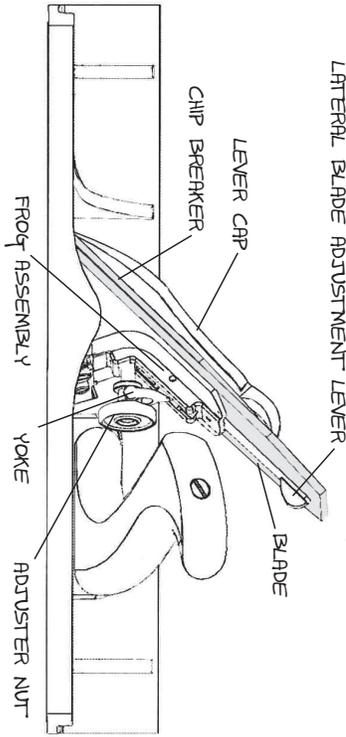


SHOOT BOARD PLANE



Lie-Nielsen TOOLWORKS[®] INC.

Heirloom Quality Tools[®]

Shoot Board 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.

Shoot Board Plane

The Lie-Nielsen Shoot Board Plane is based on the Stanley 51, which was made between 1909 and 1943 and sold with a companion metal shooting board. Our Shoot Board Plane will fit the original Stanley board, but can be used with any type of shooting board. Plans for simple shop-made shooting boards are enclosed. The skew-set blade can be adjusted for lateral adjustment to allow for angled cuts, such as draft for pattern work. The plane is 15" long, 3 1/8" wide, with a shoulder height of 2 1/8" and weighs just over 9 lbs.

Geometry: The blade is ground sharp with a 25° bevel and bedded bevel down at 45°. The blade is skewed at 20° to the sole.

Blade Sharpening: The blade comes ready to use, but honing a secondary bevel of 5° will increase performance, help achieve a razor edge quickly, and improve edge life in hardwoods. For information on sharpening, we recommend David Charlesworth's video, *Plane Sharpening*, available via our website in both DVD and streaming formats.

Blade Adjustment: To advance the blade, turn the adjuster nut clockwise. It is always a good idea to finish adjusting the blade by a forward adjustment to take up backlash and prevent the blade from moving. In order to be able to adjust the blade easily, **do not overtighten the lever cap screw.**

Mouth Adjustment: To adjust the mouth opening, loosen the two locking screws at the back of the frog; then turn the middle adjuster screw. Observe the opening in front of the blade. When you are satisfied with the opening of the mouth, set the locking screws again.

Improved Chipbreaker: Our Improved Chipbreaker is 1/8" thick. The raised lip under the bevel of the chipbreaker is back beveled 1° to ensure that the leading edge contacts the blade firmly. You should never need to dress this surface, but if you do, use a very fine stone and be sure to maintain the angle. The 25° bevel may be

honed occasionally. For general work, set the end of the chipbreaker about 1/16" from the cutting edge of the blade; for the finest smoothing work, set it closer to the edge.

Materials: Bodies are 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 is Manganese Bronze. The blade is A2 cryogenically treated Tool Steel, hardened to Rockwell 60-62 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 thick blade provides solid chatter-free cutting.

Maintenance: The sole and side are surface ground flat and square to a tolerance of .0015". Depending on how much use your tool gets, an occasional light sanding with 320 grit or finer wet/dry paper on a flat surface will keep the sole and side in as-new condition. Keep lightly oiled or waxed to prevent rust. A light oiling on the threaded rod, the Brass adjuster nut and the lateral blade adjustment lever will keep them moving freely. We recommend Jojoba Oil, a plant based oil product that is non-toxic, odor-free and easy to use. Also, in our shop, we use a fine abrasive handblock to remove any light surface oxide from tool bodies and blades. Jojoba Oil and abrasive handblocks are available from us.

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 Cherry handle is oiled and buffed with wax to produce a natural finish. Wipe with oil as desired to refresh.

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.