

INSTRUCTIONS FOR P.A. MULTITOOL SHARPENING JIG

This Sharpening Jig is suitable for all multitool models – except Model 602 (60" x 2" Belt),
and Model 8CW (8" diameter Contact Wheel).

The P.A. Multitool sharpening jig quickly sharpens Chisels, Plane Blades and Power Planer Blades to the correct angles. Screwdrivers can also be re-ground to provide maximum driving efficiency.

The Multitool sharpening jig will produce accurate, efficient cutting tools and is fast to set up. Because of Multitool's superior cutting speed and your sharpening jig's efficiency, it is possible to sharpen a tool, including setting up, in a small fraction of the time taken by conventional sharpening methods. Honing is eliminated completely.

Before using the sharpening jig remember to protect your eyes by always wearing safety spectacles.

FITTING

When attaching the sharpening jig the cam lever is only used to take up slack between the 3 flanged locating screws. Make sure the cam lever is facing downwards before fitting the jig. Apply only very light pressure to remove slack. Clamping the jig is done by tightening the 2 thumb screws at the side. Moderate finger pressure is adequate.

CHECKING ALIGNMENT

The flanged locating screws are set at the factory but the bottom screw can be adjusted to align the jig only if you find that the edge of the toolholder when tilted forward does not touch evenly across the contact wheel. **Do not touch the top 2 screws.**

Note: The original setting between screw heads and bracket is 20.7mm ($13/16$ ").

If adjustment is necessary first loosen the bottom locknut and the 2 thumb screws.

If the toolholder is touching down on the right hand side only, turn the bottom screw a small amount anticlockwise (when looking at the screwdriver slot). Re-tighten locknut, secure jig with thumb screws and check that bottom edge of toolholder is now touching evenly across the belt.

To clarify this adjustment – turning the bottom screw anticlockwise rotates the toolholder anticlockwise and vice versa.

SETTING POSITION

In order to set up tools to get the correct cutting angles, the tool holder is slid onto the round slide bar in the reverse position – that is, the black clamp knob is away from the guide plate lettering. Insert the chisel or plane blade underneath the clamp with the cutting edge protruding through to the corresponding mark on the guide plate. Tool is positioned square in jig by keeping its side against the right hand side of the tool holder. Tighten knob with moderate finger pressure only.

Screwdrivers are located in the vees of the toolholder clamp and set up to the appropriate mark in a similar manner to chisel and plane blades. Remove the tool holder from the jig and align the edge of the screwdriver blade parallel to the base of the toolholder by sighting. The screwdriver can be readily turned with the toolholder clamp tightened. Large round and square stem screwdrivers can be sharpened by undoing the screw underneath the toolholder and removing the square shaped sub plate if necessary.

GRINDING AND SHARPENING

Although modern chisels usually have only one sharpening bevel at the cutting edge, it is quicker in the long run to remove most of the metal at the chisel grinding setting with a 40 or 60 grit belt. This leaves only a gentle touch for 2 or 3 seconds at the chisel sharpening setting on a 400 grit belt to get a razor sharp edge.

A badly damaged tool that requires heavy grinding should be quenched in water a few times to prevent overheating.

When sharpening narrow chisels move the cutting edge back and forth across the surface of the belt but make sure the edge of the chisel does not go beyond the edge of the belt.

Before sharpening power planer blades the toolholder sub plate must be slid back so that the clamp screw underneath is at the other end of the slot. The blade should be positioned in the toolholder so that its extra width is distributed evenly past both edges of toolholder. The 12 x 4mm ($1/2$ " x $5/32$ ") section clamp bar included in kit is placed over the planer blade and under the clamp with the word 'top' visible. This clamp bar has a bow in it to ensure that the blade is clamped near each end. It is also desirable that the blade is slightly bent downwards at the ends after clamping.

