

Scrub Plane

The scrub plane is the tool of choice for major stock removal, the first step when flattening rough stock by hand. Much like a low-angle smooth plane, a scrub plane is not usually used parallel to the grain, but at an angle of 30° or more. The blade edge is much more sharply curved than on a smooth plane and it is an aggressive tool. This is the tool you use to get stock into a condition where you then can use a smooth plane. The 3" radius edge of the 1½" wide by 3/16" thick blade gives a distinctive, hand-worked texture to the workpiece. This is a single-iron tool, meaning there is no cap iron or chip breaker. Set screws along the side prevent the blade from shifting sideways when knots are encountered. Two texturing blades that allow finer groove patterns are available for applications where a grooved surface texture is desirable.

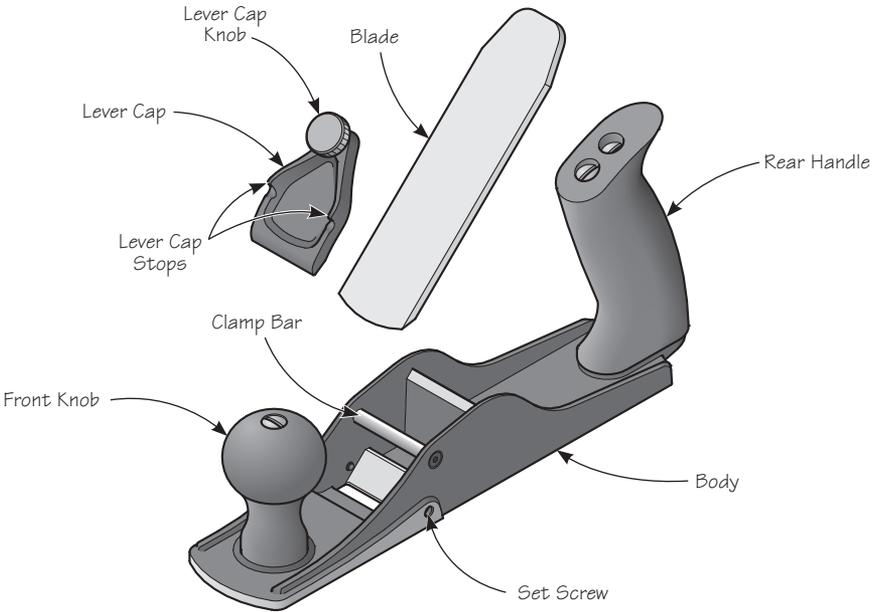


Figure 1: Plane components.

Installing the Blade

To install the blade, place the plane on a flat wood surface such as a workbench. Set the blade in position, bevel down and under the clamp bar. Slide the lever cap in place between the clamp bar and the blade such that the stops rest on the bar (see **Figure 2**). Tighten the lever cap knob to secure the blade in position. Advance the set screws on either side of the blade until they just contact the sides of the blade. Adjust the set screws as required to ensure that the blade is centered in the mouth. Back off one of the set screws slightly ($1/8$ turn) to ensure that the blade is not clamped in place.

 **A Cautionary Note:** *The lever cap knob has tremendous mechanical advantage. For normal use, it needs to be tightened only a quarter turn after full engagement with the blade. Never torque it down as hard as you can or you may damage the plane.*

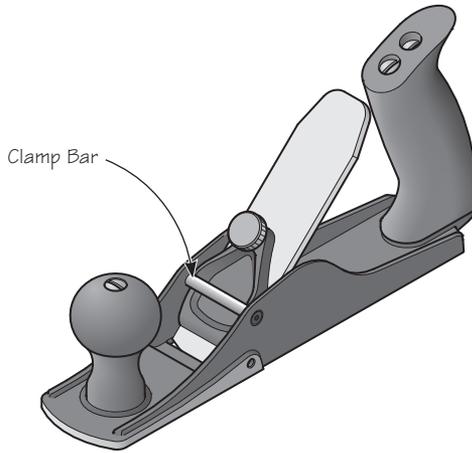


Figure 2: Installing the blade.

Blade Adjustment

The nature of the work performed by the scrub plane does not warrant a blade adjustment mechanism. You will find that the required adjustments can be readily achieved manually. Lightly clamp the blade with the lever cap knob – hard enough to hold it in position but loose enough to be moved by hand. Flip the plane to a sole-up position, then sight along the sole to ensure the blade edge is centered. Advance or retract it (push or pull the blade) as required. Clamp fully and take a test cut.

Blade Sharpening

The blade comes with a 35° bevel ground in a curve with a 3" radius. While the actual radius is not critical, it is this curved cutting edge that enables the aggressive material removal required of a scrub plane. As you sharpen the blade, the curvature or crown can be varied depending upon the type of work being done, generally less curvature for hardwood and more for softwood, or as desired if the goal is to impart a texture to the workpiece.

The blade may be sharpened by almost any method. Stones (oil or water), abrasive sheets, belt sander or power sharpening system will all provide satisfactory results. As with other blades, it is a real time saver to hone only a secondary or micro-bevel and rework the primary bevel only when required. For rough work, the scrub plane blade can be used straight from a coarse abrasive, bypassing final honing altogether.

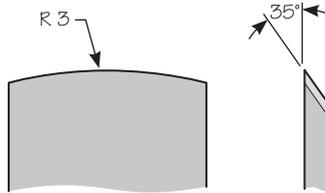


Figure 3: Blade geometry, as supplied.

Care and Maintenance

Keeping your plane working and looking like new is straightforward. The body of this plane is ductile cast iron and comes treated with rust preventative. Remove this using a rag dampened with mineral spirits. Clean all machined surfaces.

We recommend that you initially, then periodically, apply a light coat of silicone-free paste wax to seal out moisture and prevent rusting (as well as act as a lubricant for smoother planing). Wipe off any wood dust from the surfaces that you will be waxing, apply a light wax coating, let dry, then buff with a clean soft cloth. At the same time, the solvents in the wax will remove any harmful oils left from your fingers that can lead to corrosion.

If storage conditions are damp or humid, the plane should, in addition to the treatment outlined above, be wrapped in a cloth or stored in a plane sack. This precaution will also guard against dings and scratches.

Accessories

05P35.04 High-Carbon Steel Blade

05P35.74 PM-V11® Blade

05P35.06 2-Flute Texturing Blade

05P35.08 4-Flute Texturing Blade