House Calls from a Drill Doctor

by Gary Katz

I don't save much in the way of junk anymore. But I've never been able to throw away drill bits, especially the bigger ones — and I've collected a drawerful of them. I install a lot of hardware on metal doors and jambs, including locksets, closers, vision lites, kick plates, and panic bars. Whenever I know I'm going to install stainless-steel hardware, I stop at the local supply house and stock up on 1/8-inch, 3/16-inch, and 1/4-inch drill bits. And for closers on solid masonry walls, I buy handfuls of 1/8-inch masonry bits, too.

I always thought that there ought to be a good way to sharpen high-speed twist drills. I've tried every trick that anyone has ever recommended, as well as a few cheap, oddball tools, but nothing's ever worked. Still, I've saved the bits. Now I'm glad that I did.

The Doctor Will See You Now

I just spent three hours in my shop with my new Drill Doctor (Professional Tool Manufacturing, 210 E. Hersey, Ashland, OR 97520; 800/597-6170; www.drilldr.com), and the tip of every one of those old bits gleams like a tiger's eye (see Figure 1).

Like most other contractors, I'd seen the advertisements and never believed them. But after attending a builders show and seeing the Drill Doctor in action, I had to give it a try. I read the instructions (I could have just watched the great video that comes with the tool), and within minutes I was sharpening my first bit.

On that initial attempt, I managed to make every possible mistake: I used the wrong point angle and overcut the split point. Still, that bit wanted to cut in the worst way — it just couldn't stop dancing across the aluminum. My next try met with success, and I knew this tool was a winner. That 3/8-inch bit started cutting straight into 3/16-inch bar stock, without a pilot hole or even a center punch, and with only slight pressure on the drill, it threw shavings and chewed its way right through the metal (Figure 2).

My hat is off to the designers of this tool. They thought of everything. You don't have to understand the intricacies of drill bits to use this instrument. The Drill Doctor people included a good reference manual on drill bits, points, and sharpening angles in the instructions.

How It Works

To use the Drill Doctor, first find the

Figure 1. The Model 750SP Drill Doctor sharpens 3/32- to 3/4-inch bits.

Figure 2. A quick trip to the Doctor puts the bite back on the bit.

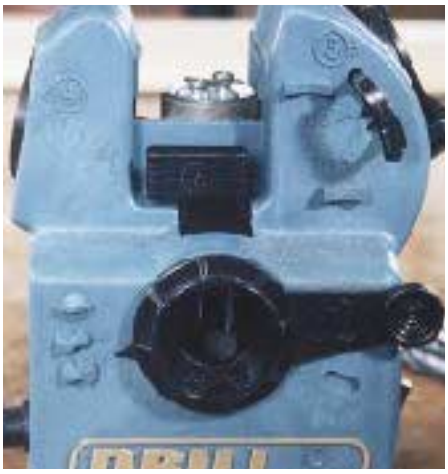


Figure 3. Templates and icons identify point angles (left) and correct settings (right).

Figure 4. The bit is loosely chucked (A) and placed in the alignment tube (B). After being aligned, the chuck is tightened (C), and the assembly is placed in the sharpening tube (D). A couple of light touches on the grinding wheel are sufficient (E).

proper point angle using the gauges molded into the base of the machine (Figure 3, previous page). Adjust the sharpening tube to that angle (once again, icons and detents are molded into the base of the sharpener). Then the bit is inserted loosely in the chuck, and the chuck is inserted into the alignment tube on the front of the machine. Flats on the chuck match with flats on the alignment tube for perfect positioning. A spring-loaded set of steel pawls grabs the bit and an interior stop sets the precise depth of cut. The chuck is then tightened on the bit (Figure 4), removed from the alignment tube, and inserted in the sharpening tube.

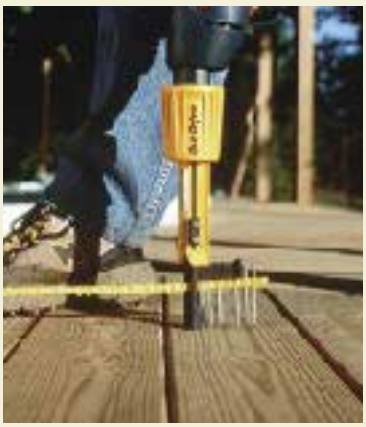
Cams and cam followers molded into the face of the chuck and the alignment tube guarantee that every bit is sharpened with exactly the right relief.

Split-point bits are the best for my business because they cut aggressively from the git-go and rarely require a center punch. After ten turns in the sharpening tube, my 3/8-inch bit was ready for the split-point tube (smaller bits require fewer turns, sometimes only two

TOOL BITS

Auto-Screw Adapter

If you don't feel you need a dedicated automatic screw gun, but would appreciate its convenience on occasion, the *QuikDriver drill attachment* may be what

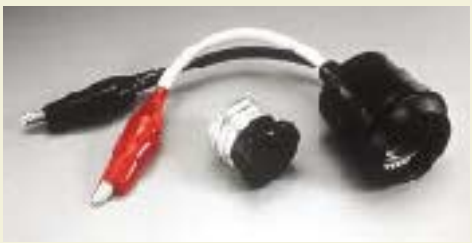


you're looking for. Attached to the 3/8-inch chuck of any drill, the driver uses the same QuikStrip collated screws as the manufacturer's commercial-grade gun, and, in my limited test, performed smoothly. The attachment sells at retail outlets for about $50.

Contact: QuikDriver, 436 Calvert Dr., Gallatin, TN 37066; 888/487-7845; www.quikdriver.com.

Circuit Tracker

By replacing an incandescent light bulb with the *GET-1200AS adapter kit,* you can use the GET-1200 Circuit Tracker to locate breakers or fuses that control incandescent lighting on the first try



without turning off the power. The adapter also works with switches or bare wires.

Contact: Gardner Bender, P.O. Box 3241, Milwaukee, WI 53201; 414/352-4160; www.gardnerbender.com.

Adjustable Finish Nailer

The 16-gauge *Model 3250-F16 Pneumatic Trim/Finish Nailer* (left), which drives nails from 3/4 inch to 2 1/2 inches, now features a depth-of-drive mechanism that can be adjusted without a wrench (right).

Contact: ITW/Paslode, 888 Forest Edge Dr., Vernon Hills, IL 60061; 800/682-3428; www.paslode.com.

or three revolutions). Once again, flats and stops on the chuck ensure proper alignment and, with only slight experience, one or two light pecks against the grinding wheel produce a symmetrical and sharp point.

Even the grinding wheel on this tool is cleverly engineered. The diamond-coated cylinder will sharpen masonry and carbide bits and can be reversed to provide twice the number of sharpenings, estimated to be about 200 (Figure 5). Replacement grinding wheels are available and cost about $20. The manufacturer also stocks replacements for every other part of this machine.

The Drill Doctor is available in three models, though I'd recommend only the two professional models for contractors. Both are equipped with the same 1/2-inch diamond wheel and powered by the same 1.75-amp motor. The Model 500SP ($149.95) comes with one chuck and sharpens 3/32- to 1/2-inch bits. The Model 750 SP is pricier ($189.95) but is equipped with two chucks and will sharpen bits from 3/32- to 3/4-inch. That's the one I bought. The price might seem steep, but I can't imagine how much money I'm going to save by not having to buy so many new bits.

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Figure 5. The diamond-coated abrasive cylinder will sharpen carbide bits and is reversible for longer life.