

Cordless Recip Saws



Cordless tools just keep getting better and better. And that stalwart friend of remodelers, plumbers, and errant framers everywhere — the reciprocating saw — is showing up on job sites these days more and more often without a cord.

by Dave Crosby

If you haven't had the chance to try out these tools, do so. They're expensive, but if you think about what it costs per hour to roll out cords, or what it does to your attitude when you have to crawl back and forth through the crawlspace to untangle the cord or plug it back in, you might decide a cordless recip saw is just what you need.

For this review, I looked at eight pro-duty saws. I used each saw for a variety of light tasks, putting them all through several charge and discharge cycles to condition the batteries and get the feel of the tools. Then, to check power and run-time under more rigorous conditions, I used each tool to make as many cuts as the battery would allow through a 2x6 embedded with three

With more power and run-time than earlier models, these saws are ideal for lighter work

sinkers. To check cutting speed, I timed each saw through an 8-foot rip of $\frac{7}{16}$ -inch OSB.

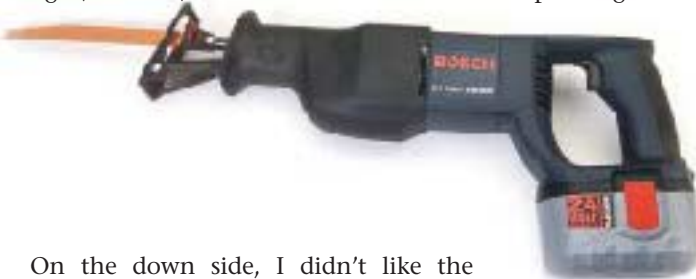
For each task, the saws were fitted with a new Magna M90452 Progressive Tooth all-purpose blade. This is an excellent blade for all-around use (see "Tool Test: Recip Blade Demolition Derby," 5/99), and it happens to be 0.050 inch thick, which seems to be a good compromise between the standard 0.035-inch blades and the 0.062 demolition blades. At this thickness, it provides the rigidity necessary for heavy work without the high load associated with wide tooth configurations.

Battery interchangeability is a consideration when buying cordless tools, especially if you already own several tools of any given voltage and brand. If you are an occasional recip user, and already own some 14.4-volt DeWalt or Makita tools, you might choose to buy one of their saws. But if a recip is a primary tool for you, I would choose one of the higher-voltage tools and keep a couple of batteries handy. The difference in performance is worth it.

I've rated each saw on several subjective and objective considerations, summarized in the chart below. While every one of these saws is certainly suitable for professional use, some clear favorites did emerge. Match your requirements against the description to find the one that suits you best. Power and run-time are important, but so are balance, controls, quality of construction, and overall feel. Don't overlook the case, and give some thought to what other tools run on the same battery. If money were no object I'd buy the Bosch 1645, but with my tool budget, I would more likely buy the Milwaukee 6515-21 or the Porter-Cable 9837.

Bosch 1645

By far, this felt like the smoothest, most powerful saw of the lot. With the flip of a switch, the 1645 offers a choice of stroke length: The $\frac{3}{4}$ -inch stroke provides minimal vibration, closer control of stroke depth, increased power, and precise control on plunge cuts or thin materials; the $1\frac{1}{4}$ -inch stroke makes for fast cutting through soft materials, especially wood. As a result, the saw handles exceedingly well at a variety of tasks. The trigger switch is responsive throughout the speed range; the quality of construction appears to be excellent; and the weight, balance, and overall feel of the saw are pleasing.

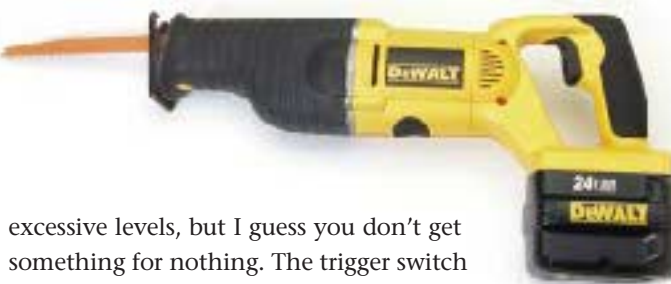


On the down side, I didn't like the placement of the pivot point on the shoe, which was rarely positioned where I wanted it to be relative to the work. Also, the battery release is a little sticky, especially in cold weather. The tool-free blade clamp on this saw was the only one of the bunch to give me any trouble. It jammed once

under heavy use, and the relatively exposed design is such that I would be concerned about packing it full of dirt or damaging it under rough conditions. However, it holds well. I had no trouble with it on a roof demolition. A conventional blade clamp is available as an optional accessory. Despite these few relatively minor shortcomings, this is an outstanding tool, and the only saw reviewed that is suitable for heavier tasks.

DeWalt DW008K

If run-time is your primary consideration, look no further. With over 40% more run-time than the Bosch, almost double the run-time of most other saws, and plenty of power for most tasks, this is one fierce recip. Vibration and noise approach



excessive levels, but I guess you don't get something for nothing. The trigger switch works well, and the blade clamp is among the easiest and most convenient. However, the dual-range speed control and trigger lock are too stiff, as is the battery release. Quality of construction seems fair, and weight and balance of the tool seem to be a bit on the light side compared to most. This model is also available with an AC/DC converter, which is the same size as the battery pack. This allows unlimited run-time without changing the balance of the tool

DeWalt DW938K and DW937K

Although it will get the job done, the DW938K has been eclipsed by recent introductions. It is relatively light, vibrates excessively, and is noisy enough that it feels a little tedious to



use. On the plus side, the run-time is above average, the controls are first rate, and the blade clamp, like that on the other DeWalt models, couldn't be easier to use. If light weight and compatibility with existing tools are primary concerns, this could still be a good buy. The DW937K is basically the same saw as the 938K, except lower voltage.

Makita JR180DA and JR140DA

With the power you'd expect from an 18-volt tool, reasonable noise levels, and minimal vibration, the JR180DA is comfortable and agreeable to use. It feels solid, and the controls are first



rate, as is the overall quality. The trigger-switch safety lock is configured such that the lock must be depressed at each trigger use — an extra bit of safety that's easy to get used to. The blade clamp is among the fastest, allowing for effortless blade changes even at the fully retracted end of the stroke. It also (usually) ejects the blade when the clamp is released, making blade changes that much easier. The sliding shoe works well, and the pivot point on the shoe is just right. Externally accessible brush holders are another nice touch. The limitations on this saw compared to

the larger models are stroke length, power, and run-time. If Makita comes out with a 24-volt model, it's going to be a serious contender. The Makita JR140DA is basically the same saw as the JR180A, except lower voltage.

Milwaukee 6515-21

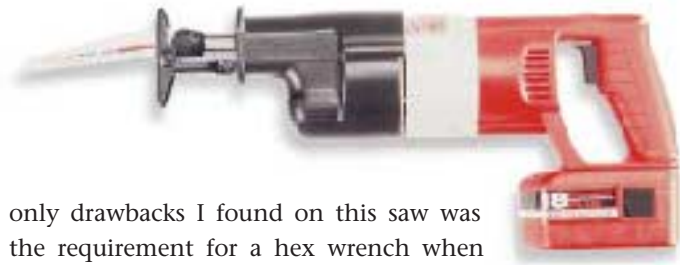
My first impression of this saw was that it felt exactly like a Milwaukee Sawzall. Not entirely trusting that intuition, however, I got the AC Sawzall and used the tools side by side. Yup, it's definitely a Sawzall — strong, well built, and entirely likeable. The slower SPM speed, top of the line low-speed trigger control, and plenty of power made it easy to work with and the balance couldn't be much better. The saw is noisier and vibrates more than most, though less than the DeWalt saws.

Cordless Reciprocating Saw Specifications

	Bosch 1645	DeWalt DW008K	DeWalt DW938K	DeWalt DW937K
Voltage	24	24	18	14.4
Battery Amp/Hr and Type	2.0 NiCd	1.7	2.4	1.7
Stroke (inches)	3/4 or 1 1/4	1 1/8	7/8	7/8
No-Load Speed (strokes per minute)	0-2,300	0-2,400/0-2,900	0-2,800	0-2,700
Length (inches)	19 1/2	18	17 1/2	16 1/2
Weight (pounds)	8.7	8.1	6.5	6
Nail-Embedded 2x6 cuts	17	24	16	14
Rip 8-foot OSB (seconds)	33	29	34	42
Balance	Excellent	Good	Good	Good
Ergonomics	Excellent	Excellent	Very good	Very good
Power	Excellent	Good	Fair	Fair
Batteries Included	Two	One	One	One
Street Price	\$419	\$238	\$210	\$190
	Makita JR180DA	Makita JR140DA	Milwaukee 6515-21	Porter-Cable 9837
Voltage	18	14.4	18	19.2
Battery Amp/Hr and Type	2.6 NiMH	2.6 NiMH	2.0 NiCd	2.0 NiCd
Stroke (inches)	7/8	7/8	1	1
No-Load Speed (strokes per minute)	0 - 2,700	0 - 2,700	0 - 2,000	0 - 2,900
Length (inches)	17 5/8	17 7/16	18 1/2	15 1/2
Weight (pounds)	7.7	7.3	8.25	9
Nail-Embedded 2x6 cuts	16	10	13	12
Rip 8-foot OSB (seconds)	41	42	40	27
Balance	Very good	Very good	Excellent	Excellent
Ergonomics	Very good	Very good	Excellent	Excellent
Power	Very good	Fair	Excellent	Very good
Batteries Included	One	One	One	One
Street Price	\$329	\$280	\$280	\$299

The blade clamp is excellent, and the saw looks and acts like it will take a beating. In fact, by the time we got done with it, it looked like it had. Regarding the blade clamp, this manufacturer had some trouble awhile back but seems to have resolved it. To test this, I removed the shoe and bashed the clamp into a concrete block with the saw running at full speed (don't try this at home, folks). I then reinstalled the shoe, inserted a blade, and it all worked just fine.

The metal case appears to be the sturdiest of the lot, and it has plenty of room for spare blades. Besides the vibration, the



only drawbacks I found on this saw was the requirement for a hex wrench when adjusting the shoe and a tendency for the battery to fall off under extra-heavy use.

Porter-Cable 9837

Modeled on the Tiger Saw, the 19.2-volt "Tiger without a Tail" is in a class by itself. If compact size or accurate, stable cuts are a priority, this is the saw to choose. Occupying a niche between



the 18-volt and 24-volt saws, it's the shortest and heaviest saw of those reviewed. This results in a decidedly front-heavy balance, which I found pleasant in use. By far, this saw was the most stable through the cut and the easiest to control. Vibration is noticeably lower than in most of the others, which may be part of the reason for this tool's good-natured performance. Cutting speed through nail-embedded 2x6 studs was better than most, and it excelled at fast cutting through OSB as well.

The battery release is sticky, but otherwise the ergonomics and controls are excellent. It's difficult to change blades in the fully retracted end of the stroke, so it would be nice if the saw were redesigned either to stop the blade toward the extended position or to make access to the blade clamp easier. Like that of the Milwaukee saw, the 9837's adjustable shoe requires a hex key.



Dave Crosby is an associate editor for The Journal of Light Construction.

Cordless Recip Manufacturers

Bosch

S-B Power Tools
4300 W. Peterson Ave.
Chicago, IL 60646
877/267-2499
www.boschtools.com

DeWalt Industrial Tool

626 Hanover Pike
Hampstead, MD 21074
800/433-9258
www.dewalt.com

Makita U.S.A.

14930-C Northam St.
La Mirada, CA 90638
800/462-5482
www.makitatools.com

Milwaukee Electric Tool

13135 W. Lisbon Rd.
Brookfield, WI 53005
800/414-6527
www.mil-electric-tool.com

Porter-Cable

4825 Hwy. 45 North
Jackson, TN 38302
800/321-9443
www.porter-cable.com