

Nail Guns for Cabinetry

A guide to using finish nailers, brad nailers, pin nailers and staplers

BY ROLAND JOHNSON

Nails enjoy a long history in woodworking. Although many of today's craftsmen, unlike their Pilgrim counterparts, avoid nails in fine furniture, these fasteners still have a place in cabinetry. But you won't see a lot of hammers swinging in cabinet shops. Today's woodworker has at his disposal all types of pneumatic guns for driving finish nails, brads and staples. These tools allow you to work faster, suffer less fatigue, align parts more accurately and won't mar a workpiece the way an errant hammer blow might.

The range of choices in pneumatics is great. But for cabinet work, there are only four categories of guns worth considering: finish nailers, brad nailers, pin nailers and staple guns. Each type of gun is best suited for specific tasks. Don't expect one to do everything.

Finish nailers

A finish nailer is the largest gun a woodworker would need. Most weigh around 5 lbs. and can shoot nails up to 2½ in. long. Many finish nailers on the market have an angled nail carriage, which makes it easier to install molding in tight quarters and to do overhead work, such as installing crown molding. A finish nailer can cost from under \$300 to well over \$400.

The nails for this type of gun



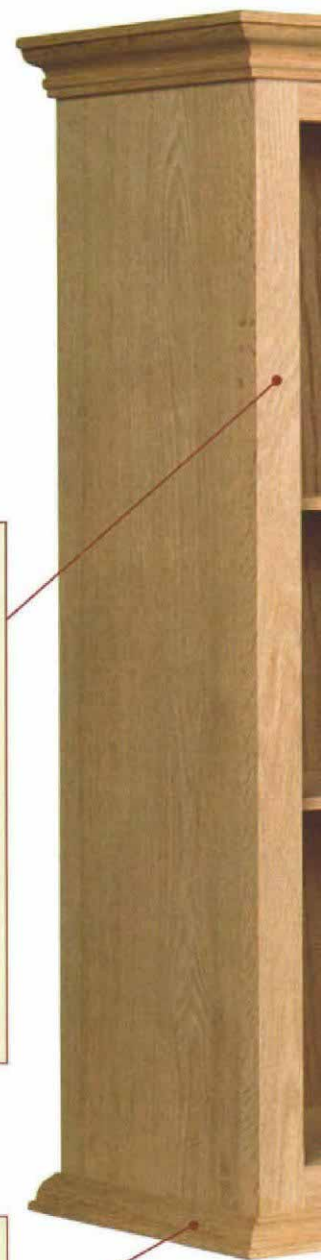
FINISH NAILER

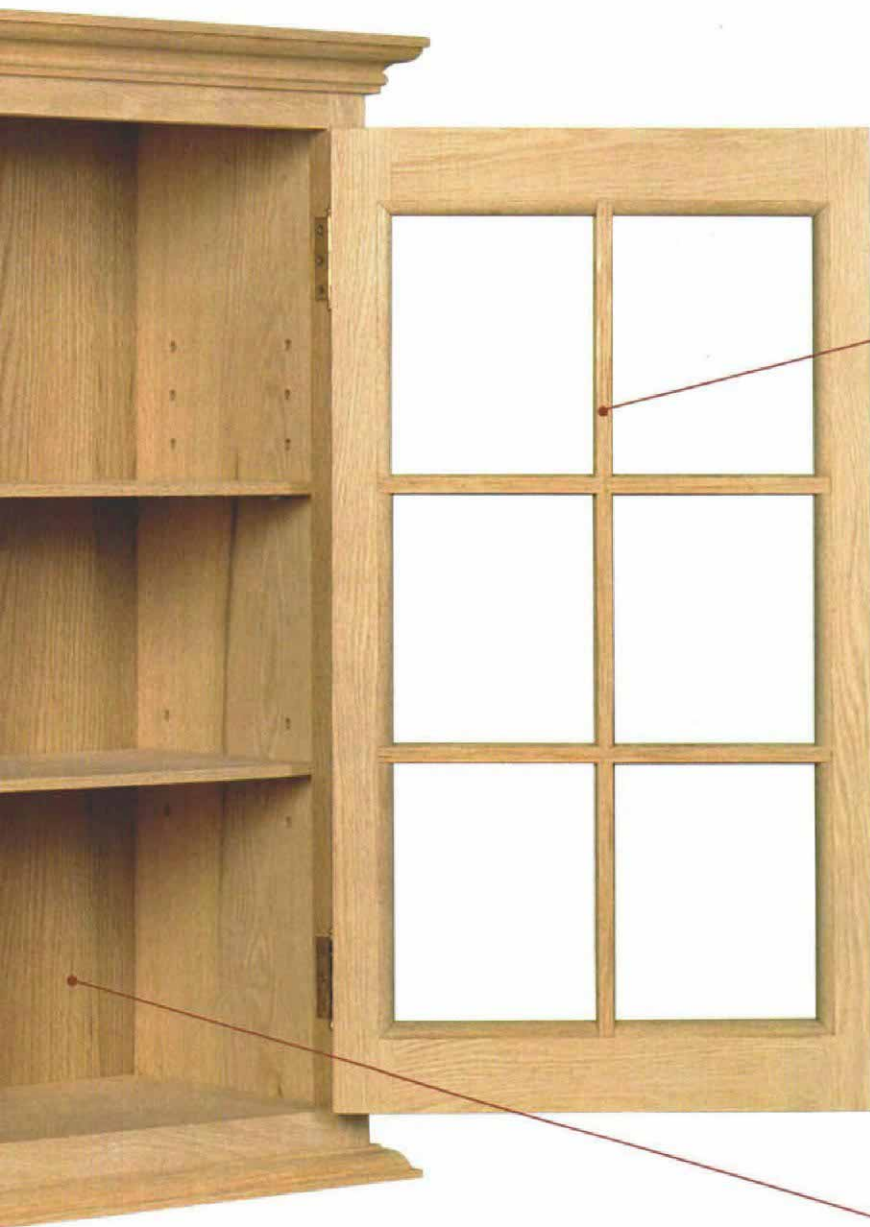
Used for cabinet carcass construction, face-frame attachment, door jambs, casing, baseboards, plinth and corner blocks, large crown moldings, jigs and fixtures. Guns come in 15-gauge and 16-gauge models and fire nails from 1½ in. to 2½ in. long.



BRAD NAILER

Typical uses include cabinet molding construction and attachment, casing at the jamb edge, cabinet backs, beaded wainscot as well as jigs and fixtures. Fires brads from ¾ in. to 2 in. long.





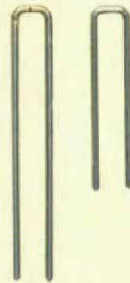
PIN NAILER

Used for attaching delicate molding and stop molding for glass. They are also useful for holding trim in place while glue dries where clamping would be awkward. The lightest type of nailer fires 23-gauge headless pins ranging in length from $\frac{1}{2}$ in. to 1 in.



STAPLE GUN

Uses include attaching cabinet backs made of plywood thin enough that a brad might blow right through and for small jigs and fixtures. Staples range in length from $\frac{1}{8}$ in. to $1\frac{1}{2}$ in.



How much air do you need?

If you are not ready to go to the expense of plumbing your shop for compressed air or even buying a compressor, a portable air tank is an adequate substitute. The author's 6-gal. air tank can be filled at a gas station and has more than enough capacity to complete a small cabinet.

Stray nails and gun safety

Make sure your hands are out of the path of a driven nail. I shot a nail into the side of my hand while holding a piece of wood that wasn't as thick as the nail was long, and I can still remember the pain. Always make sure you are aware of the length of nail loaded in the gun. If the nose of the gun has to be held at an oblique angle to nail some molding, the path of a nail may follow the grain and go off its intended course. Pulling the nails through usually causes further damage. It's best to cut the nail with nippers, recess the nail with a nailset and fill the hole.

Treat a nail gun as you would any gun. Ear protection and eye protection are important. Nail-guns emit a loud exhaust report each time the gun is fired, especially the large finish guns. Be aware of where the exhaust port is on the gun, because the exhaust can blow sawdust or other debris with considerable force.

A nail can glance off the workpiece if the nail gun is held at too severe an angle or can ricochet off a hidden piece of metal such as a screw head. Always be aware of anyone around you when firing the gun, and make sure they are not in the path of the nail if it were to go slightly astray. Never disable the safety.



Not where he intended. The nose of the gun is angled so that the nail would enter the side of the cabinet and not penetrate the inside. Unfortunately, this angle combined with the grain of the molding to steer the nail out of the side of the cabinet.



A clean snip. The neatest way to cover up an errant nail is to snip off the protrusion as close to the wood as possible.



Punch it home. Sink the stub of the nail with a narrow-headed nailset.

are typically 15 or 16 gauge, roughly the diameter of hardened finish nails. Many of the 15- and 16-gauge nails have a polymer coating that lubricates the nail as it is driven and bonds it to the wood when it cools. This feature is great for holding parts together, such as cabinet carcasses, but makes the nail almost impossible to pull out if you make a mistake. For exterior applications, nails are also made in aluminum or stainless steel to avoid rusting.

Brad nailers

A brad nailer is smaller and lighter than a finish nailer and shoots 18-gauge brads from $\frac{5}{8}$ in. to 2 in. long. A brad nailer is ideal for small moldings, installing cabinet backs or other applications where a small-diameter, small-headed nail is needed. A brad nailer is in the \$100 to \$200 price range.

One thing to note about brad nailers is that some guns have a wider nose than others (see the right photo above). Wide-nosed guns may make it difficult to place nails in tight quarters.

Pin nailers

A pin nailer is roughly the same size as a brad nailer, but it drives headless 23-gauge pins, ranging in length from $\frac{1}{2}$ in. to 1 in. Use a pin nailer for delicate molding applications, such as stop molding for glass, or in situations where filling the nail holes would be a chore or the moldings would be split by countersinking a brad head. A pin nailer is also useful for holding trim in place while glue dries where clamping would be awkward. Pin nailers range in price from \$75 to more than \$125.

Staple guns

A staple gun is my choice for attaching cabinet backs made of plywood, where a brad might blow right through. Staples also help keep splitting to a mini-



Different noses. Although both are brad nailers, the model on the left has a smaller nose than that on the right, which makes precision nailing easier.

mum when fastening near the end of a board.

The average woodworker can get by with a gun that handles $\frac{1}{4}$ -in. crown staples, from $\frac{7}{8}$ in. to 1 $\frac{1}{2}$ in. long. There are staple guns that can handle $\frac{1}{2}$ -in. crown staples, but these guns are more suitable for upholstery work. You can buy a staple gun for around \$100.

Air supply

Pneumatic nailers are not big consumers of compressed air. A small air compressor will supply all the air needs of any finish, brad or pin nailer or of any staple gun. An inexpensive method of getting into pneumatic nailing is to get a portable air tank, which can be filled at a local service station. I have a 6-gal. model fitted with a regulator and coupler that I use for small projects. A tank this size has more than enough capacity to complete a small cabinet like the one shown on p. 59.

Maintenance of a pneumatic nail gun is easy. Many guns do not require lubrication. For a gun that does need lubrication, simply trickle a few drops of oil into the air inlet of the tool each day before it is used. Do not use too much oil, because the excess could be sprayed onto the workpiece and cause finishing problems.

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