

1

- A suitable hardwood has been carefully selected and kiln dried for use in the plane's stock to provide:
- Hard, durable components which will last for years and are virtually unbreakable.
 - Low friction sole minimising work effort.
 - Presence and feel of a classic hand tool.

2

- A 3mm thick 18% tungsten HSS (T1) blade has been selected to provide:
- A super hard wearing blade which requires minimal sharpening.
 - Reduced blade chatter.
 - Long life.

3

- A half pitch (60°) blade angle has been selected to provide:
- Optimum cutting angle for planing hardwood
 - Reduced tear-out on timber with awkward grain
 - Alternative use of the plane as a scraper plane (described later)

4

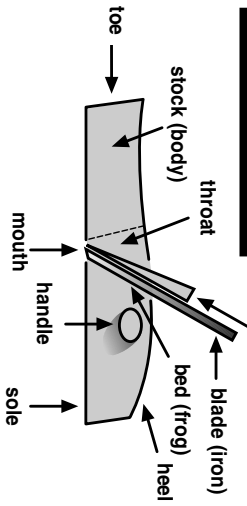
- A brass insert has been fitted to the mouth of the plane to provide optimum mouth spacing to minimise:
- Tearing of the grain
 - Clogging the throat with shavings

5

- Simple construction to provide:
- Rapid assembly and disassembly.
 - Quick easy care and maintenance.

A GUIDE TO YOUR PALM SMOOTHING PLANE

Parts of your plane



- Dimensions
- Stock 4 3/4" (210mm) x 1 1/2" (38mm) x 1" (25mm)
 - Blade 1 3/16" (30mm) x 1/8" (3mm) x 2 9/16" (65mm)

Introduction

The Palm Smoothing plane is designed to provide Cabinet Makers with a fine trimming and finishing tool which can cut a razor thin shaving without tearing the grain on your workpiece.

With minimal practice any woodworker will find this hand tool comfortable to use and easy to adjust, providing the user with a valuable asset to his workshop. All planes have been tuned and tested ready for immediate use.

ADJUSTING THE BLADE

Note: A larger plane has been used in photos to make the description of adjusting the plane clearer. The palm Smoothing plane is adjusted in the same way.

This plane has no mechanical blade adjustment, but with minimal practice you will be able to adjust the blade quickly and to very fine tolerances. Follow these simple steps:

(A) To remove the blade, tap the heel of the plane's body firmly behind the blade with a small hammer. The wedge will loosen, remove wedge and blade.

Warning: To avoid being cut by the blade, ensure you hold the plane so your hand is clear of the blade edge. Then tilt the plane at an angle so that the blade will not inadvertently slide out of the bed before you remove it with your other hand.

(B) To replace the blade, place the plane body on a 'blade setting block'. Place the blade in position letting the weight of the blade sit down flat on the block of wood. Using your index finger, also ensure the blade is sitting against the bed.

Note: A blade setting block is simply a piece of very hard wood about 150mm long by 50mm wide which has been planed dead flat.



(C) Whilst the plane is still on the setting block, place the wedge loosely into position. To set the wedge tap the top centre of the wedge with a small hammer using a series of medium to light taps until the wedge is firm.

Note: If the blade loosens during use, the wedge needs to be set more firmly by tapping harder on the wedge.



(D) To adjust the blade turn the plane over and sight down the sole placing your thumb on the wedge.

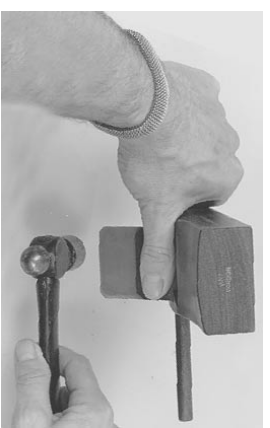


(E) If the first steps are followed carefully, the blade should be close to adjustment. If not, the blade can be adjusted laterally (left-right) by tapping on the sides of the blade as you sight down the sole.



(F) If the blade requires adjustment longitudinally (in or out), tap the heel of the stock with a hammer to retract the blade (for a finer cut) (F) or tap the top of the blade to advance it (for a coarser cut.) (G)

Warning: For any blade adjustment use your thumb to hold the wedge firmly in place with a downward pressure. This prevents the blade coming out during adjustment.



Once the blade is adjusted, re-tighten wedge and test the depth of cut on a scrap piece of timber before you use the plane on a fine piece of furniture.

Note: Some practice will be required to be able to adjust the blade with efficiency, but persevere and it becomes second nature.

USING YOUR PLANE

Your Palm Smoothing Plane can be pushed away from the body in the traditional way or pulled towards you. When planing or scraping keep light even pressure forward and aft of the blade (as in picture) and let the plane do the work in a smooth even gliding action. Avoid using the plane with a skew action as this will cause shavings to clog in the throat and may induce tearout on cranky woods.

I.



J.



The removable horizontal handle is designed to give extra control and add versatility to the way the plane is used. It will also help keep your fingers away from the workpiece to prevent minor cuts and splinters.

It is easily removed to allow the plane to be used in confined areas. The handle is on a taper and can only be inserted from the right hand side

You will find the addition of this handle to be an asset when using this plane. Its use is encouraged to enhance the plane's performance.

The design of this plane is optimised for smoothing hardwoods such as Teak or Jarrah, however, it will perform very well on softwoods such as Pine. It is ideally suited to smoothing timber which has highly figured grain and you will be impressed with the results.

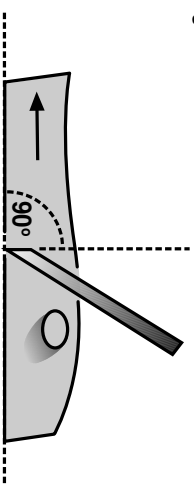
Note: When using the plane on highly figured grain, ensure the blade is sharp and finely adjusted to remove a paper-thin shaving.

USING YOUR PLANE AS A SCRAPER

By reversing the blade so that the bezel of the blade faces towards the front of the plane, you can use your plane as a scraper plane. (Fig.1)

This is possible because the bezel of the blade provides an effective cutting angle of 90° to the wood surface which gives you a scraping action rather than a cutting action.

Fig.1



Using your plane as a scraper will help you deal with wood with highly irregular and interlocked grain, and you will be surprised at the results.

SCRAPER ADJUSTMENT

(H) For final adjustment of the blade for use of the plane in the scraping mode, place the plane on the flat piece of timber you want to scrape (after you have completed steps B and C). Then move the plane forward, looking down the throat to assess depth of cut. Tap the blade in if a deeper cut is required or tap the heel to reduce depth of cut.

H.



SHARPENING YOUR BLADE

Your blade is sharpened ready for use, and to keep it sharp we recommend the following sharpening technique:

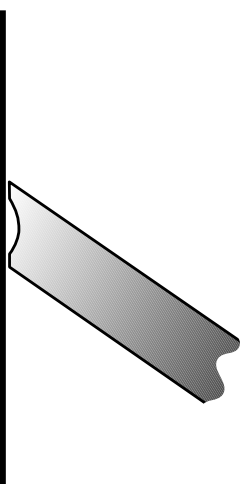
Once the hollow ground bezel is honed away use a standard 6" - 8" bench grinder to reform a hollow ground bezel, but only grind to about 1/32" (0.5mm) from the edge. This will avoid burning the edge.

Then use a 800 - 1200 grit stone to hone the bezel and back of the blade flat, then polish the two surfaces on a 6000 grit stone ensuring the polished surfaces extend right to the edges.

A secondary bevel may be used depending on your preference.

Fig. 2 shows the effect of a hollow ground bezel and if used saves time and effort when sharpening your blade, plus reduces the wear on your stones.

Fig. 2



Note: The essence of sharpening is not getting the angles perfect, but rather polishing the two surfaces to a perfect point using good quality fine grit stones (about a 6000 grit stone will give you a fine sharp edge).

TRADITION



In keeping with tradition, your Smoothing Plane has the maker's name stamped in the toe. Traditionally, the owner's name is stamped in the end grain of the heel. Whether you do this is of course your choice.

CARE AND MAINTENANCE



Regularly smear a little linseed oil on the sole of the plane to reduce friction. This will lengthen the plane's life and makes planing wood easier.

Keep a smear of machine oil on the blade to prevent rust.

If your workshop is exposed to extreme dry or damp conditions for extended periods it is recommended that you store the plane (when not in use) in the plastic bag and box that it came in.

It is recommended that you re-tune your plane when required. The sign that indicates this, is when you can feel the brass mouth is not level with the wood sole. To re-tune the plane simply place a piece of 240 grit sandpaper on a flat surface (thick glass or cast iron saw bench) and rub the sole until flat. This will ensure your plane remains in perfect working order. Re-oil your plane with any commercial oil/wax finish.

PROBLEMS AND REMEDIES



P: If wood shavings are getting clogged in the throat of the plane, one of the following is the problem: you are using the plane with a skew action, the blade is set too deep, the blade is blunt or the plane has a build up of gum around the mouth.

R: To prevent the shavings from clogging do one or all of the following: don't use a skew action, reduce your depth of cut, sharpen your blade or clean up the mouth of the plane.

P: If the blade is chattering, the wedge is too loose or the plane's bed is fouled by dirt or woodshavings.

R: Tighten the wedge or clean the bed to ensure the blade is sitting perfectly flat on the bed.

P: If you can't laterally adjust your blade, you will probably find that the blade edge is not square to the blade side through repeated sharpening.

R: Re-square the blade edge and sharpen.

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