TOOL TEST

# Brad Nailers

## Details make the difference among this group of 18-gauge nailers

BY ROLAND JOHNSON


### WHAT TO LOOK FOR IN A BRAD NAILER

**You should expect an 18-ga. gun to drive a wide variety of nail sizes and to place the nail easily right where you want it to go. You want a tool that is easy to load and gives you a clear indication when the nail supply is running low. Jammed nails are a nuisance, but they shouldn't be a problem: Look for a gun that makes it easy to clear them out.**

I bought my first brad nailer in 1992 when I was working on an entryway that included scores of small custom-made moldings. Tired of dealing with cracked and split moldings that also were marred by hammer dings, I was thrilled to have the ability to drive and set finish nails with the pull of a trigger.

That first brad nailer was a cheap utilitarian version: It jammed fairly often, and it was a bit clumsy to use. After a few months, I stepped up and bought a top-of-the line tool that has given me years of good service to this day. When the editors at *Fine Woodworking* asked me to survey the brad nailers currently on the market, I was pleased to discover that several manufacturers have made a number of improvements to earlier models. These tools are better than ever for woodworkers who want to use brad nailers to fasten moldings to fine furniture and cabinetry.

## CLEARING NAIL JAMS

***Clearing a jammed nail is easier with some nailers than with others. The driver-guide covers on the front of these brad nailers are secured with latches (right) or Allen-head screws (left). Latches allow you to clear the inevitable jammed nail quickly.***

### The first test: Can it drive a 2-in. nail?

I'm happy to report that by using 100 psi of compressed air, all of these tools were able to drive 2-in. nails into white oak. When I dropped the pressure to 90 psi, the results were mixed, with some of the nailers leaving the nails slightly proud of the surface. Shorter nails were easily driven to the adjusted depth by all of the nailers at the 90-psi setting.

The three top performers were the Grizzly, the Paslode, and the Porter-Cable because they drove the 2-in. nails all the way no matter how fast I pulled the trigger. Because of its light weight, the Paslode tended to kick back more as I drove the 2-in. nails, the same way a lightweight shotgun will kick back harder than a heavy gun. As a result, I had to keep firm hand pressure against the tool on the workpiece. That said, however, I would rather spend a long day in the field with the lightweight gun because it's a lot less tiring to handle.

Senco has a turbo setting on its FinishPro 25XP that is supposed to provide 30% more power than the normal setting. I found that the turbo setting had to be engaged to drive the 2-in. nails all the way with the pressure set at 100 psi.

### Can you clear jammed nails?

If they hit a hard knot or another nail, all of these brad nailers can jam—I proved that when testing them—and you have to be able to clear the jammed nails when that happens. All of these tools have removable driver-guide covers for clearing jammed nails. Some of them were easy to remove; others were extremely awkward.

The Campbell Hausfeld, DeWalt, and Grizzly models have what I call a lunch-pail-style latch to hold the cover in place. Simply flipping the latch lever releases the cover, making nail extraction a breeze. The latch on the DeWalt required the least amount of effort to release.

The Paslode and the Porter-Cable have spring-loaded release levers on the side of the nail carriage. It's nice that they are not in the way of the nose, but the levers can be released accidentally when you set the tool down on a workbench.

On the Makita and the Bostitch, two layers have to be removed to clear jams because the driver guide is behind the front cover and is part of the safety guard, which was cumbersome to remove.

The rest of the nailers have two, three, or four Allen-head screws that have to be loosened to remove jams. The Senco

## Why would you want one?

**An 18-ga. nailer is a great tool for applying small moldings to cabinets and built-ins. By driving nails with air pressure, you avoid the headaches of hammer marks, and the 18-ga. nail leaves a small hole that is easy to fill. For heavy-duty jobs, such as case construction or more structural house trim, use at least a 16-ga. nailer or a stapler.**

Photos: William Duckworth

**BOSTITCH SB 1850BN**
**800-782-6539**

**CAMPBELL HAUSFELD NB0040**
**800-543-6400**

**CENTRAL PNEUMATIC 46309**
**(Harbor Freight) 800-423-2567**

**DEWALT D51238**
**800-433-9258**

| MAKE/MODEL NO. | PRICE | WEIGHT | DEPTH-OF-SET ADJUSTER | DRIVER-GUIDE COVER REMOVAL | SAFETY-GUARD LOCATION |
|---|---|---|---|---|---|
| BOSTITCH SB 1850BN | $100 | 2.6 lb. | Thumbwheel on driver-guide cover | Three Allen-head screws | In front of nose |
| CAMPBELL HAUSFELD NB0040 | $80 | 2.8 lb. | None | Lunch-pail latch | In front of nose |
| CENTRAL PNEUMATIC 46309 | $50 | 2.8 lb. | None | Four Allen-head screws with keyhole slots | Behind nose |
| DEWALT D51238 | $100 | 3.0 lb. | Sliding lever beneath trigger; locking button on side of body | Lunch-pail latch | Behind nose |
| GRIZZLY G6047 | $100 | 2.8 lb. | None | Lunch-pail latch | Behind nose |
| HITACHI NT50AE | $100 | 3.1 lb. | None | Two Allen-head screws with keyhole slots | Behind nose |
| MAKITA AF503 | $150 | 3.2 lb. | None | Two Allen-head screws with keyhole slots | In front of nose |
| PASLODE T200-F18 | $100 | 2.3 lb. | Thumbwheel beneath trigger | Spring-loaded latch on side of nail carriage | Behind nose |
| PORTER-CABLE BN200A | $95 | 2.8 lb. | Thumbwheel beneath trigger | Spring-loaded latch on side of nail carriage | Behind nose |
| SENCO FINISHPRO 25XP | $150 | 2.6 lb. | Thumbwheel beneath trigger | Four Allen-head screws of two different sizes | In front of nose |
| SENCO FINISHPRO 18 | $120 | 2.9 lb. | Thumbwheel beneath trigger | Four Allen-head screws of two different sizes | In front of nose |

models have two different-size Allen-head screws, adding to the difficulty, but at least the Senco FinishPro 25XP houses the wrenches on the nailer itself. Otherwise, I would have been left digging through my toolbox looking for the correct Allen wrench to get that guide cover off every time it jammed.

## Noses and safety devices affect nail placement

All of these brad nailers have safety guards that must be depressed before they can fire a nail. The size and placement of the guard are critical when it comes to being able to see where you want to drive a nail.

I use brad nailers mostly for fastening small moldings, and often I want to place the nail in the crease between a fillet and a round or in some other spot that will camouflage the nail hole. With a large nose or safety guard, delicate placement can be frustrating, if not impossible.

Guard location is important, too. I prefer safety guards that are located behind the nose. Working at a bench, I usually look down

**GRIZZLY G6047**
**800-523-4777**

**HITACHI NT50AE**
**800-829-4752**

**MAKITA AF503**
**800-462-5482**

**PASLODE T200-F18**
**800-682-3428**

| EXHAUST-PORT ADJUSTMENT | BELT HOOK | COMMENTS |
|---|---|---|
| Rotating plastic cover | None | Overall, the tool was a well-made, solid performer; however, the depth-of-set adjuster was not intuitive for the direction of set, and there was no indicator for which direction to turn |
| Rotating plastic cover | None | Driver-guide cover releases easily to clear nail jams |
| Loosen four Allen-head screws | None | Very basic tool with reasonable performance; was the least expensive |
| Rotating plastic cover | Adjustable; rotates around rear of body | Good performer; made it exceptionally easy to clear nail jams; the depth-of-set adjustment mechanism took two hands to operate |
| Rotating plastic cover | None | Good performer, a real powerhouse; lunch-pail latch was stiff, but once open it made clearing nail jams easy |
| Rotating plastic cover | None | Good basic performance; the heaviest of the bunch |
| Rotating ring around exhaust-port casting | Can be mounted on either side of nail gun | Nailer won't fire when the carriage is empty; exhaust-port adjustment works easily, and the additional deflector is convenient; features easy-to-read nail-capacity view port |
| Rotating plastic cover | None | The favorite with serious power; lightweight; drove nails consistently; depth of set was easily adjusted; nail jams cleared quickly; has an easy-to-read nail-capacity view port |
| Rotating plastic cover | None | A real powerhouse; featured an easy depth-of-set adjustment; convenient release for the driver-guide cover |
| Rotating plastic cover | Can be mounted on either side of nail gun | Decent performer; but it was difficult to clear nail jams |
| Nonadjustable but located beneath air coupler at rear of body | Can be mounted on either side of nail gun | Excellent performer; exhaust-port location (below air coupler) is ideal; releasing the driver guide was cumbersome because it requires two tools; soft hand grip readily absorbs recoil |

**PORTER-CABLE BN200A**
**800-487-8665**

**SENCO FINISHPRO 25XP**
**800-543-4596**

**SENCO FINISHPRO 18**
**800-543-4596**

the front of the tool to see where I am placing the nail. If the guard is mounted in front of the nose, it blocks my view.

The DeWalt, the Paslode, and the Porter-Cable have narrow noses with safety guards mounted to the rear. All three nailers made it easy to see where the nails were going. The Central Pneumatic and the Grizzly also have rear-mounted safety guards with reasonably small noses. Even though the guard on the Hitachi is located behind the nose, it is huge and made of steel (which can mar the surface) with no provision for a soft cover. Also, the nose itself is wide, and I had a difficult time placing nails in tight quarters. The remaining nailers I tested have guards in front of the nose.

### Integral depth-of-set adjusters are convenient

When I change nail lengths or have to nail into soft woods using my old nailer, I change the air pressure to fine-tune how deep the nail is set. With many of these nailers, you can adjust the depth of set instantly simply by turning a thumbwheel or moving a lever.

It's about an even split between nailers that have integral depth

## NOSES AND SAFETY GUARDS

### NOSE DESIGN

*A slender nose makes it easy to see where the nails will go. The nose on the Hitachi (below) is the largest of the nailers tested. The nose on the Porter-Cable (right) tapers to a finer point.*

### SAFETY-GUARD LOCATION

*Before firing a nail, the safety guard must be engaged by pushing the tool against the workpiece. On some nailers, such as the Paslode (below), the guard is behind the nose, so it's easy to see where the nail is going. On others, such as the Senco FP18 (right), the guard is in front of the nose.*

adjusters and those that don't. The Bostitch, the DeWalt, the Paslode, the Porter-Cable, and both Sencos have depth-of-set adjusters.

The Bostitch has a small, knurled thumbwheel on the front of the driver-guide cover. However, the wheel features no indicator of which direction to turn for more or less depth of set.

The two Sencos have nicely sized, knurled thumbwheels below the trigger, and the 25XP has a decal on the side of the nail carriage to indicate which direction to turn the knob to increase or decrease the depth of set.

The Porter-Cable and the Paslode also have thumbwheels below the trigger that have a direction indicator right at the thumbwheel, making it easy to see which way to turn to make adjustments. I liked these best because I could tell at a glance which way to turn the wheel.

The DeWalt has a unique depth-of-set adjuster. A sliding lever mounted below the trigger has four different positions for depth of set, with the highest setting being the deepest nailset, which was sort of counterintuitive to me. The lever locks in place and is released by a pushbutton on the side of the gun. With this mechanism, it took two hands to set the nail depth accurately—one to push the release, the other to slide the lever. It's an interesting design but not the easiest to use.

## ADJUSTING NAIL-SET DEPTH

*Five of the brad nailers have no control for how deep the nail plunges (or sets) into the workpiece, so you have to control the depth of set by changing the air pressure. With nailers that do offer this control feature, the designs vary. The DeWalt (top) requires two hands to make adjustments. With the Porter-Cable (bottom), a simple thumbscrew with a clearly marked direction indicator does the job.*

### Nail carriages should be easy to load

I have a friend who owns an older brad nailer with an almost indecipherable method of opening and loading the nail carriage. I use the tool infrequently, and it mystifies me every time I have to load it with nails. A nail carriage with a release that is easy to open makes the task a lot more pleasant. And I'm happy to report that most of the nailers in this test have nail carriages with release levers that are logically placed, view ports for seeing the remaining nail supply, and a groove in the carriage bottom to keep nails from bunching up during the loading process.

Release-lever placement is probably more a matter of taste than function. The Central Pneumatic and the Hitachi nailers have a simple, spring-steel latch at the back of the carriage. The Bostitch, the Campbell Hausfeld, the DeWalt, and the Senco FinishPro 25XP have various styles of spring-loaded releases on the side of their carriages, and all of them were easy to use. The Grizzly, the Porter-Cable, and the Senco FinishPro 18 have various styles of toggle releases mounted on the end of the carriage. I really liked the releases on the Paslode and the Makita—the button on the top

## NAIL CARRIAGES

### EASY TO FEED

*Johnson liked the nail-carriage release lever on the Paslode (right) the best. The Senco FP18 (bottom right) was not as easy to use because he had to push on the lever with his thumb while pulling back with the fingers of the same hand. But the design on the Senco 25XP (bottom left) is more user-friendly.*

### EASY TO READ

*View ports to the nail supply ranged from small holes like the one on the Grizzly (top left) to larger openings such as the one on the Makita (top right). The Paslode (bottom) offered the easiest to see: a large, clear-plastic window with a bright orange marker that moves toward the nose as the nail supply is depleted.*

back of the carriage was easy to squeeze with my thumb as I grabbed the carriage with my fingers. I was able to squeeze the button and pull the carriage open in one motion.

I often find myself cleaning up my nail supply by loading several short sections of leftover nails. Without a bottom groove in the carriage to hold the nails in place, they can come flying out of the carriage, especially if I am in a hurry and quickly slam the carriage shut. All but two of these tools—the DeWalt and the Senco FinishPro 25XP—have a bottom groove to keep the nails in place.

### Keep exhaust away from your face

When I'm using a brad nailer, I often have my face close to it to see where I am placing the nail. With my old nailer, invariably I would pull the trigger and get a blast of exhaust right in my eyes. Manufacturers have addressed this problem, and most of the nailers I tested have an exhaust port on the top of the body that adjusts the direction of the blast of air. The one exception is the Senco FinishPro 18, which exhausts the air through the hand grip and out the back of the tool, exiting below the air coupler, where it never will hit you in the face.

### Weight can matter

Weight can be a blessing or a curse with a brad nailer. All of these tools are featherweights when compared with larger 16-ga. finish nailers, but you're likely to appreciate the lighter weight if you have to spend a long day driving nails.

The Paslode is the runaway winner here. It's a full ⅓ lb. lighter than the next-lightest nailer, and it's almost 1 lb. lighter than the porkiest. A plastic composite body is mainly responsible for the lighter weight. Compared with some of the heavier 18-ga. models, I found the Paslode easier to use for extended periods of time.

The drawback to the light weight is that you need to apply more downward pressure on the tool to counteract kickback when driving long nails into dense woods. But most of the time, I needed to drive nails 1¼ in. or shorter, so the light weight was not a problem.

Without hesitation, I would pick the Paslode as my first choice among all of these brad nailers. The light weight, narrow nose, rear-mounted safety guard, easy depth-of-set adjustment, and good power put this tool at the top of the list for me. □

*Roland Johnson is a contributing editor.*

## EXHAUST PORTS

***Most of the nailers, such as the Hitachi (left), have an exhaust port on the top of the head that you can adjust to direct the air away from your face. The Senco FP18 (right) has an exhaust port that is not adjustable, but Johnson liked it the best because the exhaust air is directed through the handle of the tool and out the back, below the air coupler.***