

Plane Hammer

50K56.01

Blade adjustment in a wooden plane is not as complex as most people think. To fix the blade in the body and adjust depth of cut or blade skew, you tap either the blade or the body as required. Unlike a steel hammer, the Lee Valley Plane Hammer will allow the user to do this without damaging either the wooden body or the blade.

Setting the Blade

Place the plane (sole down) on a smooth, flat wooden surface such as a scrap board. Slide the blade down until it just touches the scrap board and insert the wedge on top of the blade. Hold the plane firmly with one hand and tighten the wedge either with hand pressure or a light tap from the hammer. For a steel wedge, use the brass face; for a wooden wedge, use the wooden face. Hold the plane upside down and sight down the sole to check for further adjustment.

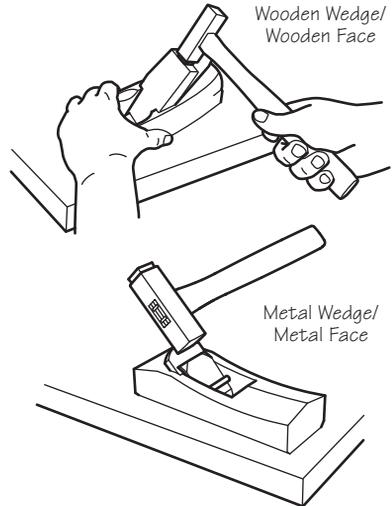


Figure 1: Setting the blade.

Increasing the Depth of Cut

To advance the blade, hold the plane firmly in one hand and tap the end of the blade with the brass face of the hammer, as shown in **Figure 2**. Use light taps at first to develop a good feel for the amount of force required to move the blade a predictable amount. Sight down the sole of the plane to ensure the blade edge is parallel to the sole and adjust as required.

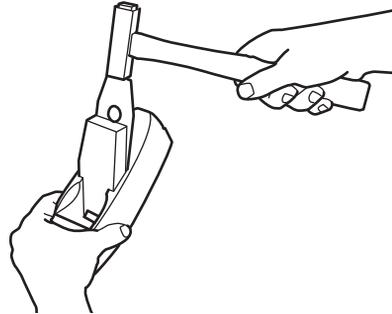


Figure 2: Increasing the depth of cut.

Decreasing the Depth of Cut

To decrease the depth of cut, hold the plane firmly in one hand, restraining the wedge and blade with one finger (as shown in **Figure 3**) so that when the heel of the body is struck, both are restrained from popping out of the plane body. Rap the heel of the plane body with the wooden face of the hammer. Since this adjustment sometimes loosens the wedge, occasionally tap the wedge back in place, as shown in **Figure 1**.

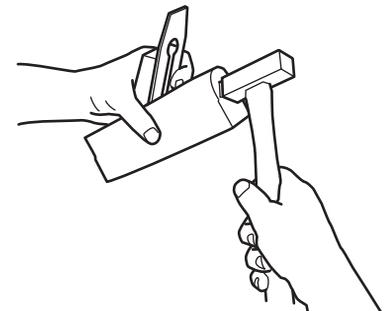


Figure 3: Decreasing the depth of cut.

Adjusting the Skew

To adjust the blade for even shaving thickness, tap the side of the blade with the brass face of the hammer.

Removing the Blade

To remove the blade, hold the plane as shown in **Figure 3** and rap the heel of the plane body with the wooden face of the hammer until the wedge is loose enough to pull the blade and wedge out.

Care and Maintenance

Handle: The handle is made of carefully selected and seasoned white ash and, with proper care, should require little maintenance. However, the handle can become loose after much use and prolonged dry conditions. To tighten the handle, position the end of the hammer handle firmly against your bench top. Use a steel hammer and a nail set or steel punch to drive the two steel wedges deeper into the handle.

Head: The cast brass head of the hammer should require very little maintenance. However, since it has the advantage of not mushrooming the edge of a steel blade, the hammer head will deform over time and will benefit from occasional reshaping with a file to maintain four clean and square edges.

Wooden Insert: Although the hammer is supplied with an insert made of hard maple, it can easily be replaced with one made from any desired wood species. To remove the existing insert, use a 1/4" twist drill to bore out the bulk of the wood. The cavity is approximately 7/8" deep, so take care not to drill into the brass hammer head itself. Fashion a new insert, starting with a 7/8" × 7/8" × 7/8" block that has a moisture content of no more than 8%. Create a 3° taper on four adjacent sides. This is most easily done on a stationary belt sander with the table set to 93° in relation to the belt. Test fit the insert frequently to gauge your progress. When you get close to final size, round the edges to match the shape of the cavity in the hammer head. Keep in mind that the insert will set itself about 1/4" farther in when struck. For very hard woods (like ebony), you need to reduce the taper slightly or risk splitting the brass socket. Shape the face of the insert as desired with a file or belt sander.

- **Do not use as a chisel hammer!** This hammer is designed specifically for plane adjustment and is not suitable for carcass assembly, driving a chisel or other robust tasks.
- If the wooden insert becomes loose, press it in by hand, then rap it against a workbench top or block of hardwood to reset it.
- Do not expose hammer to water or rain.
- Avoid storing the hammer in an excessively damp or dry environment.
- **Always** wear eye protection when using a hammer.