

# NOVA™ Finger Jig Sharpening Accessory Instruction Manual



**NOVA Finger Jig** 

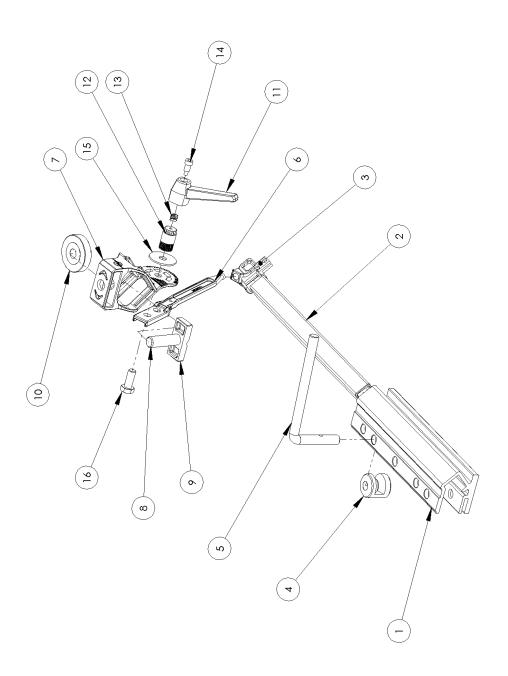
Perfect for all your Sharpening Needs. Fast and easy to use.

### READ THIS MANUAL CAREFULLY AND BECOME THOROUGHLY FAMILIAR WITH OPERATIONS BEFORE USE

Publication No: 96-1008-001 Last updated: 09.08.10 PART NO: 35053

## **Table of Contents**

Part List	4
Product Assembly	
Main Features	6
SAFETY	6
GENERAL SAFETY RULES	7
SETTING UP THE NOVA FINGER JIG UNIT	8
USING THE NOVA FINGER JIG	9
NOVA Warranty	11



Part No.	Product Code	Qty	Description
1	35030	1	Sharpening base
2	35010	1	Finger grind arm
3	CS35022	1	Finger grind slider
4	35024	1	Cam lock
5	Handle	1	Handle
6	CS35009	1	Finger grind arm
7	CS35008	1	Finger grind clamp
8	35020	1	Clamp bolt
9	35015	1	Clamp plate
10	35016	1	Clamp wheel
11	35029	1	Finger grind nut
12	G0606	1	Part 12
13	Spring	1	Spring
14	CO5015	1	Cap Screw M5X15
15	FW08	1	Nyloc Washer M8X16X1
16	SZ0820	1	Hex Bolt M8X20 ZP

finger jig bracket 47009 needs 2 bolts M8x16 sku BHC0816

## **Product Assembly**

Thank you for purchasing our NOVA Finger Jig which is designed to give you precise control and grinding economy with your chisel sharpening. To sharpen tools successfully, it is important to have a support system that gives the control needed during grinding.

The NOVA Finger Jig has been developed with both the woodworker and the woodturner in mind. It is capable of supporting most woodturning and woodworking hand chisels.

The NOVA Finger Jig will give you many advantages to your chisel sharpening solutions.

Once bevel is established then only a quick and light pass over the stone is needed to retouch the edge

### **NOVA FINGER JIG Specifications and Features**

#### Dimension:

Finger Grinding unit: 250mm x 50mm x 45mm

#### Weight: 1.4kgs

Materials: Cast High Tensile carbon steel (Finger Grind)



## **Main Features**

- Designed with wood turning experts to create the best sharpening tool on the market.
- Design and manufactured using computer modeling software gives the product good accuracy, high strength and great economical values.
- Finger grinder clamp has enormous capacity available for large chisels up to 1" inch
- Quickly retouch bevel edge with newly designed finger grind bracket.
- Ability to replicate the tool bevels with ease and simplicity.
- Grinds perfect bevel on deep and shallow gouges, roughing gouges and skews and scrapers.
- Hollow ground bevel offers the ability to hone the edge in ease, and create amazing sharpness.
- Also designed to sharpen various sizes of drills.
- Quick and easy to setup.
- Suits both 6" (150mm) and 8" (200mm) grinders.
- Will work with either the right or left hand grinding wheel.

### **SAFETY**



**Warning!** Failure to follow these rules may result in serious personal injury.

- It is important to protect your eyes!! Wear approved safety glasses which comply with current ANSI Standard Z87.1 (USA) at all times when performing grinding, wheel dressing or woodturning operations. We also strongly recommend that a full face shield be used at all times.
- During wheel dressing a dust mask must be worn.
- Follow safety directions that are supplied with your grinder.
- Do not make any adjustments to the Sharpening Centre until the grinder is switched off and the wheel has stopped revolving.
- Maintain a firm grip of chisel and always use gentle grinding action.

## **GENERAL SAFETY RULES**

1. **FOR YOUR OWN SAFETY, READ THE MANUAL BEFORE OPERATING THE TOOL.** Learn the machine's application and limitations plus the specific hazards peculiar to it.

2. **ALWAYS USE A FULL FACE SHIELD-Strongly recommended** (must comply with ANSI STANDARD Z87.1 -USA) Everyday eye-glasses usually are only impact resistant and safety glasses only protect eyes. A full face shield fill protect the eyes and face. Also use face or dust mask if cutting operation is dusty.

3. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in moving parts. Non slip footwear is recommended. Wear protective hair covering to contain long hair.

4. **USE EAR PROTECTORS.** Use ear muffs for extended period of operation. Use muffs rated to 103 DBA LEQ (8 hour).

5. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted. The DVR Lathe is intended for indoor use only. Failure to do so may void the warranty.

6. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Build up of sawdust is a fire hazard.

7. **KEEP CHILDREN AND VISITORS AWAY.** The Nova Sharpening Center is **not recommended** for children and infirm. Such personnel and onlookers should be kept a safe distance from work area.

8. MAKE WORKSHOP CHILDPROOF with locks, master switches, or by removing starter keys.

9. **GROUND ALL TOOLS.** If the tool is equipped with a three prong plug, it should be plugged into a three hole electrical receptacle. If an adapter is used to accommodate a two prong receptacle, the adapter lug must be attached to a known ground. Never remove the third prong.

10. MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY while the motor is being mounted, connected, or reconnected.

11. **DISCONNECT TOOLS from wall socket** before servicing and when changing accessories such as blades, bits, cutters and fuses etc.

12. AVOID ACCIDENTAL STARTING. Make sure switch is in the Off position before plugging in power cord.

13. **NEVER LEAVE MACHINE RUNNING UNATTENDED.** Do not leave machine unless it is turned off and has come to a complete stop.

14. KEEP GUARDS IN PLACE and in working order.

15. USE RIGHT TOOL. Do not use a tool or attachment to do a job for which it was not designed.

16. USE RECOMMENDED ACCESSORIES. The use of improper accessories may cause hazards.

17. DON'T FORCE TOOL. It will do the job better and be safer at the rate for which it was designed.

18. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

19. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

20. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form a habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

21. DON'T OVERREACH. Keep proper footing and balance at all times.

22. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

23. ATTENTION TO WORK. Concentrate on your work. If you become tired or frustrated, leave it for awhile and rest.

24. SECURE WORK. Use clamps or a vice to hold work when practical. It's safer than using your hand and frees both hands to operate tool.

25. CHECK DAMAGED PARTS. Before further use of the tool, any part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, mounting, and any other conditions that may affect its operation. Any damaged part should be properly repaired or replaced.

26. DRUGS, ALCOHOL, MEDICATION. Do not operate machine while under the influence of drugs, alcohol, or any medication.

27. **DUST WARNING.** Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

Lead from lead-based paints

Crystalline silica from bricks, cement and other masonry products

Arsenic and chromium from chemically-treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

### SETTING UP THE NOVA FINGER JIG UNIT

The positioning of the base in relation to the centre of the grinding wheel is critical to ensure that the marked positions will achieve the correct angles.

1. Locate the Base of the Nova Finger Jig so that the end of it is flush with the centre of the grinding wheel.



**2.** Now locate the centre of the finger grind arm to the centre of the wheel as shown in the picture 2.



**3.** Tighten the screws to attach the base to the bench top.

### **USING THE NOVA FINGER JIG**

#### About the Finger Jig

Use of the finger grinding unit allows the user to tailor the grind on their gouges to suit their preference, from a slight sweep back on the wings of the flute to quite extreme grinds. Once the ultimate grind is achieved and the settings are noted, these grinds can be faithfully repeated with minimal fuss and waste of gouge material.

This versatile jig can be used to sharpen Bowl Gouges, Spindle Gouges, Skew Chisels and Roughing Gouges.

#### A few basics on setting up

In order to ensure symmetry to the grind, it is essential that the Sharpening Base (Part 1) is mounted so that the pivot point in the Finger Grind Slider (part 3) on the end of the Finger Grind Arm (Part 6) is vertically in line with the centre of the Grinding Wheel.

To ensure consistent repeatable grind a few simple rules must be remembered;

- Always have the same amount of gouge protruding from the front of the Finger Grind Jig.
- Always set the Length of the Finger Grind Arm (part 6) the same.
- Always set the angle to the same using the scale on the Finger Grind Clamp (Part 7).

It helps to write down the settings near

your grinder so they are right where you need them.

By varying steps 2 and 3 above, a variety of grinds can be achieved. Use the length of the bar to achieve the flute grind (by ensuring the grinding is high on the wheel, between 1 and 2 o'clock) and the angle on the clamp to define the bevel and you will get long "erect" wings. Conversely, use the length of the bar to achieve the angle of the bevel and the angle on the clamp to control the wing length and the bevel will roll around the tip of the gouge with a "more modest" wing shape.



# Note: Be careful never to attempt to grind tools below a line horizontal with the centre of the grinding wheel;

#### Sharpening a Skew Chisel

Some turners prefer their skew chisels with an oval grind and this is easily achieved with the finger grind jig.

Mount the skew as you would any other gouge, set the plate angle so the cutting edge of the skew is square to the edge of the grinding wheel and set the bar length to suit the angle you want the bevel shallower angles, longer for steeper angles.

Ensure you use light sweeps across the grinder. The metal at the tip of a skew chisel is very thin due to the shape of the grind and thus is very prone to overheating. Quenching in water between strokes of the grinding action helps to alleviate this problem.

#### Some starter settings for your gouges

These are the settings typical for sharpening gouges, and will provide a starting point for you to work from.

For an approximately 55 degree grind (Steep) suitable for cutting the inside of a bowl;

- Angle of the Plate. 8.6
- Length of the bar 156mm
- Length of gouge past the end of the holder 57mm

For an approximately 35 degree grind (shallow) suitable as a roughing gouge and for the outside of a bowl;

- Angle of the Plate 8.0
- Length of the bar 140mm
- Length of gouge past the end of the holder 57mm

For a spindle gouge:

- Angle of the plate 6.5
- Length of the bar 140mm
- Length of the gouge past the end of the holder 76mm



### Teknatool Two Year Limited Warranty

This NOVA product is backed by a TWO YEAR warranty from the date of purchase. Teknatool International Ltd will repair or replace, at its expense and option, this Teknatool product which in normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to an authorized Teknatool service center with proof of purchase of the product within TWO YEARS and provides Teknatool with reasonable opportunity to verify the alleged defect by inspection. Teknatool will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse, or repair or alteration made by anyone other than an authorized service facility or representative. Under no circumstances will Teknatool International Ltd. be liable for incidental, special, indirect, and consequential damages or expenses, including loss of profits or loss of operations. This warranty is Teknatool International Ltd. sole warranty. There are no other warranties, whether written or verbal, whether expressed or implied by law, trade, custom, or otherwise, whether of merchantability, fitness for purpose, or otherwise, except for remedies available to customers under the Consumer Guarantees Act or other legislation.

OVERSEAS CUSTOMERS: Our Teknatool Distributors and agents will issue their own warranty to cover this product. Terms may vary from those stated above; please check with you local agent.

In North America warranty covers Continental USA only. For Alaska and Hawaii and other areas, warranty covers replacement of parts only and excludes transport costs.

**(i)** Note: Did you know you can register your warranty with Teknatool online? Visit our website on <u>www.teknatool.com</u> to register your warranty faster today! Register online to receive the latest information and additional features



Nova Finger Jig Unit Manual Publication Code: 96-1008-001 © Teknatool International 2010

www.teknatool.com