INSTRUCTIONS FOR GRINDING

You now have two ways of supporting your tools for grinding:
1. the vee-arm
2. the platform.

USING THE VEE-ARM

The vee-arm can be used to grind bowl-gouges, roughing gouges, and skews. All gouges are ground with basically the same technique. Slide the vee-arm into the base. With the grinder turned off, rest the handle of your tool in the vee-arm pocket. Slide the vee-arm in or out of the base until the heel of your gouge lays flat on your wheel and then clamp the vee-arm in place with the locking lever. Lift your gouge off the wheel and turn the grinder on. Gently touch your gouge to the wheel. Check the position of the vee-arm by lifting the tool off the wheel and looking at the grind marks on the heel. If the grind marks are even on the whole heel, then the vee-arm is adjusted properly. If the grind marks are not on the heel of the tool, away from the cutting edge, move the vee-arm out.

To sharpen a bowl gouge touch the tool on the wheel (fig 2) and roll the gouge to each corner of the gouge. Then grind in the vee-arm by rocking/rolling the tool exactly as when sharpening a gouge. A radius fixture is not needed to obtain this grind (figure 6).

You now have two ways of supporting your tools for grinding: 1. the vee-arm and 2. the platform.

Sharpening Chisels

Standard wood chisels are easily ground using the base and vee-arm.

Adjust the arm to set the bevel and grind the chisel with small sideways motions and light cutting pressure. Cool often as this is a hot process. Three or four strokes on a strop will generate a razor sharp edge on this tool.

For your new ONEWAY Wolverine Grinding Jig to work best, your grinder and your grinding jig should both be mounted on a board or a bench so that they cannot move in relation to each other. The base should be mounted directly centered under your grinding wheel. Slide the vee-arm into the base to ensure that the centre of the pocket lines up with the centre of your wheel.

CONTENTS OF PACKAGE

1 vee-arm
1 platform
2 bases
1 Speed handle

Setting Up - Mounting the Bases

In order for the vee-arm to work properly it must be set to the base of the grinding wheel. The base must be approximately 1/2" (or less) from the front of the mounting board. Once you have the base positioned use two screws to anchor it in place. Use the nuts and one middle lock. These bolts are countersunk for standard wood screws.

Two bases are provided for mounting on each side of your grinder.

Notes

1. Rubber feet underneath the grinder should be removed and be installed underneath the mounting board if required.
2. With some grinders (particularly 6 inch grinders) it may be necessary to mount your grinder on a spacer approximately one inch thick to achieve the 6-1/4” minimum dimension. This will be necessary if any part of the base interferes with the wheel guard and when using the ONEWAY Dressing Jig.

INSTRUCTIONS FOR GRINDING

You are finished grinding. Instead of grinding the ears back 20 degrees, the end of the tool should remain square (figure 4). When you are grinding these two tools you will find that different areas of the tool will grind away at different speeds. It is important to watch the shape of the tool as you are sharpening and to spend more time grinding some areas of the tool and less time grinding others. Also please note that bevel angles are starting values only. Modify them to meet your own turning style.

USING THE PLATFORM

For your new ONEWAY Wolverine Grinding Jig to work best, your grinder and your grinding jig should both be mounted on a board or a bench so that they cannot move in relation to each other. The base should be mounted directly centered under your grinding wheel. Slide the vee-arm into the base to ensure that the centre of the pocket lines up with the centre of your wheel.

The roughing gouge is ground much the same way as a bowl gouge but should have a different geometry when you are finished grinding. Instead of grinding the ears back 20 degrees, the end of the tool should remain square (figure 4). When you are grinding these two tools you will find that different areas of the tool will grind away at different speeds. It is important to watch the shape of the tool as you are sharpening and to spend more time grinding some areas of the tool and less time grinding others. Also please note that bevel angles are starting values only. Modify them to meet your own turning style.

USING THE PLATFORM

With the grinder turned on, slide the assembled platform into the base. Please note that the platform can be used on the left or right side of the grinder. Clamp the platform arm in place with the locking lever so that the platform is held securely. Adjust the platform so that the tool meets the wheel at the desired angle. Reset to the minimum distance from the wheel before starting the grinder and proceeding to sharpen your tool.

SAFETY GUARD - Installation Instructions

1. Observe carefully the photos to the right.
2. Join the two sets of bend plates with the screws provided (as shown in Fig 2.) - ensure to adjust as far forward as possible. Note there is a left and right assembly (right is shown).
3. Screw down the assembly to the grinder mounting board (as shown in Fig 2.)
4. Make any final adjustments to ensure the guard is within 1/8” of the wheel and secure. If possible, allow the guard to rest gently on the grinder guard for extra support.

The guard will fit most grinders.
Perform the following:

✓ Fingernail grind
✓ Edge or line grind

While attending many wood shows and symposiums, designers at ONEWAY® recognized that the side (or long grind) on deep bowl gouges has become very popular. This shape is excellent for rapid following, and is useful on the outside of bowls. Once you know how to use it, it will be one of your favorite gougess.

Sharpening tools can be difficult for many reasons. One problem can occur because grinding wheels are sensitive to vibration due to their mass and speed. Often vibrations are responsible for inferior finishes on the tools that are being ground. They can also harm the bearings and bearing housings of the machine. Most vibrations are caused by unbalanced grinding wheels. Unfortunately honing tools or pedestal grinders do not come equipped with a means to balance wheels.

Oneway’s Skew Grind Attachment minimizes this problem by allowing the skew to be mechanized and balanced. The unique offset handle position actually reduces the skew grind generated and leaves a stronger more predictable tool.

Our Mini Platform is a highly recommended option with our Wolverine Grinding System.

Wheels are an integral part of the grinding process. The wheels on our grinding jigs offer that have been manufactured to our specifications after considerable testing and in conjunction with our manufacturers and experts.

For grinding carbon, and particularly high speed steel, select a Grinding Wheel that suitable for your grind and consider the following suggestions:

1. If your grind mostly large tools with a large contact area on the grind, such as skews, the wheel and other products, choose 60 grit for roughing and 80 grit for finishing.

2. For grinding small tools and for finishing large gouges, choose 120 grit wheel.

3. Oneway’s Wolverine wheels are specially manufactured to grind high speed steel on bench grindes.