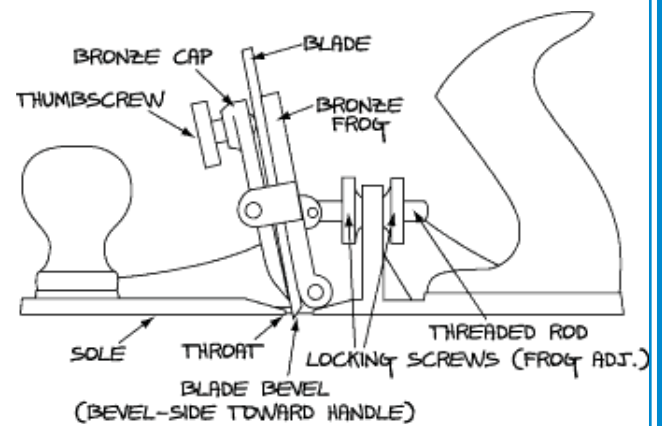


Lie-Nielsen Toolworks Product - Use and Care Instructions

Large Scraping Plane

The Lie-Nielsen Large Scraping Plane is based on the Stanley #112, which was made by Stanley from 1885 and discontinued in 1944. This is an excellent tool for putting the final finish on large flat surfaces, especially when using woods that are difficult to finish with a Smoothing Plane. Scraping — whether with a Cabinet Scraper or a Scraping Plane — gives great results. The plane format gives a comfortable handle and knob to grip. Scrapers, however, take some practice to master.



Blade Sharpening: Our Scraping Plane comes with a much thicker blade than the original. This allows the blade to be prepared somewhat differently than other scrapers. We recommend that you hone the blade to a sharp edge like a plane blade and do not use a burr (at least until you get used to using the tool). The blade is provided with a 45° bevel to facilitate sharpening. Slightly round the corners of the blade with a stone to prevent them marking the work.

Burnishing: To create a burr, hone the blade, then hold it upright in a vise. Using a burnisher, begin by holding the burnisher at about 45° to the blade, working up to 90°. 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.

Setting the Blade: The blade is inserted with the bevel facing the handle. 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 burnisher or light hammer while the tool is resting on a flat board.

Adjusting Blade Angle: The blade angle 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.

Use: Handle the Large Scraper like a Bench Plane. 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 (blades set too deep) or too much downward pressure will result in chatter. You should be taking light strokes. Often it is helpful to scrape at an angle to the grain, then again from the opposite angle. For a good discussion on the use of scraping planes see David Charlesworth's book Furniture Making Techniques Vol. II.

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

Materials: The body is cast from Ductile Iron, a very strong alloy that will take a lot of abuse. These castings are fully stress-relieved, a process that removes inherent stresses and ensures that the tool will remain flat and true. The cap and frog (the part the blade sits on) are Manganese Bronze. Other parts are Brass and Steel.

The blade is A-2 Tool Steel hardened to Rockwell 50-55, cryogenically treated and double tempered. 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 body of this tool is cast Ductile Iron and will rust. To protect it , you should oil, wax and/or wrap the tool after use. At the least wipe your fingerprints off with an oily rag. The body casting is ground dead flat. Occasional hand lapping with fine wet/dry sandpaper (320 grit or higher) on a flat surface will help remove dings and keep it true. The cap iron can be polished with any good brass polish or be allowed to patina with age and use.

Occasionally, the tool should be disassembled, cleaned, and the moving parts oiled. The blade should be kept lightly oiled to prevent rust, especially when the tool is not in use. In our shop, we use a fine abrasive handblock to remove light surface oxide from body or blade. The Handblock is available from us.

Guarantee: Materials and workmanship are guaranteed for the life of your tool.

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