Pneumatic Cap Nailers

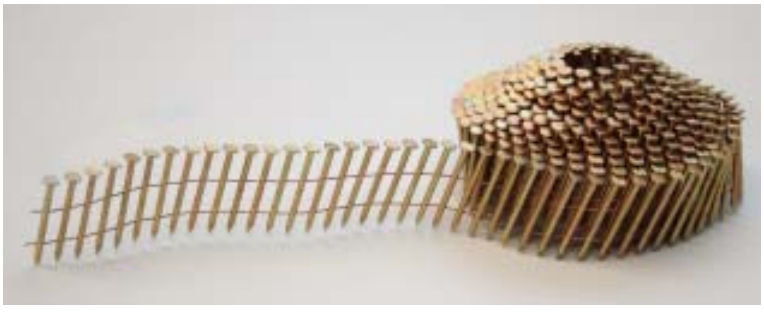
Look for an easy-to-load magazine and a trouble-free feed system

by Jeremy Hess

Anyone who's ever had to reinstall felt or housewrap after a windstorm knows that cap nails — because of their greater surface area — hold felt and housewrap much better than staples or roofing nails do. Nevertheless, many contractors hate using them. You can never fit enough in your nail apron, and driving them by hand is painfully slow. Fastening with a roofing nailer or a hammer-type stapler is much faster.

With all of that in mind, our remodeling company bought a Hitachi pneumatic cap nailer a few years ago. Originally dubbed the Plasti-Tacker, the tool is now in its third generation. It allows us to fasten felt and housewrap with hammer-tacker speed — without wondering whether the material will still be on the building the next morning.

For years, Hitachi's was the only cap nailer on the market, but more recently similar tools from Bostitch, Spotnails, and Grip-Rite have shown up. Like the Hitachi, these nailers



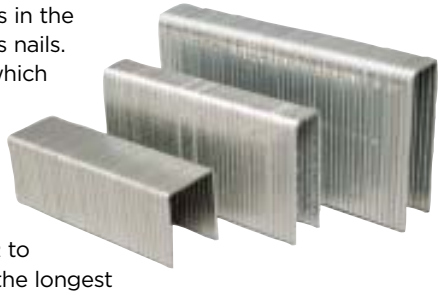


Figure 1. Of the four tools in the test, only the Hitachi uses nails. It accepts a 2-inch nail, which is the longest fastener in the test. The other three tools use staples; none are interchangeable. Grip-Rite's nailer accepts the shortest staples (5/32 to 5/8 inch). Bostitch takes the longest (3/4 inch to 1 1/2 inches). And the Spotnails falls in between (7/8 inch and 1 1/4 inches).

Figure 2. The author likes stacks of caps better than coils. Coils tend to unroll and become distorted, making loading difficult. Hitachi offers coils of caps in both metal and plastic; its metal cap is shown here (left). The other tools use plastic caps (top right, from left: Grip-Rite, Bostitch, Spotnails). Caps measure about 1 inch in diameter. A properly driven cap sits tight to the roof without distortion (above right).

combine separately collated caps and fasteners at the driver, but instead of the more expensive collated nails, the newer tools use medium-crown staples (see Figure 1). The four tools in our test all use proprietary caps; the Hitachi and Spotnails use coils, and the Bostitch and Grip-Rite use stacks (Figure 2).

In addition to taking less expensive fasteners, the newer tools cost at least $150 less than the Hitachi — a savings that means little to me if the guns don't perform.

To see if the newer models are a worthy alternative to our Hitachi, my co-workers and I used them on the job site for six months. Our goal was to get a feel for their real-world performance. We looked for features that make the tool easier and more comfortable to use; we paid particularly close attention to the feed and magazine systems. After all, these tools burn through fasteners quickly, and it's important to know which ones minimize time spent clearing jams and reloading.

Here's what we discovered.

Bostitch SB150SLBC-1

Bostitch's cap gun holds 100 1-inch proprietary caps and 160 staples. Since the proprietary caps are threaded onto a plastic leader — rather than coiled — you don't have to worry about rewinding misshapen or dropped coils. However, this design means that the Bostitch requires more frequent loading than the Hitachi and Spotnails, which have larger, circular magazines.

Bostitch's caps come in stacks of 100. They're dropped in the top of the magazine and then the plastic string that collates them is removed, also from the top of the magazine (Figure 3, page 3).

Bostitch SB150SLBC-1

Figure 3. Bostitch's vertical cap magazine, which is made from sturdy reinforced plastic, is the easiest to load. With the pusher pulled to the top and rotated out of the way, strings of caps are dropped in (left). Once the pusher is back in place, the plastic leader is pulled out. Stacked caps like Bostitch's (below) fit better in a toolbelt and are less vulnerable to damage than coiled caps.

The gun secures the caps with standard 5/16-inch-crown 18-gauge staples in sizes from 3/4 inch to 1 1/2 inches. Staples load as they would on a conventional pneumatic stapler: Once the pusher is pulled back and locked in the loading position, they can be dropped onto the magazine rail. We easily found 5,000-count boxes of staples ($16) at our local suppliers; a couple of stores also stocked the caps, which come in packages of 1,000 ($22). In our experience, it takes 1,000 caps to fasten about 1,800 square feet of roofing or housewrap.

With its front-mounted magazine, the gun looks as though it might be a little nose-heavy, but it's not. The lightweight aluminum housing makes it comfortable to use. Because the contact element is mounted on the side, the user is forced to keep the gun square to the roof, which practically guarantees that fasteners will be positioned flat for maximum hold.

Other features include a quick-release nose for clearing jams and an adjustable exhaust. The gun's depth adjustment is located just below the trigger.

With a plastic case — plus starter packs of staples and caps — the Bostitch sells for around $230.

Grip-Rite GRC58

When we began our test, the Grip-Rite was the newest cap gun on the market. (Since then, Bostitch has introduced its N66BC-1 model; see page 120). It holds 110 caps and 110 1/2-inch-crown standard staples in lengths from 5/32 to 5/8 inch. The shorter staples limit this tool to felt and housewrap — the other tools accept longer fasteners for installing varying thicknesses of rigid insulation.

The Grip-Rite is very compact; it's the smallest of the

Grip-Rite GRC58

Figure 4. The Grip-Rite's cap magazine is mounted on the bottom of the tool — rather than on the side, as with the other guns. This arrangement makes the Grip-Rite very compact. To load the caps, the user retracts the cap pusher, which opens the magazine door; strings of 110 caps go in the end (above). The author found this cap-feed system unreliable. Staples go in a separate magazine under the handle (right).

group and about a third the size of the Hitachi. In part, the smaller size is due to Grip-Rite's unique cap magazine, which is mounted on the bottom of the tool (Figure 4).

Inexplicably — given that these tools are commonly used on roofs and staging — the Grip-Rite is the only model that includes a belt hook. This is a feature that should be on all of the nailers.

While this gun is nice overall, the cap feed system is not very reliable. You load the cap parallel to the staple, then flip it up 90 degrees for fastening. I ran 600 caps through the gun and was never able to get an entire magazine of caps to feed properly. I would have given up sooner, but I wanted to give the tool the benefit of the doubt.

In short, the gun holds promise — we liked its cool cap magazine, belt hook, and small size — but Grip-Rite might want to go back to the drawing board to work out the bugs in the feed system.

The tool sells for $240 with a plastic case.

Hitachi NV50AP3

Hitachi's cap nailer is the only tool in the test that uses nails instead of staples. It also boasts the largest capacity, holding coils of 350 nails and 350 caps. Nail length ranges from 7/8 inch to 2 inches, which means the tool can be used to install foam sheathing.

Hitachi NV50AP3

At more than 5 1/2 pounds (unloaded), this nailer is the heaviest we tested. Its weight, coupled with its cap compartment — which is mounted on the right side of the housing — makes the tool feel a little out of balance.

Because the cap magazine is made from hard plastic, we initially had some concerns about its durability. However, a co-worker's impromptu drop-test on a 20-degree morning proved that the gun and the magazine are pretty tough — the 15-foot tumble onto frozen ground did no damage.

Hitachi's large magazines mean you don't need to reload as often — which is good because this was the most time-consuming tool to load (Figure 5, page 5).

Figure 5. Loading the Hitachi takes some effort: First you have to open two doors to load the nails and engage them on the feed pawls (far left). Then you open the cap magazine and get the caps started on the feed mechanism (left). It took the author several attempts to master the process.

Depth-of-drive on the Hitachi is adjusted with a small knob under the trigger, but I never needed to use it. I found that the gun drove nails to the proper depth without adjustment and worked consistently whether the air tank was full or ready for a recharge. The gun also has a selective trigger for switching between bump-fire and sequential nailing modes, but we never had occasion to try it.

Unfortunately, I couldn't find anyone in my area who stocked Hitachi nails and caps, so I had to order them. A box of 2,800 caps and nails cost me about $56. The gun (no case) sells online for $402.

Figure 6. The Spotnails' circular magazine accepts 200 caps. Once they're loaded, the caps advance manually while the user holds up the "picker's" red handle (left). Staples can be placed on the magazine rail after the pusher is locked in the retracted position (right).

Spotnails Crossfire TCS6832

The Crossfire uses 200-count rolls of caps and strips of 18-gauge staples in $\frac{7}{8}$-inch and $1\frac{1}{4}$-inch lengths. The coil of caps is mounted toward the rear of the gun, which gives the tool a balanced feel.

The stapler ships with a sequential trigger installed, but the manufacturer includes a bump-fire trigger in the package and recommends replacing the sequential trigger with the bump-fire version for more consistent operation.

To load caps, the user inserts the roll into the circular magazine on the tool's right side (Figure 6). The caps slide through a channel while the user pulls up on the feed lever. The process is easier than it sounds.

Spotnails Crossfire TCS6832

The stapler itself is very compact, which helps to reduce its weight.

My biggest gripe involves how the caps are collated. They're held together by a strip of cellophane tape with surprising tensile strength. Sometimes the tape fails to break after a cap is driven; when that happens, a string of caps is pulled from the magazine when the gun is moved to drive the next fastener.

Another problem is that the caps aren't on a reel of any sort, so the slightest mishandling means you have to reroll them for use.

We also had some concerns about the construction of the cap magazine. Though it's made from hard plastic, it seems doubtful it would survive a fall from a roof or scaffold.

On the plus side, boxes of 2,000 caps and staples sell for $30 at one of our local roofing suppliers, which made this gun the most economical to use.

You can find the tool (no case) online for around $220.

The Verdict

After several months of testing, we decided that we liked the Bostitch best. We especially appreciate its easy-loading cap magazine, easy-to-adjust depth-of-drive, and inexpensive, readily available fasteners.

Our second choice is the Hitachi, with its large magazines and its ability to drive a 2-inch nail.

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Too Late to Test

The newest cap nailer came on the market just as we were wrapping up testing. With a capacity of 300 nails and 100 caps, Bostitch's N66BC-1 could be considered a cross between Hitachi's NV-50AP3 and Bostitch's SB150SLBC-1. It accepts Bostitch's stacked caps and coiled nails from 1 1/4 to 2 1/2 inches — a half inch longer than any of the tools in our test. The ability to shoot a longer nail should make the tool appealing to contractors who install greater thicknesses of foam sheathing. According to Bostitch, the tool weighs 5.8 pounds and sells for $320. Look for a comprehensive test in an upcoming *Toolbox* review.

Cap Nailer Specs

Brand	Model	Street price	Weight (in pounds)	Fastener type	Fastener length (in inches)	Cap capacity	Fastener capacity	Cap collation	Toolless depth-of-drive?
Bostitch 800/556-6696 bostitch.com	SB150SLBC-1	$230	4.75	staples	3/4 to 1 1/2	100	163	Strip	yes
Grip-Rite 800/676-7777 grip-rite.com	GRC58	$240	4.25	staples	5/32 to 5/8	110	110	Strip	no
Hitachi 800/706-7337 hitachipowertools.com	NV50AP3	$402	5.6	nails	7/8 to 2	350	350	Coil	yes
Spotnails 800/873-2239 spotnails.com	TCS6832	$220	4.88	staples	7/8 and 1 1/4	200	200	Coil	no