

OWNERS MANUAL

TROW & HOLDEN PNEUMATIC CARVING TOOLS

Thank you for buying a Trow & Holden Co. pneumatic stone carving hammer. As inventors of the first pneumatic carving tool in 1890, we have had many years to perfect these tools and to expand our range of sizes to suit the needs of all our customers. Whether you're working in small blocks of alabaster or large blocks of granite, if you feel the tool you have received is not a comfortable size for you, we will gladly exchange it for another.

You may have noticed that your Trow & Holden pneumatic tool has a number on it. That is a distinct serial number and with it we have registered the tool in your name. Unique details of each batch of tools are kept on file, so if your tool ever needs repair, we can determine its exact specifications before beginning work. Each tool is guaranteed for life against breakage or defect. Because this tool has only one movable part, it is difficult to wear it out. We know of tools that are nearly 100 years old that are still in use. You made a great investment when you bought a Trow & Holden pneumatic tool!

BREAKING IN YOUR TOOL

We made your Trow & Holden pneumatic tool to very precise specifications. The piston fits the cylinder with a .0002" tolerance (2/10ths of 1/1000th an inch!) so that your tool will perform consistently and not wear out for a very long time. For that reason, it may take 100 or more hours of use before your tool achieves its maximum power level. We believe this slight reduction in power during early use will not significantly effect the tool's efficiency, but if it presents a problem, please call us to discuss your needs. If and when your piston ever wears out enough to need replacement, you will know by the excessive air leakage around the nose end. Please send in the whole tool so we can replace the nose bushing at the same time, thereby duplicating the fit and performance of a new tool. Replacement of the piston and nose bushing due to normal wear are not covered by warranty.

SAFETY

A common-sense approach to safety should be maintained while using any Trow & Holden stoneworking tool. To protect yourself from flying stone chips, always wear safety glasses whether you are using hand or power tools. These are available from us for \$10.00, or any hardware store carries them. The best type are those that completely cover your eyes.

You may find that you are generating more stone dust with your pneumatic hammer. We suggest that you either install a dust collection system or wear a respirator.

Because pneumatic hammers make noise, we recommend that you wear earplugs while using your tool.

Wrist supports may help prevent wrist strain and shock-absorbing gloves may increase your comfort whether you are using hand or pneumatic hammers.

Strain and fatigue lead to accidents, so equipment that helps prevent these two conditions will improve safety. Don't forget that taking breaks and changing hand positions frequently while working will also help prevent fatigue.

GENERAL OPERATION

Your Trow & Holden pneumatic tool has a 1/2" or 5/8" nose bushing and is designed for use with chisels having shanks of the same size. Be careful to order chisels with the proper size shank for your tool (NOTE: only the 1-1/4"D-type tool uses a 5/8" shank).

Carving with a Trow & Holden pneumatic hammer and chisel is a 2-handed operation. Much as it is with a hand hammer and chisel. The nose opening of your pneumatic hammer is round and does not have a retainer to lock a chisel into it. There are a number of advantages to this design. It increases the

comfort of the person using the tool by allowing him or her to change hand position during work without resistance from the tool. It also improves accuracy in fine work by rendering the chisels infinitely adjustable both in position and power during use. And it means you can discontinue power to your chisel instantly by simply withdrawing it from the nose opening, without disconnecting your pneumatic tool or turning off your compressed air supply.

There are several ways to adjust the striking impact of your tool. One is to withdraw the chisel from the hammer very slightly, until a suitable level of impact is achieved. Another is to reduce or increase the air volume as needed using your hose-mounted air stopcock. You can also partially block off the exhaust outlet on your tool (using your thumb or finger) allowing some, but not all, of the air to escape. There should be only one air regulator in your air line; more than one regulator does no good and reduces the total amount of air available to your tool. Set the air regulator to achieve maximum power to the tool (do NOT exceed the air pressure rating of the compressor or air hose), then adjust the tool's power using the hose air stopcock. Experiment to discover what degree of impact feels best to you. This will vary depending on the width of your chisel and the hardness of your material.

MAINTENANCE

Your Trow and Holden pneumatic tool requires very little maintenance to run well. Please review the parts list attached - it will help you become more familiar with how your tool works. The most important maintenance procedure is to oil your tool before and after each use and every 2 hours while in use. If you feel this is creating an excess of oil, you may wish to purchase a line filter/oiler. This will lubricate your tool without flooding it and at the same time filter out stone dust and other contaminants. Call us if you would like further information on these filter/lubricators.

Never use household oils in your pneumatic tool, as they can quickly gum up the works and rob your tool of power. Using the wrong oil or failing to adequately oil a tool are the primary causes of tool failure and repairs. With proper oiling, your tool should run well for many years.

HOW TO DO IT?

- ◆ Use a light spindle oil that will not gum. A sample is included with your tool. You may order more from us or ask for a comparable product at a hardware/auto parts store. Any oil approved for pneumatic tool use should work -- if in doubt, call.
- ◆ Place 2 drops of oil directly in the air inlet. Remember; oil before and after each use and every 2 hours while in use.
- ◆ Use good air and hoses. A pneumatic tool requires a good, clean supply of compressed air in order to operate at peak efficiency. The intake filter on your compressor should be cleaned regularly according to the manufacturer's directions. The air storage tank should be drained frequently to eliminate any moisture from the air supply. These steps will not only help your pneumatic tool to operate at its best, but will also reduce wear and tear on your compressor.
- ◆ Make sure your air supply hose is in good condition. Air hose that appears old or is cracked on the outside surface may be disintegrating from the inside out. Pieces of rubber or fiber reinforcing material could enter the air inlet causing the tool to lose power or to stop working completely. This would not damage your tool, but often does require some creative cleaning! So remember to use good air supply components and to check for deterioration frequently. Also, AVOID USING TEFLON or similar type thread-sealing tapes. While they are excellent for plumbing jobs, fragments of these tapes will seriously clog air tools. Solvents have little or no effect on these materials making the cleaning job even more difficult.

- ◆ Keep your pneumatic tool clean. If your carving tool fails to work properly due to the problems listed above, or if you are working in a very dusty environment, you may need to clean the internal workings of the tool. It should not be necessary to disassemble the tool. Simply disconnect the air supply and totally immerse the tool in an oil-reducing solvent such as kerosene or naphtha. Let the tool soak for several hours, then remove and let excess solvent drain completely from the tool. Put several drops of pneumatic tool oil in the air inlet (see lubrication instructions), reconnect to the air supply and start the tool. If this cleaning procedure does not improve the performance of the tool, please call the factory and describe the problem. We will do our best to help you over the phone and, if necessary, make arrangements to have the tool repaired at your convenience.
- ◆ Store the tool carefully. Wipe the outside surfaces clean after using your pneumatic tool. Use a lightly oiled cloth and, if possible, store your tool wrapped in a clean, lightly oiled cloth as well. Don't forget to oil as previously mentioned before storing.
- ◆ Avoid running the tool without a chisel in place. Running without a chisel can cause burrs and excessive internal wear.
- ◆ If your tool does not run at all when air pressure is applied, try removing the chisel and, with the air still on, tap the nose end of the tool gently on a non-marring surface such as a block of wood. This should start the tool immediately and indicates that the tool is probably not getting enough lubrication. Try oiling more frequently.

Your Trow and Holden pneumatic carving tool will provide you with years of hard work while requiring very little maintenance. We are very proud of its superior design and quality. Please feel free to call us at any time to discuss your tool and its many uses and remember, Trow & Holden also has a full line of steel and carbide-tipped chisels designed for use with your pneumatic tool.

Thank you for buying a Trow and Holden pneumatic carving tool. Like our other fine tools, they're made to last in Barre, Vt.

