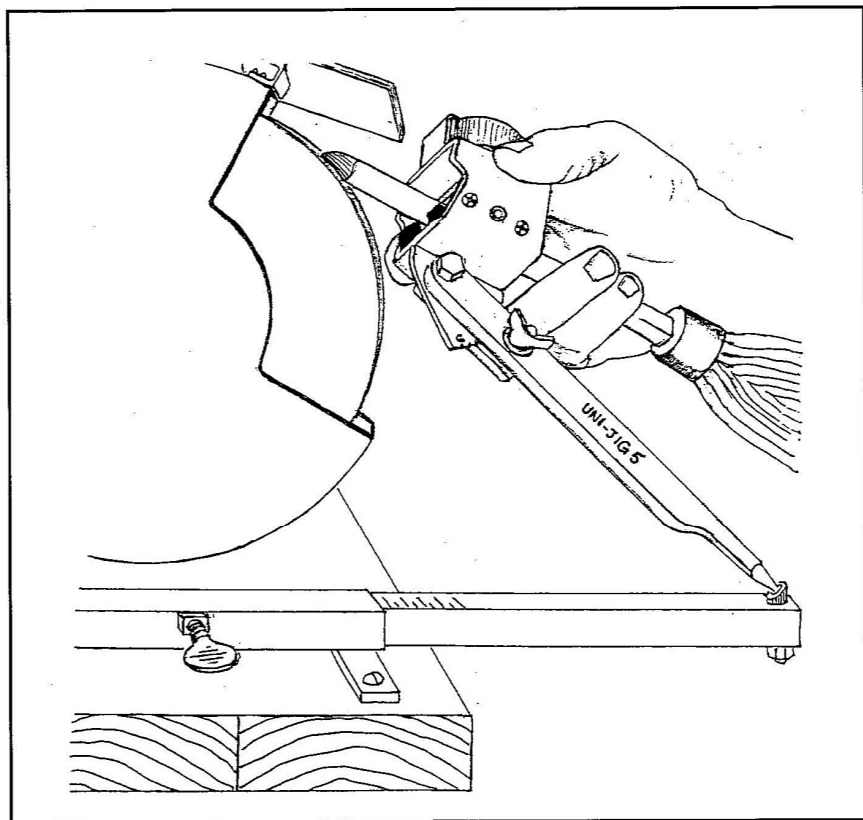


# THE UNI-JIG 5

## SHARPENING DEVICE PAT. PENDING

Designed and manufactured  
*by GORGI ARMEN*  
N.S.W. AUSTRALIA



**INSTRUCTION MANUAL**

# THE UNI-JIG 5

## Overview

The sharpening of wood turning and wood carving implements to an acceptable standard has long been a major problem for the amateur woodworker. There are many aids to sharpening readily available to the woodworker which assist in obtaining a good edge for working of timber.

Unfortunately, there is not one single instrument available that successfully holds ALL manner of tools. The UNI-JIG 5 is the first sharpening jig to achieve this most difficult concept.

With a minimum of skill and practice, the amateur woodworker is able to "put an edge" on tools with a professional finish.

## Description

A calibrated sharpening device for clamping all manner of bevel-edged tools. For example:

- \* Woodturning and wood carving tools.
- \* High-speed steel drill bits and Carpenter's chisels.

So as to sharpen or re-shape them to original standards.

The UNI-JIG 5 is a simple single device that can successfully:

- \* Securely hold all tools listed.
- \* Sharpen or re-shape to accepted levels.

## General Description

The UNI-JIG 5 consists of a single hand-held calibrated clamping device that pivots on a telescopic arm mounted on the bench directly under the grinding wheel. The housing that secures the tool in the jig consists of a zinc-plated casing with a knurled nylon knob clamping screw, that secures the tool against a pair of nylon blocks saddle.

There are two calibrated adjustments on the device:

- 1) On the clamp to adjust the angle of the bevel on the grinding wheel.
- 2) On the telescopic arm to adjust the height of the tool in relation to the circumference of the wheel.

When these two adjustments are made, the tool can then be sharpened by re-inserting in the jig to the original calibrations with the end result of a reproduction of the angles with an absolute minimum of grinding.

# THE UNI-JIG 5

## INSTALLATION INSTRUCTIONS

**Note: Read the installation instructions fully before beginning.**

The UNI-JIG 5 is designed to operate on most diameter wheels.

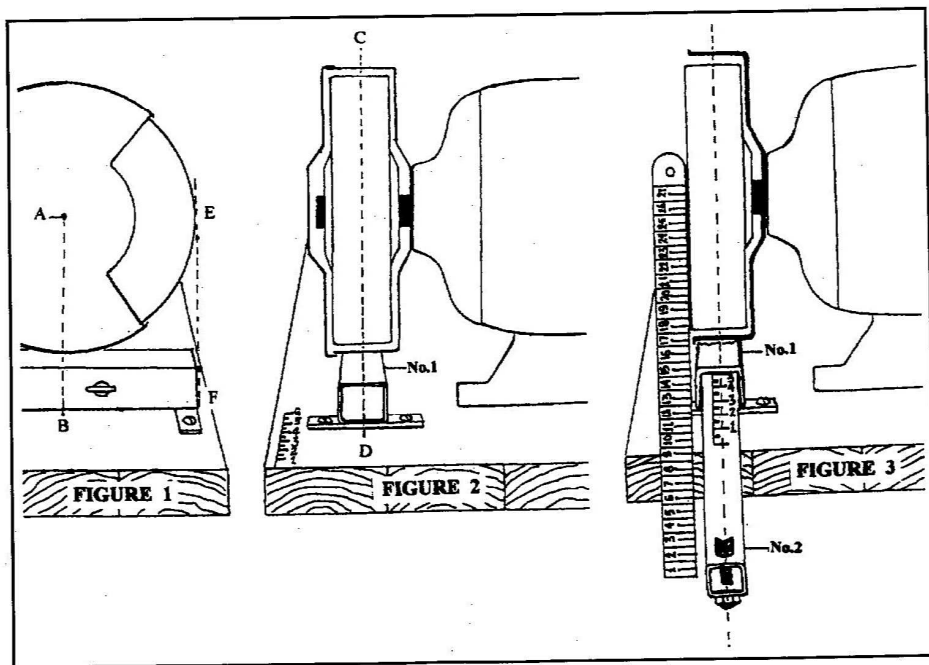
The grinder must be securely affixed to a substantial bench top, which extends a minimum of 50mm on either side of the outer edges of the grinding wheels so that the housing No.1 (Fig.2) can be securely fastened.

\* It may be necessary to adjust the height of the grinder or the telescopic arm housing to obtain the correct height of the shaft.

\* The illustration shows the installation on a 25mm board for portable use.

1. Affix the grinder to the bench top so that centre of the shaft (A) is 152mm (6in) above the bench top (B) (Fig.1).
2. Attach the housing No.1 (Fig.2) to the bench top with its centre C----D directly below the centre of the grinding wheel (Fig.2) and the line from E----F (Fig.1) at right angles to the bench top.
3. Place the telescopic arm No.2 in the housing fully extended. Tighten the thumb screw in the housing to secure the arm. Ensure the arm is parallel to the grinding wheel using a straight edge on the wheel extended outwards to the telescopic arm. (Fig.3).

Provision is made for a final adjustment by using screws slightly smaller than the diameter of the securing holes.



# BASIC SHARPENING PROCEDURES

**FOR PERSONAL SAFETY** protective eye and face equipment is required where there is reasonable probability of injury that can be prevented by such equipment.

**GRINDING** wheels need to be regularly dressed to ensure maximum efficiency.

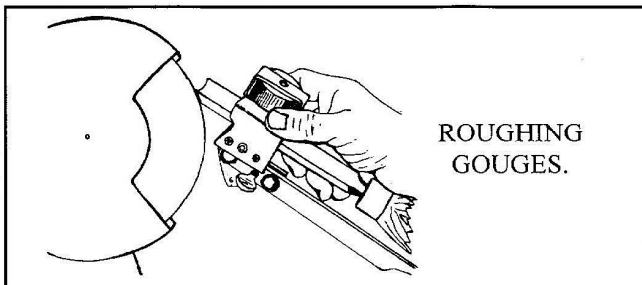
Note. All settings listed on the guide chart (Page 5) are an indication only, and can be varied by individual needs.

1. Insert the tool parallel in the clamp to the projection setting.
2. Adjust the angle setting.
3. Adjust the pivoting arm setting.

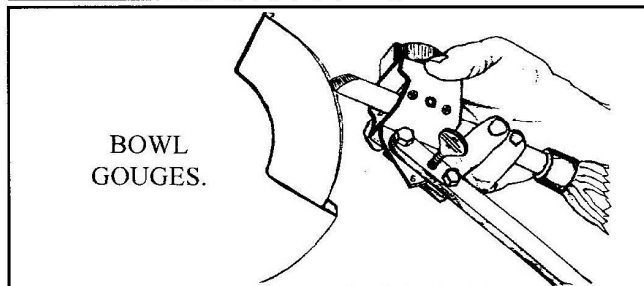
Before attempting to grind, place the tool on the stationary wheel and rotate it to check that the tool bevel is resting squarely without tolerance on either the toe or heel.

## ROUGHING GOUGES

Lightly grind at the centre of the gouge and check that you have your preferred angle. Start your sharpening action by sweeping and rotating the cutting edge gently and continue until the bevel is evenly shaped.



## BOWL GOUGES Standard and Ground back

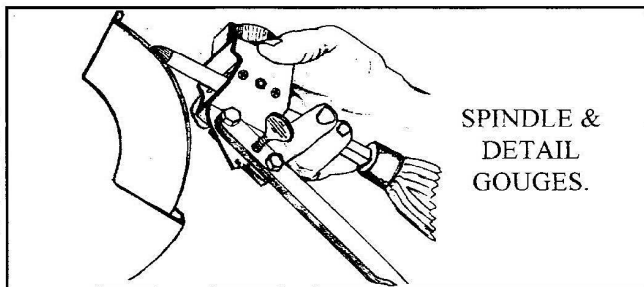


Grind for the preferred angle at the centre of the gouge. Start the sharpening with the tool on its side and rub across the wheel with a semi rotating action. When the edge is complete, repeat the action on the opposite side. Finish the sharpening by blending each side to the centre with a rotating action.

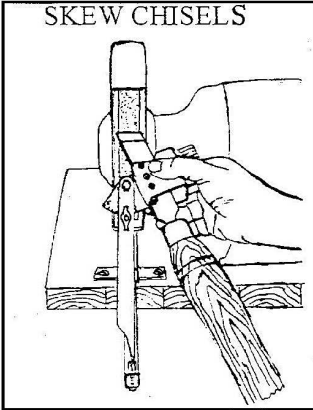
The grinding procedure for the Ground Back Fingernail BOWL GOUGE is identical to the standard gouge. The jig setting (Refer to GUIDE CHART page 5) will vary according to the shape and personal requirements of the tool.

## SPINDLE AND DETAIL GOUGES

The grinding procedure for these tools is identical to the bowl gouge. The only difference is the settings or calibrations. These will vary according to both the chart and your preferred angles.



## SKEW CHISELS



## SKEW CHISELS

The clamping procedure for the skew is different.

1. Insert the chisel between the nylon blocks to the projection setting with the "toe" of the chisel to the inner bottom of the clamp housing No. 12 (Page 6).
  2. Adjust the screw No.22 until the chisel is held between the blocks.
  3. Lock the chisel firmly in the jig with the clamping knob.
  4. Adjust angle and projection settings as required.
- Turn the jig sideways, rest the tool on the stationary wheel and check that the bevel is sitting squarely. This must be done for EACH SIDE to compensate for different tool thicknesses. Adjustment is made by moving the pivoting arm in or out if required. Begin sharpening by rubbing the chisel across the face of the wheel with a movement of no more than 5mm until the required bevel is reached or by up end down movements. Repeat the same procedure on the opposite side of the chisel.

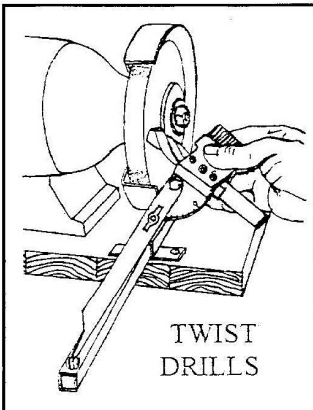
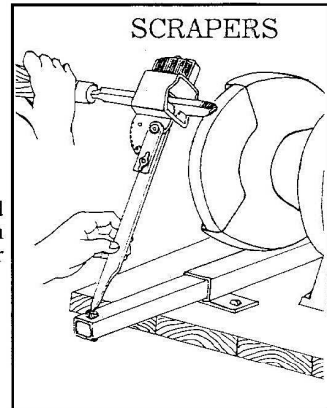
## SCRAPERS

The adjustment of the angle setting is different.

### ANGLE SETTING:

1. Release the wing nut.
2. Open the leg out just until it clears the angle setting plate.
3. Tighten the wing nut.

The scraper is held parallel to the bench, and pivoted in a forward action until it touches the wheel whilst rotated in a circular motion on the pivoting point until the required round shape is reached or left to right motion for straight edge.



## TWIST DRILLS

1. The drill is held with the cutting edge vertical and secured in the jig with the aluminium angle resting on the blocks.
2. Adjust the edge of the pivot leg to the edge of the setting plate.
3. Rest the leg in the pivot arm, and move it forward until the drill cutting edge rests on the side of the stationary grinding wheel.
4. Re-adjust the angle setting to match the angle of the drill against the wheel.
5. Turn the jig in a clockwise direction, until the rake angle of the drill is sitting squarely on the wheel.

Grind against the side face with a slight upward action until the cutting edge is reached.

Repeat on the other side by turning the drill to the opposite edge with the same projection length.

Note. After every successful sharpening, register the settings on tool handles for future sharpening attempts.

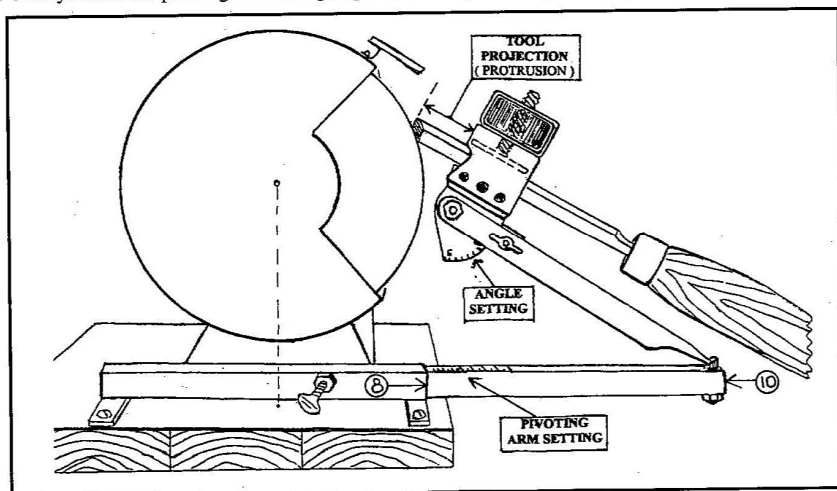
# SETTING GUIDE CHART

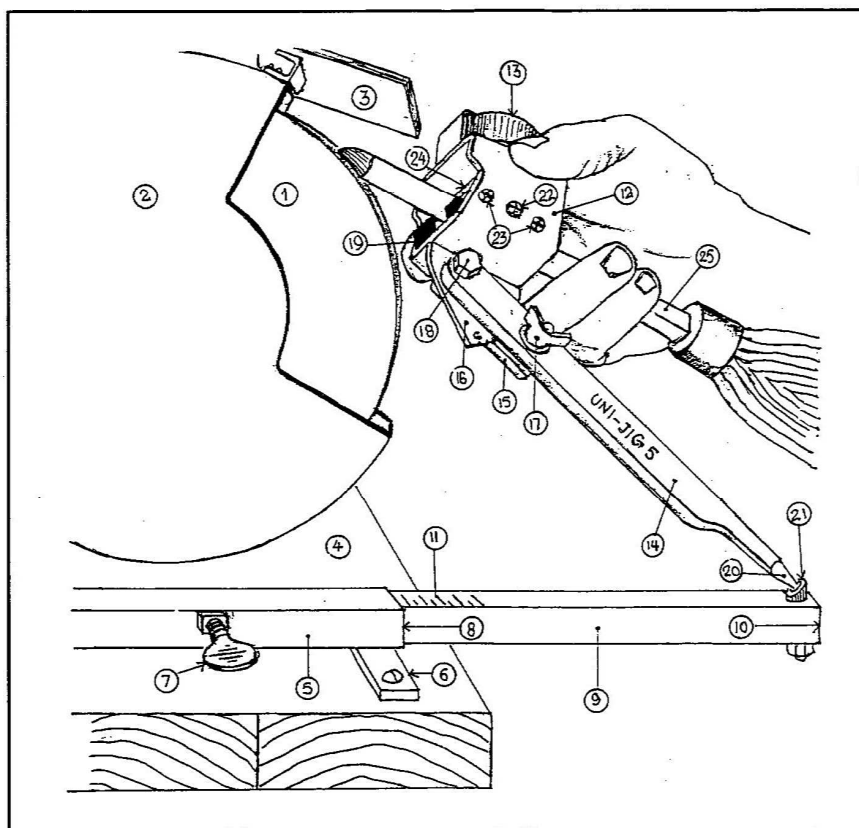
## FOR SHARPENING WOODTURNING CHISELS & GOUGES

TOOLS	TOOL SIZE	TOOL PROJECTION (PROTRUSION)	ANGLE SETTING	PIVOTING ARM SETTING	GRINDING ANGLE (Degrees)
ROUGHING Gouge	25 to 40 mm.	50mm.	0	11	30to35
BOWL Gouge Stand. & Ground back	13&16 mm.	60mm.	0	12.5	40
BOWL Gouge Fingernail Ground back.	13&16 mm.	60mm.	3	12.5	45
SPINDLE Gouge	8,10,16, mm.	60mm.	1	10	25to30
DETAIL Gouge	8,10,16, mm.	60mm.	3	8.5	25to30
SKEW Chisel	18to38m. X 6to8m.	60mm.	2 ½	10	25
SCRAPERS	ANY	40mm.	N/A	5	60
DRILL BITS	6 to 19 mm.	30mm.	N/A	12.5	60

There are two ways to adjust the pivoting arm setting, either using the measurement marked on the pivoting arm, or by measuring with ruler from the edge of housing No.8 to the outer pivoting arm edge No.10 for your own record

Note. Always cover the pivoting arm setting to prevent damages from grinding sparks..





- |                              |                           |                                |
|------------------------------|---------------------------|--------------------------------|
| 1. Grinding Wheel.           | 10. Pivoting arm edge.    | 19. Nylon block. (tool saddle) |
| 2. Wheel Cover.              | 11. Pivoting arm setting. | 20. Pivoting pin.              |
| 3. Protection guard.         | 12. Clamp housing.        | 21. Pivot point.               |
| 4. Bench top.                | 13. Clamping knob         | 22. Clamping screw.            |
| 5. Outer telescopic housing. | 14. Pivoting leg.         | 23. Self tapping screws.       |
| 6. Securing bracket.         | 15. Clamp bracket.        | 24. Clamping plate.            |
| 7. Thumb screw.              | 16. Angle setting fin.    | 25. Tool.                      |
| 8. Telescopic housing edge.  | 17. Wing nut.             |                                |
| 9. Pivoting arm.             | 18. Axle bolt.            |                                |

**UNI JIG 5**  
**SHARPENING DEVICE** Pat.Pending  
Made in Australia

- Accurately grinds your tools.
- Simple to operate for Woodturning,  
Carving & Cabinet Making tools  
as well as drill bits.
- Fits most grinders.

Distributed by  
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# SETTING GUIDE CHART

## FOR SHARPENING WOODTURNING CHISELS & GOUGES

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SCRAPERS	ANY	40mm.	N/A	5	60
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