

Porter-Cable 894PK Router Kit

by Joseph Fusco

I've used Porter-Cable routers for more than 20 years, so I was looking forward to checking out the newest version, the 890 series. Besides a more powerful motor, Porter-Cable claims the router has a number of improvements that make it easier to use. The new routers are offered with plunge, fixed, and D-handled bases. I tested the combo kit model number 894PK, which contains a D-handled and plunge base, and I think it's the version that makes the most sense for builders and remodelers.

The whole setup is intelligently packed in two plastic cases that lock together, creating one large carrying case. The first case contains the new 891 D-handle router, manual, wrench, and 1/4- and 1/2-inch collets. The second case contains the plunge base (model number 8931).

Plunge Base

The locking lever on the plunge base has what Porter-Cable calls the "free-plunge mode," and it's a nice feature. If you move the lever all the way down, it releases the plunge mechanism so you can adjust the plunge settings without fighting the springs. Moving the lever slightly to the right allows the plunge mechanism to operate normally. You can also lock the plunge mechanism in a stationary position with the same lever — unfortunately, when I first got the router, that didn't work. After releasing the lever, the router would shoot directly to the top. The manual gives detailed instructions on how to adjust the locking lever, but it took me 15 minutes to make it work correctly. After adjusting the locking lever, I noticed that the grips were loose. It was an easy fix, but I needed a 5/16-inch hex key that wasn't supplied with the kit.



Stops

One of the most useful features on the older plunge bases was the turret depth stop. Simply by rotating through the six different positions, you could get about 1 inch of depth adjustment. But now there are only three stops. The new stops work okay, but you only get a 1/2 inch adjustment.

D-Handle Base

The most visible feature on the 891 base is the cushioned handle that's also the dust collection port. Unlike most other D-handled bases (including previous PC versions), this D base has no trigger switch; instead, it uses the sliding switch on the motor. While eliminating the trigger might sacrifice a little control, it also eliminates the bundle of cord tied to the motor that's typical of trigger-controlled bases. The handle is comfortable, and you can reach the switch while holding it.

Motor

The redesigned 12-amp motor is rated for 2 1/4 "peak" hp. It has a great soft start and runs with little vibration.



The depth stop on the 8931 plunge base has only three positions, while the previous rotating version had six. A full turn on the stop adjusts the depth 1/32 inch.



Motor speed is adjustable from 10,000 to 23,000 rpm, and feedback circuitry helps maintain a constant speed under load.

The motor did have a tendency to increase and decrease in pitch, but I believe that's because it's maintaining the desired speed under load. The variable speed is easily adjustable and works well, too. All in all, the motor is powerful and comfortable to use.

The dual switch feature, also new to the 890 motor, is designed to make the router easier to use when it's mounted in a table. It works great with the fixed bases, but it's a bit more awkward with the plunge base because you need to slide the switch "up" (away from your thumb), which makes it difficult to reach while holding the handles. I think a button or toggle would have

been a better choice. Instead of the threaded base common to older versions of PC routers, the new motors have a rack-and-pinion gear to move them up and down in the base. Fortunately, you can still use the older 690 bases by removing the rack-and-pinion gear. Two screws hold it on.

Older PC routers required two wrenches to remove the bit from the collet. The 890s have a collet lock that prevents busting your knuckles when changing bits. A small "tab" makes it easier to engage the collet's locking pin on both bases. But the tab doesn't work with the dust collection base plate because the plastic shield gets in the way. I found it easier to change bits by removing the motor from the base when using the dust-collecting setup.



The new motor is not only more powerful, it has a new rubber covering that makes it easier to grip and reduces vibration. The upper switch is for table-mounted work, and the lower switch is easier to reach when doing hand-held work. It also has a new rack-and-pinion depth adjustment, but it's possible to use the new motor in older bases by removing the two screws.



Dust Collection

Dust collection is one of the best new features on the 890 routers. Both the 891 and 8931 have modified bases for better dust collection. I routed some $\frac{3}{4}$ -inch MDF to see how it works. It worked well with both bases, but the "solid" base plate on the 891 performed slightly better than the open-holed base on the 8931 plunge base. In both cases, almost all of the dust was picked up, which should be good news to remodelers.

The dust collection system on the 890 routers is also an improvement. Dust goes out the hollow handle on the D-handled base, which keeps the hose out of the way.



The Verdict

Overall, I'd say that the new 890 routers are nice tools and worthy replacements for their predecessors. At \$245, the kit is also a good value. My impression was somewhat soured by the loose parts that I mentioned earlier — I think final adjustments should be handled on the assembly line not in the field.

Joseph Fusco is a cabinetmaker in Staten Island, N.Y.

Festool Trion Jigsaw

by Victor Rasilla

Many tool companies produce good stand-alone jigsaws, but Festool's Trion model is a cut above. It has the advantage of being part of a system that includes optional dust extractor vacuums and straightedge cutting guides. I've been using the Trion PS 300 EQ for about six months, and it's superior to any other jigsaw I've used.

Precise Cutting

One of the things that sets this tool apart is the absence of any blade sway during tightly curved cuts. There's no wander because the blade is held on three sides by a solid carbide guide. The guide adjusts, so you can fine tune it to fit the blade.

I used the Trion to make 1-inch-radius cuts on the ends of 30 redwood 2x2s for a garden trellis. Despite the

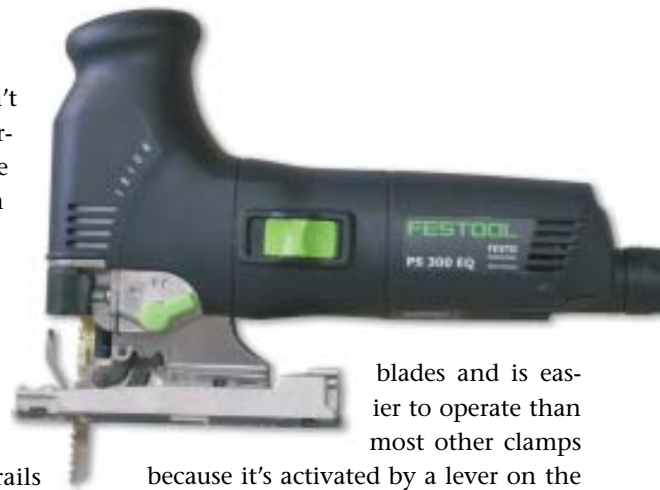
tight radius, the blade didn't wander, so the cuts were a perfect 90 degrees through the stock. They would have been slightly beveled if I had made them with another saw.

The Trion can be used with Festool's FS guide rails to make straight, accurate cuts. All you need is one of the rails and an \$8 adaptor plate. I've used these rails with Festool's circular saw and router, but I don't do enough straight cutting with jigsaws to bother using the plate. I have used the Trion with a conventional edge guide, and with the splinter guard in place it was able to trim door bottoms with zero splintering and near table-saw precision.

Dust Extraction

Festool's construction tools are geared toward the high-end finish carpenter. They're particularly suited to "live-in" remodeling and medical industrial applications, where low dust generation is required. The Trion's cutting area is enclosed by a clear plastic chip guard, and dust is extracted through a pair of collection ports built right into the shoe. A hose adaptor can be clipped into the back of the shoe and connected to a dust extractor. Festool makes a number of trigger-activated extractors, but the Trion works fine rigged up to my old shop vac.

The shoe bevels up to 45 degrees in either direction, but the adjustment requires a wrench, and the bevel gauges are hard to read when the saw is tilted beyond 30 degrees. The tool-less blade chuck accepts T-shank



blades and is easier to operate than most other clamps

because it's activated by a lever on the housing. There's absolutely no play in the chuck mechanism, and that increases the precision of your cuts.

The barrel-grip version is designed for right-hand use and is comfortable to grasp with medium hands. At five pounds, it's easy to use for extended periods. However, the housing did get noticeably hot when I used it for ten minutes straight. The 6-amp motor is equipped with electronic speed control and has the power to maintain speed under heavy cutting loads such as 8/4 hard maple. The saw has orbital cutting action and comes with a removable cord.

The Trion comes in a Systainer, Festool's brand of case management. Systainers for different tools stack, mate, and lock together. They can be carried as one unit or wheeled around on top of a Festool vacuum. The Trion is available as a barrel-grip (PS 300 EQ) or a top-handle model (PSB 300 EQ).

The only downside to these saws is their price. At \$250, they're about \$100 more than competing models. That said, I bought one of the barrel-grip models, and it was worth it because I like to do very precise work.

Victor Rasilla is a lead carpenter for Sattler's Construction in Walnut Creek, Calif.



Carpenters don't normally use jigsaws for long, straight cuts, but with a straightedge and splinter guard, the Trion will cut almost as cleanly and precisely as a table saw.

ROOFING TOOLS

Roof Cutter. It's not surprising that the crew seems to disappear when it comes time to trim the overhanging shingles from the rake. Scratching up your hands and forearms while lying prone on a mat of hot asphalt seems like cruel and unusual punishment. A better way is to use the *Shingle Saw Pro II* from Roof Mates. The air-driven tool uses a 3-inch carbide-tipped blade that, according to the maker, slices through even the thickest architectural shingles easily. Not only does air power mean easy repairs and fewer moving parts, you can hook it up to the air hose supplying your roof nailer without wasting time running a cord. The *Shingle Saw Pro II* sells for \$469, and replacement blades sell for \$44. According to the manufacturer, blades should last through 250 squares of shingles.

Roof Mates, 410/551-7539, www.roofmates.com.



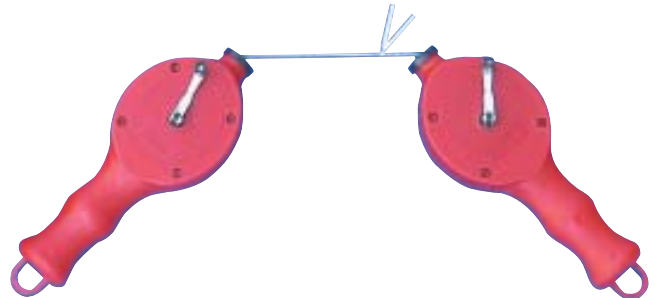
Easy Roller. Handling trusses without a crane can test your physical stamina, but, according to veteran builder and inventor Harv Lilligard, you can make the process easier and safer with his new product, *Truss Glide*. The aluminum rollers ride along the top plate, so you don't have to drag the truss along the wall. With the reduced friction, you can stand on the deck and push the trusses along without the top-plate tightrope act. Although they're available for 2x4 and 2x6 walls, the maker says that the larger size will work for 2x4 walls if you center it on the plate and take your time. They sell for \$225 a pair, plus shipping.

Truss-Glide, 866/878-7768, www.trussglide.com.



Shingle Multi-Tool. The first time I saw my coworker's Estwing *Asphalt Shingler's Hammer* I wondered why anybody would spend \$35 on a hammer made for nailing down asphalt shingles. After all, it's not the kind of precision work that warrants a specialty tool. But after seeing him effortlessly trim the shingles on an open valley and 40 feet of ridge, the tool's merit became apparent. The heavy all-steel hammer has adjustable exposure guides and a replaceable hook-style blade that trims and cuts with ease. A huge waffle-faced head prevents overdriven nails that can lead to shingle blow off. After seeing it in action, I ended up buying one, too.

Estwing, 815/397-9558, www.estwing.com.



Chalk Without the Walk. Snapping lines every few courses is an easy way to prevent shingle screwups, but most chalk boxes don't hold enough chalk for more than a few lines. The *Thor Double Chalker* has a heavy-duty braided string that snaps 8 to 12 lines without reloading. In addition, the Double Chalker has two reservoirs and crank handles, so with a partner's help, you can wind it into the opposite housing for a reload. By alternating between the two housings, you can chalk without the walk. You can find it on the Thor Tools website for \$25, plus shipping.

Thor Tools, 800/398-0376, www.thortools.com.

HIGH-TECH TOOLS



No Time to Lose. If you're concerned that your employees are overly optimistic when it comes to reporting their working hours on a time sheet, you might consider switching to the

Jobclock. The easy-to-use time clock uses individually assigned, color-coded key fobs to sign your employees in and out. The little device can store up to 10,000 records before they're downloaded to a PDA. Individual Jobclocks can be used to track particular jobs — and even the travel time between them. More specific tracking is possible with additional colored fobs. For example, you could use one colored fob to indicate roofing or framing work and another color to indicate a lower-risk activity like trim or painting. According to the manufacturer, better tracking of tasks could save you some money on your workers' comp and liability insurance. Prices start at about \$1,000 for the clock, fobs, and software.

Exaktime, 888/788-8463, www.exaktime.com.

Cool Keyboard. While more and more contractors are relying on portable computers and pocket PCs, they're constantly fighting a battle to keep dirt and grime out of those expensive devices. I've seen builders and remodelers wrap their keyboards in shrink wrap or cover them with poly, but if you're looking for a better way to keep the crud out of your keyboard,



you could switch to a cool new product from iBIZ Technology. The *Virtual Keyboard* uses a laser projection

to simulate a conventional computer keyboard on any smooth, flat surface. The projector is about the size of a disposable lighter and will last for three to four hours on its rechargeable, lithium-ion battery pack. Besides keeping your computer clean, it gives construction types a full-sized keyboard that's easy to transport. It sells for \$99.

iBIZ Technology, 623/492-9200, www.ibizpda.com.

Plumbing Tool. I can't image anything lower tech than a plumb bob, but a new electronic version from DeWalt brings the centuries-old tool into the high-tech category. The *Laser Plumb Bob* is about the size of a 25-foot tape, and it finds plumb in a second or two without wait-



ing for a string to settle. Magnets on the bottom allow you to attach it to steel framing, and a rubber-covered housing protects it from drops and impact. I doubt that it's as reliable as gravity, but it sets up

faster than traditional plumb bobs and costs less than most laser-leveling devices. I found it for about \$120 on the web.

DeWalt, 800/433-9258, www.dewalt.com.

Task Tracker. The dashboard collection of notes, material lists, and to-do lists written on scrap lumber, material invoices, and catalog pages won't inspire customer confidence and probably isn't the most efficient way to keep track of your business. A better way might be with a PDA and *Punch List* software from Bosch. According to the manufacturer, the system makes it easy to keep track of materials, punch lists, subcontractor items, and just about anything else related to finishing projects. When you're in the office, you can dock the PDA to your office computer, where information is updated and material lists, change orders, and correspondence can be automatically sent to the appropriate parties. The software runs about \$300, and a PDA sells for \$100 to \$600.



Bosch, 877/267-2499, www.punchlist.com.