

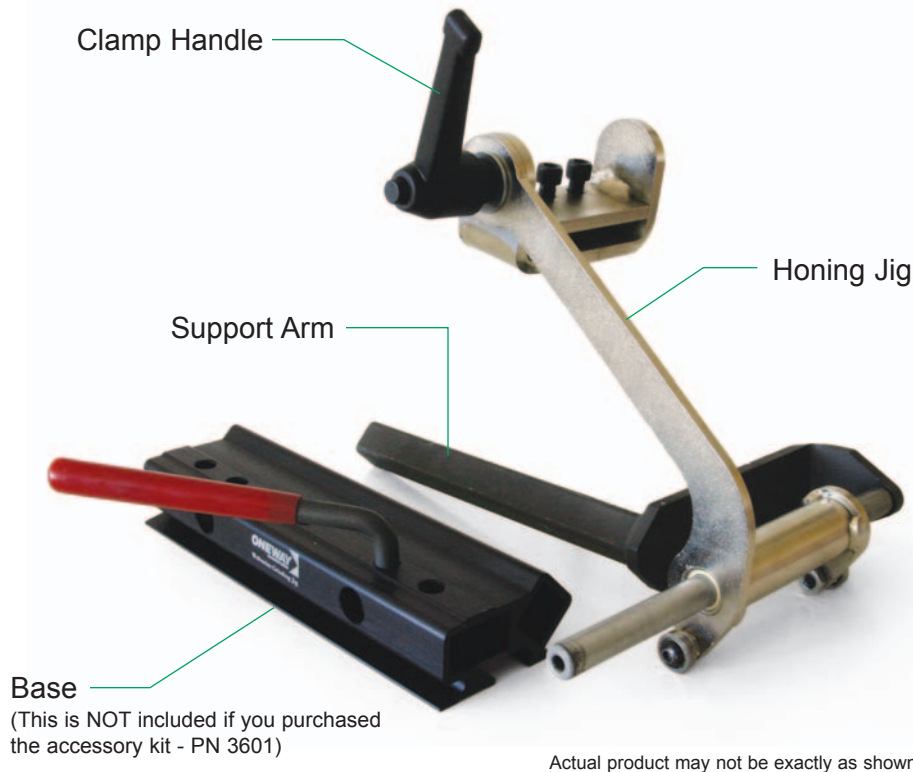


MAKING WOODTURNING FUN.

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WOLVERINE FLAT TOOL SHARPENING & HONING JIG



Actual product may not be exactly as shown

INITIAL SETUP

1. Mount your honing stones (side by side) on a flat smooth board (see photo 4). An excellent choice would be 3/4" thick melamine (or similar). The board should be long enough to allow 12" of rolling space for the honing jig. It should be wide enough to accommodate all the honing stones placed side by side (min. 1" gap between the stones and the outside stones to the edge). If you are only using one stone, make the board the width of the stone plus 2 inches wide.



2. Mount the Support Base (supplied)

NOTE: If you bought the Accessory Jig to the Wolverine Grinding Jig (PN 3601), you would not have received a base and should skip this step.

Mount the base under the grinding wheel of choice so that the square hole is centered to the wheel and the front of the base is flush with the front of the wheel (as shown in photo 1). It may be necessary to shim the grinder to obtain clearance for the base to fit under the wheel - 3/4" to 1" is usually enough (refer photo 2).

Screw the base down using three 1"-8 or 1 1/4"-8 flat head screws.



A. HONING

1. Using the three screws, clamp the tool in the fixture. The tool needs to be square and protrude out of the jig by 1".

Important: This stick-out should be the same every time you grind the tool.

2. With the tool edge resting on the honing stone and the rollers touching the board, adjust the micro-bevel angle of the tool by loosening the Clamp Handle, adjust, and re-tighten (see photo 3).



3. The micro-bevel can now be re-furbished using standard honing procedure of sliding the tool forward and back over the stone (refer photo 4) until the desired sharpness is obtained.



NOTE: The wire edge created on the back side of the tool should be removed by touchup with a hand held fine hone or strop after which two or more strokes will finish the job.

B. GRINDING BEFORE HONING

Occasionally you may need to grind the tool prior to honing due to excessive nicks or to change the angle on the tool.

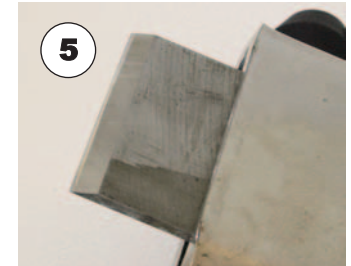
Equipment & Hardware Required:

- A 6", 7", or 8" grinder with a properly dressed (and preferably balanced) 80 to 120 grit wheel
 - Three 1"-8 or 1¼"-8 flat head screws and screw driver
2. With the grinder stopped, slide the Support Arm into the Base. Next slide the Honing Jig onto the Support Arm.
 3. Rest the cutting edge on the wheel and adjust the Support Arm (in the Base) until the HEEL of the Tool is resting on the wheel. The objective is to grind away the heel leaving the actual cutting edge untouched. You do not want to grind the cutting edge for two important reasons:
 - The cutting edge can overheat
 - Honing the cutting edge is sufficient to achieve an extremely sharp edge, especially if you use stones up to 1500 grit.

GRINDING

1. Lift the tool clear from the wheel.
2. Start the grinder.
3. Slowly lower the Honing Jig to the wheel until it just touches. Make sure you only touch the tool to the wheel and then lift the tool back off the wheel and observe where the grinding is taking place.

TIP: Use a black marker pen to color in the bevel of the tool to be ground. This will make it very easy to see where you are grinding, what has been ground and what still needs to be ground.



IMPORTANT: You want to be grinding the area from the heel of the tool to around 2/3 to 3/4 of the bevel (see photo 5). In other words, at least 1/4 of the bevel (at the cutting edge end) should not be ground during the grinding process.

If you are not happy with the grind you are obtaining, re-adjust the Support Arm and re-test the grind. Repeat this process until you are completely happy with the area you are grinding.

4. Once you are satisfied that you are grinding the correct area of the tool, continue grinding the heel of the tool using very light pressure, sliding back and forth across the wheel until it's clean. **IMPORTANT:** Be sure to lift and observe the grinding process every few seconds to ensure you do not over-grind the tool.

SEVERE NICKS

If you have severe nicks in the tool to be ground, you will need to grind the tool until the nicks have been removed. It is important to keep the tool cool during this grinding process.

5. Honing can now be performed. Remove the Honing Jig from the Support Arm and start honing as described in the Honing section (described previously).

IMPORTANT: Due to the way this jig works, there is no need to re-set any angles after grinding and before honing. This is what makes this jig unique!