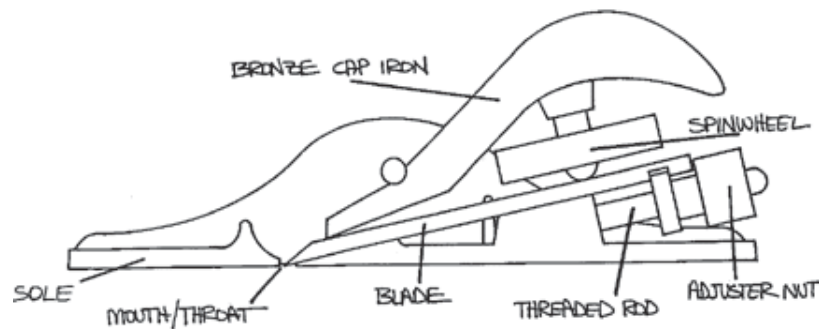


# Lie-Nielsen Toolworks Product - Use and Care Instructions

## Block Planes



Our Low and Standard Angle Block Planes are fashioned in such a pleasing shape that they will rapidly become the most used tools in your kit. The mouth of the plane is made to take a maximum .008-.010" cut, which is a compromise size suitable for most woodworking. Special tight mouth versions are available for specialized applications.

**Geometry:** The blade sits in the body at 12° (low) or 20° (standard); it comes with a 25° flat ground bevel, making the included cutting angle 37° (low) or 45° (standard).

**Blade Sharpening:** The blade comes ready to use. Slight additional honing will increase performance. We recommend a secondary bevel of 1° or 2°. This is easily accomplished with a good honing guide. Further modifications of the bevel angles can be made to suit your style and work.

**Blade Adjustment:** Slightly loosen the pressure of the cap and advance or retract the blade. Tighten the spinwheel. Do not overtighten - you should be able to adjust the blade after loosening the spinwheel about a quarter turn.

**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 cap is also Manganese Bronze; other parts are Brass and Stainless Steel.

The blade is A-2 Tool 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 1/8" thickness provides solid, chatter-free cutting.

**Maintenance:** The Bronze bodies are lapped, to a tolerance of less than .001". Depending on how much use your tool gets, an occasional light sanding with 400 or finer wet/dry paper on a flat surface will keep the sole in as-new condition. A light oiling on the threaded rod, adjuster nut and spinwheel 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.