

Weigh In!

Want to test a new tool or share a tool-related testimonial, gripe, or technique? Contact us at JLCtools@hanleywood.com or 707.951.9471



EDITED BY BRUCE GREENLAW



Friendlier Bosch 18V Brute Tough Drill/Driver

I tested the Bosch DDH181 “Brute Tough” 18-volt drill/driver along with eight heavy-duty rivals for the January 2012 issue of *JLC*. The tools were surprisingly powerful, but when I tried to push them to the limit, it felt like I was almost inviting an injury. They easily drove 1½-inch spade bits, bored 2¼-inch lockset holes with a hole saw, and sank Simpson Strong-Tie’s 0.22 x 10-inch multipurpose structural wood screws into an LVL/LSL/PSL sandwich without pilot holes. And they also had enough muscle to propel a 4-inch hole saw and a 1¾-inch ship-auger bit through 2-by Douglas fir. A few times, though, the bigger bits jammed, violently whipping my arms before I could let go. This strong reactionary torque is not only scary, it could be dangerous.

Bosch has now attempted to address the issue by introducing the DDH181X Brute Tough. It’s almost identical to the DDH181,

but adds “Active Response Technology” that promises to take the angst out of jamming. I just gave one of these tools a workout to gauge its overall performance and to see if this new feature works as advertised.

KICKBACK CONTROL

Bosch’s new Active Response Technology consists of an internal microchip called an “accelerometer.” When the tool binds, this sensor detects rapid rotation of the tool body and quickly cuts the power. Before my test drive, I viewed a demonstration of this feature on YouTube (search: DDH181X Drill/Driver Video). That gave me a good idea of what to expect from the tool when a drill bit binds or a fastener bottoms out to a hard stop.

To test the feature, I chucked a 3-inch hole saw into the tool, started drilling through ¾-inch plywood, and tipped the drill slightly until it jammed, repeating the

process several times. As in the video, when the bit jammed, the tool body rotated about 45° on its axis before the tool abruptly shut itself off. The abbreviated rotation still delivered an unpleasant jolt, but it was significantly less jarring than a freewheeling kickback. The feature worked equally well in reverse. Either way, the LED headlight starts flashing to indicate that the Active Response Technology has kicked in. To resume drilling, you release the trigger, unbind the bit, grip the tool comfortably again, and squeeze the trigger. If you simply release and squeeze the trigger instead, the tool body will jump again before the motor shuts off.

This safety feature works only if the drill handle is free to rotate. If you brace the main handle or side handle against the framing when drilling in tight quarters, for instance, if the bit jams, you’ll have to manually release the trigger to stop the motor.

RUNTIME

The new DDH181X-01L kit I tried includes 4-amp-hour batteries versus the 3-amp-hour ones included with the DDH181 kit I evaluated a couple of years ago. I repeated my standard runtime test with the new model by counting the number of holes it could drill through 2-by Douglas fir per charge in low gear using a new 1-inch Irwin Speedbor solid-center auger bit. I once again avoided knots, stopped drilling when the bit’s screw point broke through, and kept the bit clean with Blade & Bit pitch remover.

The tool drilled an impressive 176 holes compared with 115 holes for the DDH181. I took no timeouts during this test, and detected no overheating. It did take me a whopping 1 hour and 59 minutes to fully recharge the battery, though, which was one drawback to its higher capacity.

OTHER FEATURES

The DDH181X retains Bosch’s effective base-mounted LED headlight, has fuel



The author tested the “Active Response Technology” by purposely binding a 3-inch hole saw several times in plywood in first gear. The tool body rotated only about 45° on its axis before stopping, helping to prevent injury.

gauges on the batteries, and now includes a handy depth gauge for the side handle. The tool is compatible with every Bosch 18-volt lithium-ion battery.

As for durability, Bosch has been refining its Brute Tough drill/drivers for more than a decade and says the tool can survive 20 drops onto concrete from a 10-foot height. According to Bosch, electronic motor and cell protection help defend against harmful overheating and overloading.

The deluxe kit I tried includes a modular L-Boxx-2 case from Bosch’s Click & Go line. Although the side handle and depth gauge fit in the case, it has no dedicated compartments for them, which is a bit annoying.

THE BOTTOM LINE

The new Bosch DDH181X doesn’t have a brushless motor like some of the latest competing models do. But it’s lightweight, compact, comfortable, and powerful, and it delivers impressive runtime. And let’s face it: The more powerful these tools get, the more we’re tempted to push them to



In the runtime test, the tool drilled 176 1-inch-diameter holes in 2-by Douglas fir.

the limit, and that means more risk of injury from a strong kickback. The new Active Response Technology in this tool helps reduce this risk without driving up the price. I think that’s great.

Four DDH181X drill/driver kits are available. The model HDH181X adds a hammer-drill mode.

DDH181X-01L Specs

Weight with/without side handle:

5.23/4.80 pounds

Length: 8 3/8 inches

RPM: 0–400/0–1,700

Price: \$300

Included in kit: two 4-Ah batteries, charger, side handle, depth gauge, magnetic bit holder, Phillips insert bit, L-Boxx-2 case

Warranty: 1 year, 30-day money-back guarantee (register for free 3-year ProVantage plan)

Bruce Greenlaw is a contributing editor to JLC.

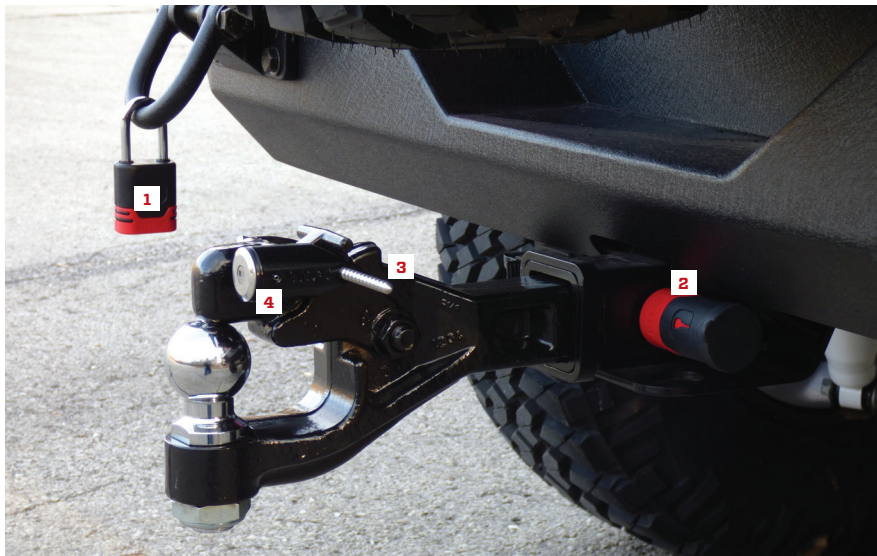
HIGH-SPEED CHALK-LINE REEL

I’ve been using DeWalt 100-foot chalk-line reels with a 3:1 gear ratio for several years. They not only retrieve the line quickly to help speed our layouts, they’ve proven to be durable as well. That’s why I was happy to try DeWalt’s new cast-aluminum DWHT47270 reel for *JLC*. It has a 6:1 gear ratio that doubles retrieval speed and uses helical gears for smoother winding. The gearbox is sealed against contamination to help prevent seizing. A clutch allows you to release the line without spinning the crank, and a large plastic-and-rubber top swings open for easier refilling and jam clearing.

My lead supervisor and I have been using the new reel for a couple of months, and so far we’re impressed. The smooth, rapid line retrieval is great, and the braided nylon/polyester line holds just the right amount of chalk for clean multiple snaps. The reel fits nicely in our toolbelts and has yet to leak any chalk. But the \$15 price tag seems a bit steep. A few dollars less, and we wouldn’t hesitate to buy these reels. —*Terry Goodrich is a framing contractor in Scappoose, Ore.*



The large cap swings open for easy refilling.



1. Padlock 2. Receiver Lock 3. Coupler Pin 4. Coupler Pin Lock

Bolt Security Locks

Strattec Security's Bolt locks automatically program themselves to match the ignition keys of most vehicles. This allows users to carry fewer keys and reduces the likelihood of arriving on site and not being able to open a lock because you forgot the key.

To program the lock, simply insert a vehicle key, push a button, then turn the tumbler (see the "How It Works" video at boltlock.com). From that point on, the lock can be opened by any key that unlocks that vehicle. These weatherproof locks are available as padlocks, cable locks, spare-tire locks, receiver locks, toolbox latches, and tailgate handles.

The newest product in the series is the Bolt Coupler Pin Lock, which can be used to prevent the uncoupling of a trailer. The lock adjusts in 1/8-inch increments along a stainless steel pin to allow for a snug fit with couplers from 1/2 inch to 3 3/8 inches wide. It features a plate tumbler sidebar to prevent picking and bumping, and its stainless steel lock shutter helps keep out dirt and moisture. Like other locks in the series, it is

made in Mexico. The Coupler Pin Lock retails for about \$30. Padlocks go for about \$22. For pricing and other information, visit boltlock.com.

David Frane is editor-in-chief of TOOLS OF THE TRADE, where this review first appeared online.



Above are the cable lock and a retrofit toolbox latch.

PISTOL-GRIP IMPACT TOOLS

Regular pistol-grip impact drivers and wrenches can come up short when fasteners are located in tight places. Milwaukee's solution is these two new right-angle impact models—the 2667 1/4-inch impact driver (left) and the 2668 3/8-inch impact wrench—which require less than 2 inches clearance at the head and bring the brand's impact fastening product line to a total of 18 tools. Features include an eight-position rotating head, a paddle switch that works with forward or rear hand grips, two speed settings, and an LED headlight.

Both tools will be available in October 2014. Bare tool prices are \$120 for the model 2667-20 and \$150 for the model 2668-20; kits include an M18 Redlithium compact battery, an M18/M12 charger, and a case, and sell for \$180 (2667-21CT) and \$230 (2668-2XC). —*Updated from Michael Springer's blog at toolsofthetrade.net.*

