

Lie-Nielsen TOOLWORKS[®] INC.

Heirloom Quality Tools[®]

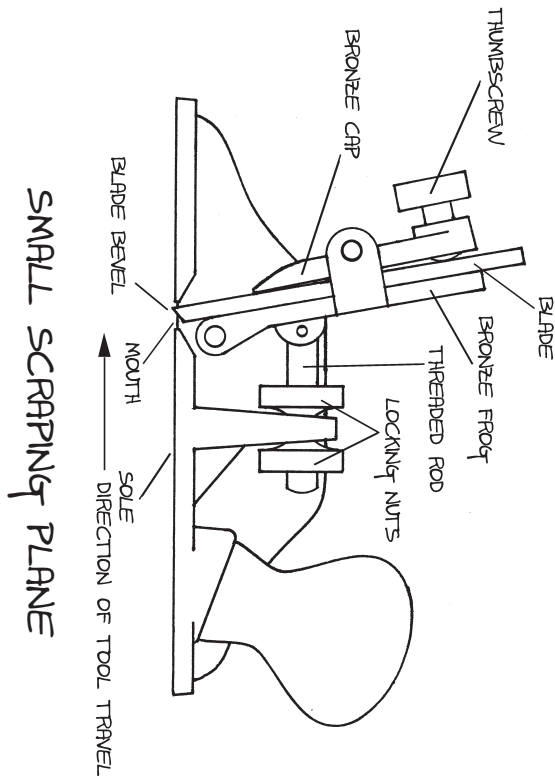
Small Scraping Plane

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Made in Maine, USA, since 1981



WARNING: This product can expose you to lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. Wash hands after handling.

Small Scraping Plane

The Lie-Nielsen Small Scraping Plane is based on the Stanley No. 212, which was discontinued in 1934. The original has become increasingly hard to find and expensive, but it is the perfect tool to use for many small scraping jobs. We are pleased to make it available for woodworkers once again.

Blade Sharpening: Our Scraping Plane comes with a much thicker blade than the original. This allows the blade to be prepared differently than other scrapers. We have found that our Scraping Plane blades sharpen easily and produce a better surface with a 45° bevel, honed to a sharp edge like a plane blade. Honing a secondary bevel of 5° will help achieve a razor edge quickly. We do not recommend using a burr, at least until you get used to using the tool. Slightly rounding the corners of the blade with a stone will prevent them from marking the work.

Burnishing: If you wish to create a burr, hone the blade, and then clamp it upright in a vise. Using a burnisher, begin by holding the burnisher at about 45° to the blade, working up to 75°. Work the edge until you can feel a distinct 'hook' all the way across. *Be very careful not to cut yourself on the upright blade.* Use of a burr will give more aggressive cutting action, and depending on how consistent you are, turning the burr will require adjustment of the blade angle after sharpening to work best.

Adjusting Blade Angle: The blade angle is adjustable and should be set about 15° forward of vertical. Try adjusting the angle to find optimum performance in various woods. One way to get it close is to take some test passes holding the blade by hand, varying the angle until it cuts best, then hold the blade at that angle against the side of the plane and adjust the frog to match. The beveled faces of the nuts fit into the countersink on the hole in the post to provide a solid lock.

Setting the Blade: Normally, one pushes the Scraping Plane from the rear with the knob in the palm. The blade is inserted with the bevel facing the knob. To set the depth of cut, lay the sole of the tool on a flat surface and loosen the thumbscrew. Press lightly on the top of the blade with your thumb and re-tighten the thumbscrew. **Do not over tighten.** Usually, this will be enough exposure for a fine shaving. If not, repeat with a slip of paper under

the front of the tool. Minor depth adjustments may also be made quickly by lightly tapping the top of the blade with a light hammer while the tool is resting on a flat board.

It is best to use a light touch, rather than trying to remove too much material at once, or using too much downward pressure. Too aggressive a cut, including too much downward pressure, will result in chatter. You should be taking light passes. Often it is helpful to scrape at an angle to the grain, then again from the opposite angle.

Toothed Blades: We offer toothed blades of 18 and 25 teeth per inch, useful when working extremely difficult woods, by scoring fibers in a criss-cross pattern before using the regular blade. They are also used to prepare surfaces for gluing, as in veneering, by lightly roughening the surface.

Materials: We use Manganese Bronze for the bodies. These castings are fully stress relieved, a process that removes inherent stresses and ensures that the tool will remain flat and true.

The blade is double tempered A2 Tool Steel, hardened to Rockwell 50-55. Our heat treating technique ensures that the blade will take and hold a very fine edge for a long time. After heat treating, the blade is fully surface ground on the top, back, and cutting edge, giving a smooth, flat surface that will take a mirror finish very quickly. The 1/8" thickness provides solid chatter-free cutting.

Maintenance: The bodies are hand lapped, to a tolerance of .0015". Depending how much use your tool gets, an occasional light sanding with wet/dry paper (320 grit or finer) on a flat surface will keep the sole in as-new condition. A light oiling on the threaded rod and Brass adjuster will keep them moving freely. Many people like the patina that Bronze gets with age and use, but if you wish to keep the finish bright, a little brass polish is in order. The blade should be kept lightly oiled to prevent rust, especially when the tool is not in use. We recommend Jojoba Oil, a plant based oil product that is non-toxic, odor-free and easy to use.

Guarantee: Materials and workmanship are guaranteed for the life of your tool. Call for repairs or replacement parts. We are available for advice if you ever have a problem using your tool.

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