Toolbox

Bosch PS20 Pocket Driver

by Norm St. Onge

As the owner of a business that focuses on small projects and handyman work, I do a variety of screwdriving tasks throughout the day. Until a few months ago, I used my cordless drill — which weighs almost 7 pounds — as a screwdriver. But my worn-out arm convinced me that a smaller, more lightweight tool was needed, so when JLC suggested that I try out the new Bosch PS20 cordless Pocket Driver — without risking any of my hard-earned cash — I jumped at the chance.

Specs

The Bosch PS20 kit contains the driver, two bits, two 10.8-volt lithium-ion batteries, and a 30-minute charger. Everything is neatly arranged in a soft case with elastic and Velcro straps that's small enough to tuck under a truck seat.

The driver itself — which weighs less than 2 pounds with the battery installed — fits nicely in my average-sized hand. The tool has a comfortable rubber grip; a variable-speed trigger with forward, reverse, and lock positions; a 10-position clutch plus a "Max" setting; a 1/4-inch hex-shaped bit-holder; and an LED work light.

Performance

I tend to be protective of my tools; if they come with a carrying case, they get stored and transported that way. But after using the PS20 for two or three weeks, I quit using the case — for a couple of reasons.

First, I found the case's straps a tad annoying. Cinching everything in place took too long, and it would all start coming apart during transit anyway.

Second, the driver itself turned out to be so handy

Bosch PS20 Specs

Platform: 10.8-volt lithium ion **Maximum torque:** 80 inch-

pounds Rpm: 0-400 Weight: 1.8 pounds Street price for kit: \$130

Bosch Tools 877/267-2499 www.boschtools.com



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and convenient it earned a permanent home in my tool carrier. I'm not a big fan of heavy toolboxes, so a tool has to be virtually indispensable to earn a spot in my pouch.

I've used the PS20 for installing a multitude of items: storm doors, door hardware, electrical devices and cover plates, light fixtures, ceiling fans, an over-thestove microwave, cabinet hinges, ductwork. It works great anywhere I'd normally use an old-fashioned screwdriver. It's increased my productivity, too, and made installing multiple screws much easier. What's more, the tool has enough finesse to drive smaller fasteners without stripping them.

Bosch claims that you can drive 100 3-inch screws per charge, but when I tried driving screws longer than 2 inches into tough material, either the PS20 stalled before hitting home or the battery drained quickly.

Bosch also says you can drill ¹/2-inch holes, but doesn't specify at what speed or in what material.

Personally, I found the usefulness of the PS20 as a drill somewhat limited. The truth is, the tool really isn't designed for large fasteners or for drilling. That wasn't a problem for me; after using the driver for a few days I could predict which jobs it could handle and which required a tool with more oomph.

For most applications, I was impressed with the little driver's runtime. With two months of near-daily use, I've had to charge batteries maybe 10 times. The battery charger worked as advertised,

charging a pack in 30 minutes or less.

Gripes

So, assuming you use the tool as a driver for screws no longer than 2 inches, is it perfect?

Pretty darn close — though I do have a beef with the forward/reverse switch, which is meant to prevent the trigger from being pressed when the switch is in the middle position.

Unlocking the switch doesn't take much force, and more than once I've arrived on a job site to find that another tool in my belt had been pressing the Pocket Driver's trigger. The result: a dead battery. For a tool that promises pouch-worthiness and pocketability, a better trigger lock that's less susceptible to jostling would be helpful.

Surprisingly, I also found the LED work light to be more of a hindrance than a help in low-light situations. Because of where the light is located, the tool housing blocks the beam, throwing a shadow over the end of the bit and the fastener. Eventually I discovered that using a bit extension solves this problem. I'm hoping Bosch moves the light or at least includes a bit extension in future kits.

The only other issue is the bit-holder. With all my other quick-change adapters, the user pulls back to release the bit; with the Bosch, you push forward. Yes, I'm nitpicking, but the pull-in release motion is so hard-wired into my



At half the size of a cordless drill, the Bosch Pocket Driver replaces a conventional screwdriver. It's powered by a 10.8 lithium-ion battery pack, produces about 80 inch-pounds of torque, and spins at 0 to 400 rpm.

brain that after nearly two months of using the tool I still try to pull the bit release toward me. Each time, for a split second I think it's broken — and then I remember.

The Verdict

So maybe the tool isn't 100 percent perfect — but I'm keeping it anyway. It's a great addition to my arsenal. After all, it is basically pouch-worthy — probably the best recommendation I can give.

The kit costs \$130.

Norm St. Onge owns St. Onge Renovations and Backyard Tractor Works in North Bennington, Vt.

Toolbox

The Pipe Shredder

by Robert Zschoche

accepted long ago that on most kitchen and bath jobs my remodeling company would have to remove more plastic plumbing fittings and pipe than we wanted to. Still, I couldn't help thinking how much easier it would be if we could remove solvent-welded pipe from plumbing fittings (PVC or ABS) and reuse existing hubs.

Instead, we often found ourselves tearing open a wall



or floor, cutting out the old fitting, and using couplings and short pieces of pipe to install a new one — just so we could get an open hub to tie into.

All that changed last summer, when we bought a set of Pipe Shredder bits at our local plumbing supply. Since then, the added plumbing work has become unnecessary.

A Pipe Shredder (RectorSeal, 800/231-3345, www. rectorseal.com) is designed to be chucked into a 1 /2-inch drill. It's used to ream out existing hubs so that new pipes can be glued into them. The set — which comes in a padded case — includes bits for

1½-inch, 2-inch, 3-inch, and 4-inch plastic pipe.

At first glance, the shredder looks like a Forstner bit. It consists of a hefty single-piece steel mandrel and body with replaceable steel cutters. Each cutter measures ¹/₂ inch square and ³/₁₆ inch thick, and is held in place with a pan-head screw that takes an Allen wrench. The cutter is ground on all four edges; when one edge gets dull you can switch to a side that's still sharp.

We've had the tool for more than a year and have yet to see any wear on the cutters.

According to the manufacturer, there have been so few requests for replacement cutters the company doesn't even sell them yet. The few requests it did receive were from people who chipped cutters by dropping the bits on concrete.

So far, the company's simply been sending out free replacements, but it plans to offer an inexpensive replacement kit in the future.

Using the Tool

Before reaming out a fitting with a Pipe Shredder, you have to cut the pipe as close as possible to — and parallel to — the face of the hub. We do this with a recip saw, a handsaw, or an inside pipe cutter (a shaft-mounted circular blade

that chucks into a drill).

Cutting with the Pipe Shredder requires a decent amount of "push" into the fitting, so you need to use a heavy-duty drill. We like the leverage and control we get from a right-angle model.

Self-centering. Because the front end of the Pipe Shredder is sized to fit inside the pipe remnant that's glued into the hub, the tool is self-centering. The cutters are set back from the end for stability and won't engage until the bit is a good ⁵/₈ inch into the pipe.

Since the outside diameter at the cutters is the same as the outside diameter of the pipe, the Pipe Shredder

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doesn't actually cut the hub; it cuts only the pipe that is glued into the hub. When you finish drilling out the old piece of pipe, a new piece should fit in its place.

Cutting action. The Pipe Shredder's cutting action isn't very aggressive; it scrapes more than it cuts. This is good because it makes it less likely the bit will bind and injure the operator or damage the plumbing fitting.

If you tilt the drill slightly, you can change the diameter of the cut to account for small variations in pipe size. Once the cut is finished, the hub is almost as clean and smooth as new, and it is ready to be primed and joined with new pipe.

If you use the Pipe Shredder with a heavy right-angle drill or a heavy regular drill (one with a long T-handle for con-





The cutters — which are held in place with screws — cut the pipe as the Pipe Shredder advances into the hub (left). The bits come in a padded case and are sized to fit $1^{1}/2^{2}$, 2^{2} , and 4^{2} -inch pipe (right).



A tradesman prepares to ream the fitting by cutting the existing pipe flush to the face of the hub (above). The end of the Pipe Shredder keeps the bit centered in the pipe. At top right, the bit has been inserted but the cutters have not yet engaged. At right, the cutters have engaged and the bit has gone about ¹/4 inch into the hub.





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trol), it is relatively safe and easy to drill out a hub. It takes us about five minutes to cut off the pipe and ream out the hub when we're working with 1^{1} /2-inch fittings. Larger fittings and toilet flanges take longer — probably about 15 minutes or so each.

Is It Worth the Cost?

The Pipe Shredder is definitely not one of those gimmicky accessories you find in the tool center of a big-box store. The bits are manufactured in the United States and are hefty, well-designed, and solidly made. We paid about \$270 for our kit and have used it on several projects, any one

of which would have justified its cost.

The manufacturer says that it's possible to buy individual bits but most people buy the kit.

We've used the Pipe Shredder primarily to clean out sanitary tees for sink drains and to ream out closet bends in preparation for new toilet flanges.

Once, the tool spared us from having to chip away concrete to get below a damaged but exposed section of pipe. Another time, it saved us from having to open up a wall to cut out a sanitary tee and replace it with no-hub connectors.

Most recently, it allowed us to replace a damaged subfloor, install a new toilet

flange, and run a drain line to a new shower without having to replace the existing side-inlet closet bend.

As is the case with almost any tool purchase, I debated whether it would be worth the cost. For me, a tool is worth-while if it makes the work easier, pays for itself quickly, and helps us earn more on the job.

By that standard, the money we paid for the Pipe Shredder was well-spent.

Robert Zschoche owns Robert Zschoche Remodeling in Chantilly, Va.

Toolbox | Plumbing Tools | by Patrick McCombe

Bacon Saver. Knowing what to do when things go wrong is what separates the pros from the pretenders in any field. So when a threaded pipe breaks with the threaded section still in the fitting, what do you do? Some pros turn to Walton's REPS Heavy-Duty Pipe,

Stud & Screw Extractors. Available in sizes from 1/8 inch to 2 inches, the tools have sturdy four-point grips that make it easy to remove an offending obstacle; afterward, Walton says, they let go without a struggle. They're sold in sets and individually; the #206 set includes six extractors sized 1/8 to 1 inch and sells for about \$90.

Walton Co., 860/523-5231, www.waltontools.com. Circle #13

Wrench. I gave up using compression stops years ago because I could never get them to tighten correctly. As it turns out, I may have just been using the wrong wrench.

Supply-Valve Installation

The One-Stop Wrench from Ridgid is actually two wrenches: one for the valve body and one for the compression fitting on top. A 3/8-inch-diameter section on the handle prevents the valve from spinning while it's being connected to the stub-out. The twoin-one tool sells for about \$21.

Ridgid Tool, 888/743-4333, www.ridgid. com. Circle #14







Handle It! At one time or another, it's happened to the best of us: You go to shut off the supply valve so that you can fix a toilet or faucet, and the handle won't budge. Unfortunately, channel locks — the typical go-to plumbing tool — are likely to distort the handle or break it off altogether. Instead, try using an EZTurnPlus Supply Stop Wrench. This long-stemmed wrench grips the valve's entire handle, reducing the chance of breakage. Since it's made out of plastic, it won't damage finishes. It costs about \$10.

Superior Tool, 800/533-3244, www.superiortool.com. Circle #15

Toolbox I Job-Site Security

Lock Out. A cheap laminated padlock from the hardware store isn't going to stop a determined thief, but a heavy-duty commercial version might. The *A702* (\$28) from American Lock has a case-hardened body and a shackle made with a cut-resistant boron alloy. The *A800LHC* (\$51) delivers even greater security. The lock — which comes with a matching 8¹/2-by-4¹/2-inch hasp — features a distinctive shape that resists cutting and prying. Both products are available online and at your local locksmith.

American Lock, 414/571-5625, www.americanlock.com. Circle #16





Bite Back. Contrary to popular belief, most builders' insurance policies will pay only a fraction — if anything — of what it would cost to replace a trailer of tools. So spare yourself a huge headache — not to mention a day of shopping for new tools — and consider the *Trailer Dog*, a self-contained solar-powered security system for enclosed trailers. The package includes two keychain remotes, two sirens, a solar panel, a backup battery, a door contact, an LED indicator, and a shock sensor. Normally the Trailer Dog costs about \$700, but it's on sale until October 31 for \$500.

Trailer Dog, 877/632-6364, www.trailerdog.com. Circle #17

Eye in the Sky. Rampant theft on large residential construction sites can add 10 percent or more to a home's selling price — which is why some builders decide to install a Wifieye mobile surveillance system. This trailer-mounted array of Webcontrolled, solar-powered cameras helps prevent theft. (It's also a good way to monitor construction progress.) The high-resolution video can be reviewed from any wide-band, Web-connected computer. According to the maker, just bringing the rig on site can solve a lot of theft problems. The setup fee is around \$750. Equipment rental and video storage cost \$1,500 to \$4,000 per month; the most popular package comes to about \$2,700 per month.

Wifieye, 866/943-4393, www.wifieyeinc.com. Circle #18

