in less

pressure fluctuation. It's especially helpful when you're running a gun connected to more than 100 feet of hose.

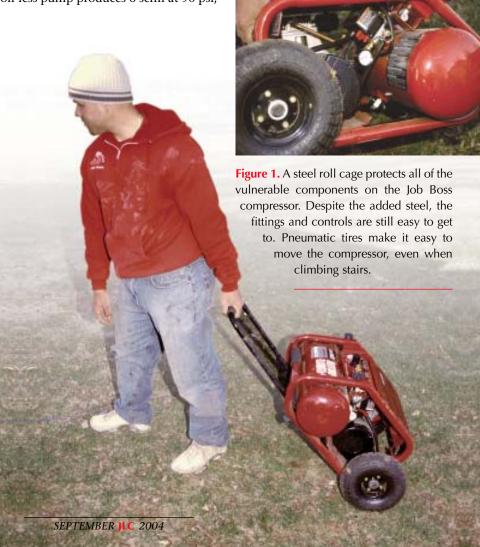
Air Delivery

The single tank has a capacity of $4^{1/2}$ gallons and a maximum pressure of 150 psi, which is 25 more pounds than most tanks. The additional pressure serves two functions: to supply high-demand guns with plenty of air and to provide more storage volume. You might say a $4^{1/2}$ -gallon tank is a $4^{1/2}$ -gallon tank, but raising the pressure by 25 psi results in noticeably more air. I found that I could shoot five nails with my framing gun before the compressor cycled. The oil-less pump produces 6 scfm at 90 psi,

which can keep a pair of framing guns running (as long as you're not nailing off sheathing with both of them). The company also offers an oil-bath model, but I think the oil-free model makes more sense when working in a furnished home.

Motor Performance

The 3.4-peak-hp motor fills up the tank fast and runs quietly for its size. But I found it will rarely run on a 15-amp outlet, as Porter-Cable claims. On a few jobs, I had to use a different compressor because the Job Boss kept tripping a



15-amp breaker. There might have been something else connected to that circuit that I didn't know about, but this is something to keep in mind if you need a compressor for remodeling projects where dependable outlets are few and far between. I had no problems with 20-amp circuits or when it was powered by our large generator.

The Verdict

Overall I liked using this compressor. The mobility kit was priceless, and the removable panel made depth-of-drive adjustments easier and more consistent. With a street price of \$300 and the tool's several unique features, I think this compressor deserves a serious look.

Jeremy Hess is a carpenter with D.E.R. Construction in Bainbridge, Pa.

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Figure 2. A removable control panel includes the airpressure regulator and two push-in quick connects. The panel allows you to adjust air pressure from inside the house or up on a roof; the keyhole slot in the center of the panel allows you to hang it out of the way.

Milwaukee 14.4-volt Compact Cordless Drill by Patrick McCombe

t's hard for me to believe, but I'm on my third cordless drill in a little over five years. I never buy cheap tools, but if past experience is any indication, it would seem I'm pretty tough on cordless drills. Lately I've been using a 14.4-volt Milwaukee 0612-22, which is part of the company's new line of compact cordless drills. It's a nice drill, and it has a couple of features that distinguish it from other cordless drills.

Good Belt Hanger

Most notably, the new line has an intelligently designed clip for keeping the drill on your toolbelt or waistband; Milwaukee calls it the Clip-Lok. The quick-release hook holds the drill securely yet allows it to swing, so it's more comfortable when you're working on your knees or climbing ladders. It's a great replacement for the holster on my toolbelt, which works fine for a drywall gun but not for T-handle cordless drills, which tend to fall out or flop around. The other problem with holsters is that they sometimes push on the trigger, which starts the drill turning. Of course, this only happens when your hands are full. Milwaukee's Clip-Lok solves all of these problems. The designers even considered that toolbelts can vary in thickness, so they made the belt hook adjustable.

Another nice feature is the ratcheting ¹/₂-inch chuck. I never had it loosen, and an internal mechanism locks the motor shaft for easy one-handed bit changes. The housing has a holder for a pair of driver bits and includes a rubber insert on the handle for better grip and reduced vibration.

Under the Hood

The 0612-22 has a two-speed transmission with 390 inchpounds of torque at low speed and 1,400 rpm in top gear. Twenty clutch positions make it easy to drive small fasteners without stripping heads. I found the drill had plenty of power even when running a $2^1/2$ -inch self-feeding bit.

Like other Milwaukee cordless tools, this one has a reversible battery, which gives it a little more clearance in close quarters.

The Verdict

I've been using this drill for the past six months, and I have no complaints. In fact, I really like it because it has plenty of power without being too big and clumsy. It's already lasted longer than one of my recent cordless drills. The Milwaukee 0612-22 includes two 1.7-Ah batteries, a one-hour charger, and a blow-molded case. It has a street price of \$180.





A slot on the drill and a corresponding pin on the unique belt clip keep Milwaukee's compact cordless drill within reach and prevent it from taking a dive when you're up on a ladder or scaffold. Pushing the thumb-activated release is a natural movement when you're going for the drill, and it works for both right-and left-handed users.



POWDER-ACTUATED TOOLS

Reach Higher. Powder-actuated tools (PATs) are great for installing mechanicals and drop ceilings in steel and concrete buildings, but dragging around a ladder for overhead work can really slow you down. Fortunately, extension poles like the 6-foot *PEPT6* and 8-foot *PEPT8* from Simpson can make overhead fastening quicker and easier. They work with tools like Simpson's semi-automatic PT27 and make it possible to reach 12-foot ceilings without a ladder. The PT27 has a list price of \$500, and the 6-foot pole sells for \$150.

Simpson Strong-Tie, 800/999-5099, www.simpsonanchors.com.



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Heavy Hitter. If a PAT with maximum versatility is your aim, you probably want to take a look at the *DX460 Series* from Hilti. Available with both single- and 10-shot magazines and featuring adjustable power, it seems perfect for the residential builder who is also doing or seeking work in the light-commercial sector. Adjustable power (increasingly popular on PATs from all manufacturers) allows users to reduce the impact of more powerful loads. This important capability reduces the risk of injury and prevents damage to the tool caused by overdriving fasteners. It also reduces the number of different loads a user needs to keep on hand. Pricing for the Hilti DX460 starts at \$649.

Hilti, 800/879-8000, www.hilti.com.

Pistol-Grip Power. Most residential contractors aren't installing miles of mechanicals or huge expanses of drop ceiling, so a less expensive, single-shot PAT often makes more sense than a more expensive semi-automatic version. The P2201 from Powers is a single shot .22-caliber tool designed for both .300- and 8-mm drive pins up to 3 inches long. It also accommodates ¹/4-inch threaded studs. Because the pistolgrip tool is trigger-actuated, it leaves a hand free for holding and positioning whatever is being fastened. The kit includes safety glasses, ear plugs, maintenance tools, a spall guard, plastic case, and an assortment of pins and loads. It sells for \$150.

Powers Fasteners, 914/235-6300, www.powers.com.

No-Hammer Bammer. Many inexpensive, single-shot PATs require a hammer blow to fire the load. With one hand holding the tool and the other holding a hammer, there are no hands left for holding the material or fixture you're trying to mount. But there is a simple and inexpensive solution: the *Model 479* from Remington. The \$45 tool uses a trigger to actuate the firing pin instead of a hammer, freeing one of your hands for positioning whatever you're trying to fasten. It accepts pins up to 3 inches long. **Desa**, 866/672-6040, www.desatech.com/

remington.

VINYL SIDING TOOLS

Channel Your Energy. Clean and precise "J"-channel corners are one sign of a quality vinyl job. So if your crew's corners look a little ragged, you might give them a *J-Channel Cutter* from Malco Products. Squeezing this specialty tool one click produces the drain tab on horizontal pieces, while two clicks make the corresponding notch on vertical legs; an adjustable stop makes both cuts the correct length. Besides looking more professional, a properly executed corner is better at channeling water away from doors and windows. The tool is offered in ¹/₂-, ⁵/₈-, and ³/₄-inch sizes and sells for about \$30.

Malco Products, 800/328-3530, www.malcotools.com.



Top-of-the-Line Table. If you're looking for a faster and more accurate way to cut vinyl, fiber-cement, and wood siding, you might consider a *Trim-A-Table* from Van Mark. This Cadillac of cutting tables features a rotating saw guide for cutting angles and slide-out extension wings that stretch to 18 feet. An adjustable stop helps with repetitive cuts and the miter settings show roof pitches expressed in rise/12 inches, which helps with gables. According to the maker, the table works with most circular saws and has a list price of about \$940.

Van Mark, 800/826-6275, www.van-mark.com.

Nail Biter. Vinyl siding and aluminum trim coil often go hand in hand, so if you're wrapping windows and trim as part of a siding job, you'll probably want to add Malco's *TNP2R Trim Nail Punch* to your siding tool kit. The small nail set makes it easy to get those tiny aluminum nails where you want them without smashing your fingers or the trim. Unlike some other nail punches for trim coil, this one has a small clip that prevents the nail from falling out while you get the tool in position. At \$14, it seems like a bargain.

Malco Products, 800/328-3530, www.malcotools.com.