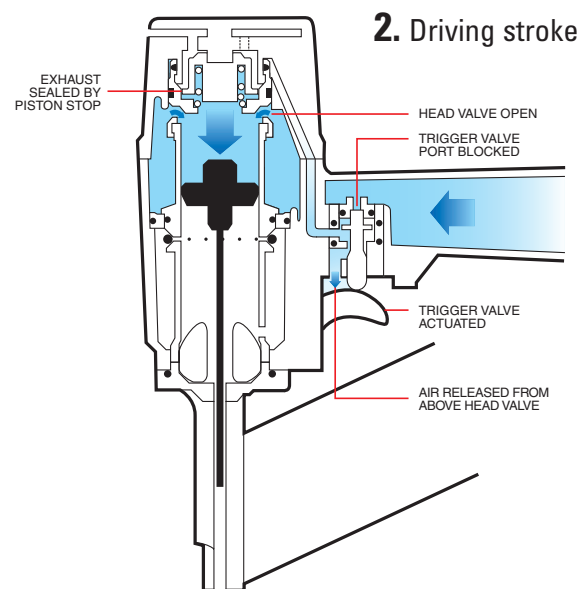
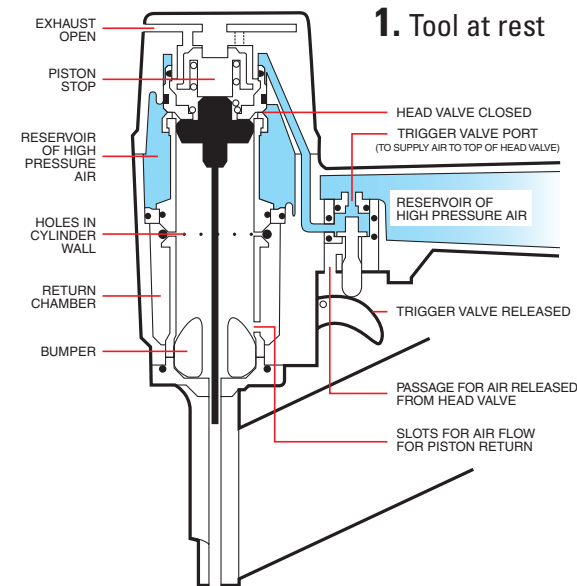


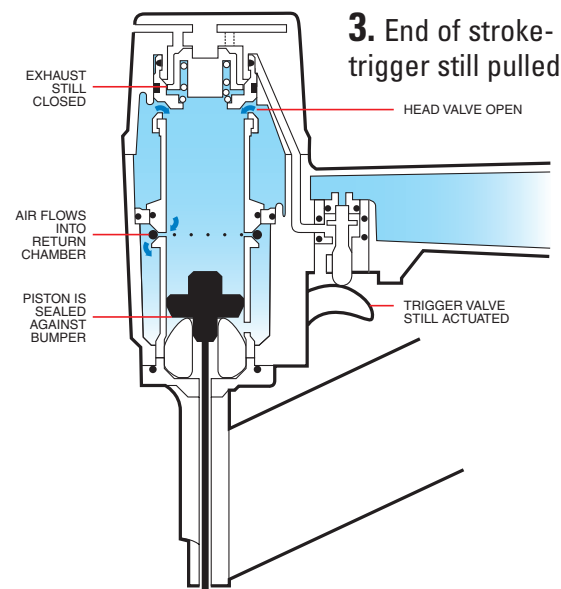
# How Driving Tools Work



If you have access to a cut-away tool this is the time to get it, as looking at a diagram is not the same as looking at the real thing.

Firstly, you do not **fire** a nail with a hammer – you **drive** it. The same applies to pneumatic fastening tools. You use them to drive fasteners.

The place of the hammer is taken by the driver/piston and the energy that comes from the movement of the hammer is replaced by the energy from the movement of the driver/piston. Instead of putting your hand into your pocket for the next fastener, it is fed in to the nose of the tool for you, either by a spring or by a piston.



There is nothing magic to pneumatic fastening tools. The trick lies in moving quantities of air from one part of the tool to another as quickly as possible. The four diagrams opposite show the position of the various components that make a tool work during the stages of **driving** a fastener.

**High pressure air** is shown as **blue**. Areas which have **no colour** are at **atmospheric pressure**.

All tools work in more or less the same way, they either **drive** or **clinch** a fastener.

Some tools have a work contacting element that has to be pushed against the wood before the trigger can be actuated, but this does not change the way the air moves inside the tool.

There are slight changes for coil nailers; these tools use air from the bottom of the housing to move a feeder piston to engage the next nail, which is then returned by a return spring.

