



A GUIDE TO YOUR A55 SMOOTHING PLANE

INTRODUCTION

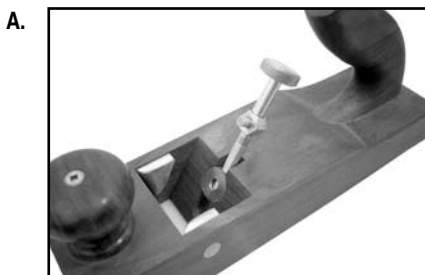
Your A55 smoother is designed for the final smoothing of any surface that has been made flat by a longer plane or machine. On most woods it will leave the surface ready for finishing without sanding. The 55 degree blade angle is optimised for planing figured Australian furniture woods.

ADJUSTING THE BLADE

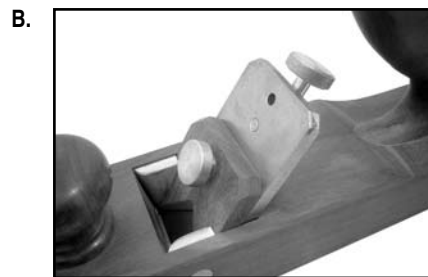
The A55 smoothing plane has a screw adjuster for retracting, advancing or laterally moving the blade.

Follow these simple steps:

(A) Wind adjuster back so the blade will sit at least 1mm back from the brass mouth. This will prevent the sharp edge from being damaged during blade insertion.



(B) To put the blade in, slide the bevel down the bed until the hole in the blade fits over the brass pin on the adjuster. Be careful not to bump the blade edge on any brass pieces. Then put the lever cap wedge loosely into position.



(C) Holding the wedge in position with your thumb, turn the plane upside down so you can sight down the sole. Screw the adjuster until you can clearly see the blade and make the required lateral adjustment. Then retract the blade so you can just see the edge.



(D) Turn the lever cap knob about 1/4 turn to hold the blade in position and then adjust the blade depth. Once correct depth is set turn the lever cap knob about 1/8 of a turn more. 1/10 of a turn on the adjuster knob will give you a meaningful change in depth. I recommend planing a scrap piece of wood to make the final adjustment of the required blade depth.



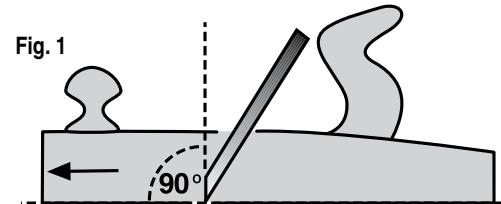
Note 1: For consistently smooth adjusting, best results will be obtained by slightly loosening the lever cap knob, (1/8 turn) then make the required adjustment and re-tighten the knob.

Note 2: The lever cap will remain in position for small adjustments, but if you do a large retraction of the blade the lever cap may loosen. If this happens simply unscrew the knob, reset the lever cap and tighten the knob again.

Note 3: DO NOT over tighten the lever cap knob as blade adjustment will be very difficult and excessive pressure is not required to hold the blade in position.

USE AS A SCRAPER

To add flexibility to planing difficult woods the blade can be reversed (fig 1) and adjusted in the same manner. This is the best way to avoid tearout on difficult woods, to leave a perfectly smooth surface.



SHARPENING YOUR BLADE

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

Once you have honed away the hollow ground bezel, regrind a 30 degree hollow using a standard 6-8" bench grinder. Only grind to 1/32" (0.5mm) of edge to prevent burning it.

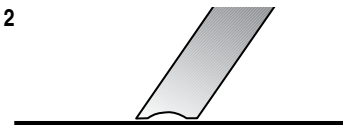
Then use a 800 - 1200 grit stone to hone the bezel and back of the blade flat, then polish the two surfaces on a 6000 grit stone ensuring the polished surfaces extend right to the edges.

A secondary bevel may be used depending on your preference.

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.)

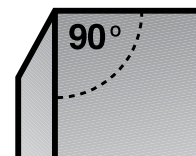
Fig 2 shows the effect of a hollow ground bezel and if used saves time and effort when sharpening your blade, plus reduces the wear on your stones.

Fig. 2



Ensure your blade remains sharpened at 90° to sides of blade. Fig 3.

Fig. 3



For more advanced information on sharpening go to www.hntgordon.com.au/sharpeningblades.htm

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 and a drop of oil on the moving parts of the adjuster.

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.

Tune your plane once a year by placing a piece of 240 grit sand paper on a perfectly flat surface (cast iron saw bench top or thick glass) and rub the sole of the plane over the sand paper. Rub only enough to ensure the sole is flat. This will ensure your plane remains in perfect working order. Re-oil the wood sole with any commercial oil or wax.

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 lever cap is too loose or the plane's bed is fouled by dirt or wood shavings.

R: Tighten the lever cap 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 or the lever cap is too tight.

R: Re-square the blade edge to the sides of the blade (fig 3) and sharpen or loosen the lever cap, laterally adjust the blade and then tighten the lever cap.

P: If it takes too much force to adjust the blade the lever cap is too tight.

R: Loosen the lever cap 1/8 turn, do the adjustment and re-tighten the lever cap.

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