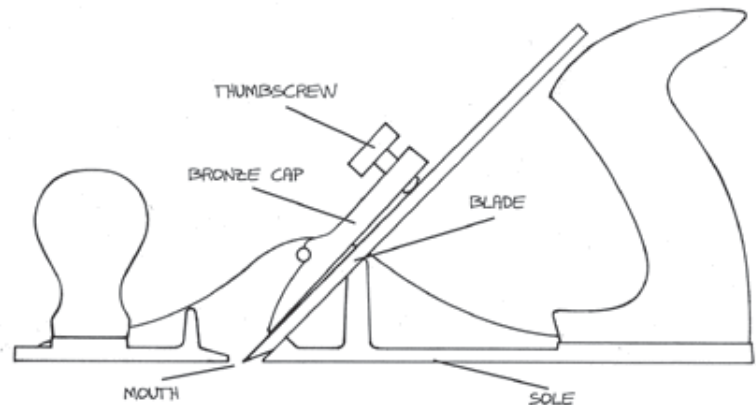


Lie-Nielsen Toolworks Product - Use and Care Instructions

Scrub Plane

The Lie-Nielsen Scrub Plane is based on the Stanley 40-1/2. This plane removes large quantities of wood in a hurry. In the past, Scrub Planes were used like a Thickness Planer to take rough-sawn boards down to size. Then the woodworker would progress to a Jack Plane, and finally a Smoothing Plane.

Today's woodworker will still find pleasure in using a Scrub Plane for that purpose, and will also find it practical for shaping irregular objects, for producing an interesting finished surface, and for trickier jobs like backing out a length of molding to fit an irregular wall.



Blade Sharpening: The blade comes with a 3" radius. Your approach to sharpening the scrub blade will depend on what sharpening tools you have available. To hone it, you can use any type of sharpening stone — water stones work very well. Place the bevel flat on the stone, and move down the length of the stone, rocking from side to side as you go. An easier way is to approach it as you would an axe — clamp the blade upright in a vise and stone the bevel with circular motions of the stone held in your hand (be very careful of your hands — this is dangerous). Fine and coarse stones will give you a serviceable edge. Hone the back of the blade by laying it flat on a stone. Do this lightly to remove the burr from the previous step. Some people like to finish with a hard buffing wheel. The biggest problem you may encounter is the need to remove a lot of material, such as stoning out a chip in the edge of the blade. This can be done with a coarse stone and the above method, but it will take time. If you want to use power, you have several options: an ordinary bench grinder (be careful not to burn the blade), a flat Japanese-type grinder (easy to use), or some kind of sanding machine. If you don't have access to a stationary belt sander, you can make do with a portable belt sander clamped upside down in a vise, but this is also dangerous. With any of these machines, keep the bevel flat to the grinding surface, and rock the blade back and forth across the arc with light pressure. With a sander, try a 100 or 120 grit belt. Keep water handy to cool the edge while working.

After grinding, hone as above. All this sounds harder than it is. Keep in mind that the exact radius on a scrub plane is irrelevant — and the arc can have irregularities in it. The tool will still work fine.

Setting the Blade: The blade is inserted with the bevel facing the handle. Sight down the sole to set the depth of cut — practice will tell you the amount of exposure needed for the job.

Materials: The body is cast from Ductile Iron, a very strong alloy that will take a lot of abuse. We use Manganese Bronze for the cap. 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 A-2 Tool

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Steel hardened to Rockwell 60-62, 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 3/16" thickness provides solid chatter-free cutting.

Maintenance: Depending on how much use your tool gets, an occasional light sanding with 400 grit or finer wet/dry paper on a flat surface will keep the sole in as-new condition. Tools with iron bodies should be kept lightly oiled or waxed to prevent rust. The cherry knob and handle are finished with wiping varnish and should require no maintenance.