# **WORK SHARP KNIFE & TOOL SHARPENER** Ken Union Edition

## **BLADE GRINDING ATTACHMENT**



**Video Demos and Replacement Belts Available at: WORKSHARPTOOLS.COM** 

## **INSTALLATION:**

Push lock release lever & rotate knife sharpening cassette to remove cassette.





Install Blade Grinding Attachment by aligning the chassis to the keyed "on / off" position then rotate into the "sharpening position".





## **SAFETY INFORMATION:**

Use only as directed in Work Sharp User's Guide.

**WARNING:** To minimize the risk of injury, always use proper eye and respiratory protection. Use only as directed in Work Sharp User's Guide.

**WARNING!** CHOKING HAZARD! Small Parts - Not for children under 3-yrs.

WARNING: This product contains a chemical known to the State of California to cause cancer. Some dust created by power sanding and grinding as well as contents from the machine may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Darex, LLC

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**Internet:** www.worksharptools.com

Use tracking knob to center belt on pulley.

Bench

Mount Tab





**Optional:** Use a clamp to secure to work bench.



## Angle Adjustment Lever 90° Grind Plate Tracking Knob-

Angle

Indicator

Tensioner

Assembly

Long Distance Center Reference Plate -PRINT FRANKS

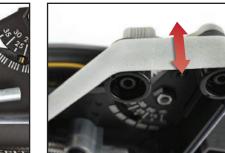
Bench -

**Mount Tab** 

Angle Selection

Clamp Knob

**GET TO KNOW YOUR TOOL:** 



## **BELT INFORMATION:**

Included 1" X 18" belts are listed below. Replacement Belt Kits (WSSAKO81115) are available at select retailers and WorkSharpTools.com.

**Tension Assembly** 

Clamp Lever

Short

Distance

Center



**Hub Fastener** (Left-Handed Thread)

> Grit: X22 Grit | Medium Size: Norax 22µ Use: **Sharpen**

> > Grit: X4 Grit | Fine Size: Norax 4µ

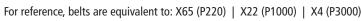
Use: **Hone** 

Grit: 12000 Grit | Extra Fine Size: SiC 1µ

Use: Strop









**Remember:** Counter-clockwise to tighten, clockwise to loosen.

Push in and rum remains. clockwise to install / uninstall belt. Push in and turn tensioner

Install Hub Fastener onto drive shaft.





to lock into position



once belt is in place.

## **TOOL SET UP:**

Choose entire should depending on preference. Choose either short or long center location for pulley





Long Center

Set the desired sharpening angle, set tensioner into lock position, then move the Angle Adjustment Lever. Tighten Angle Selection Clamp Knob to secure selected angle.

Be mindful that accommodations will need to be made for

every blade such as thumb studs, pocket clips, blade profile

or handle design. Test run the blade through the process on

Do not over-tension belt or it may negatively affect belt tracking.

both bevels without power first to ensure accommodations



**BEST TECHNIQUES:** 

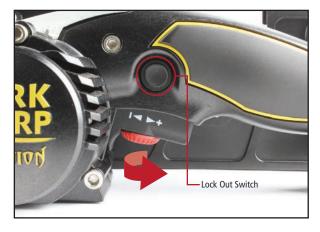
can be made before sharpening.

If Over-Tension Mark is visible, lower tension.



Choose and mount a belt based on the task at hand (see Belt Information Section for details).

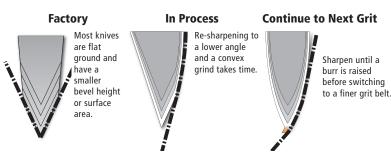
Turn on button. Turn on power at medium speed and press switch lock out



Ensure belt is properly tracking so it is centered on the pulleys.

The tool is ready for use. Continue to Sharpening Section.

## | Sharpening Process:



Follow the curve of the knife when sharpening for best results.



Over-Tension Mark

Use a clamp to secure to work bench.

During heavy grinding, do not over-heat the blade.



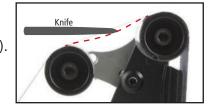
- Follow the curve of the knife when sharpening for best results.
- Masking tape can protect blade from scratching during sharpening.
- Use a practice knife to learn.

## **SHARPENING:**

Place spine of the blade flat onto reference plate. While keeping blade flat, move up onto belt surface and place the heel of the blade edge onto the abrasive.



Use very light pressure on belt (1/16" deflection).



Move blade flat across abrasive (1" per second) and stop the tip on the middle of the belt. Then pull blade away from the belt.

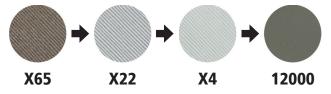


#### Continue sharpening the same side of the blade until a burr is raised along entire edge (count strokes).



Repeat same number of strokes on other side of blade.

Continue up the grit scale until desired sharpness is achieved. Ensure tracking and tension is properly set when you change belts.

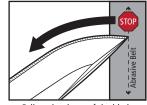


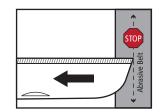
## TROUBLESHOOTING:

#### Knife not getting sharp?

- More strokes Grind all the way to the edge. Continue until a burr is raised. Then progress to a finer belt.
- **Higher Speed -** Slow belt speeds may not be removing enough material.
- Coarser Belt Coarser grit belts will remove material more aggressively.
- a) **Problem:** The tips of my knives are becoming rounded.
- **Solution 1:** Stop the tip on the belt.

**Solution 2:** Keep the blade edge perpendicular to the belt. To reduce tip rounding, follow the curve of the blade.





Follow the shape of the blade so the edge remains perpendicular to the belt. Stop on belt.

**c) Problem:** How do I feel for a burr at the cutting edge to know when to proceed to a finer belt?

**Solution:** Slide your finger perpendicular and away from the cutting edge. The burr will feel like a small 'ridge' or 'wire' at the edge.

See image in the Sharpening Section, Step 3.

## **ACCESSORY LIST:**

WSKTS-KO Blade Grinding Belt Kit (1" x 18" belts): WSSAKO81115 **Individual Extra Coarse P120 Grit Belt** (1" x 18" belts): PP0002770 Individual Coarse X65 Grit Belt (1" x 18" belts): PP0002940 Individual Medium X22 Grit Belt (1" x 18" belts): PP0002942 Individual Fine X4 Grit Belt (1" x 18" belts): PP0002943 Individual Extra Fine 12,000 Grit Belt (1" x 18" belts): PP0002952 Leather Belt Kit (1" x 18" belts with .5µ compound): WSSA0002782

## WARRANTY:

1-year warranty on all **WORK SHARP**® components; excludes abrasives. Warranty for consumer not industrial use.

#### DAREX, LLC

Function: BILI

## Single Level Bill

Option: A

In Eff: 071717

Out Eff: 123179

Parent: WSSAK081112

Desc: WSKTS-KO BLADE GRINDING ATTACHMENT

Revision: 0

Um: EA

Run Lead Time: 5

Fixed Lead Time: 0

Planner: AP

Lt: N

Planning Policy: N

Drawing:

Pt Use

Seqn

Component

Starting:

Pt				С		Q		M	L
Use	Seqn	Component	Description	Т	Quantity				Т
0	005	PP0003079	WSKTS-KO BLADE GRINDING ATTACH FRAME	N		1	EA	В	N
0	010	PP0003081	WSKTS-KO BLADE GRINDING ATTACHMENT INDICATOR GEAR	N	1	1	EA	В	N
0	015	PP04053FF	1/4-20X5/8 BT HD CP SCR	X	1	ì	EA	В	N
0	017	PP0002204	1/4-20 JAM NYLOCK	X		í	EA	В	N
0	020	SA0003124	WSKTS-KO BLADE GRINDING ATTACH DRIVEN PULLEY ASSEMBLY	N		ı	EA	В	N
0	021	PP0003080	WSKTS-KO BLADE GRINDING ATTACHMENT PULLEY GEAR	N	1	1	EA	В	Ν
0	022	PP0003082	WSKTS-KO BLADE GRINDING ATTACH SPACER	Ν	1	1	EA	В	N
0	023	PP0003085	WSKTS-KO 1/4 -20 X 1.5" SHCS	Χ	2	ï	EA	В	N
0	025	SA0003140	WSKTS-KO BLADE GRINDING ATTACH #10 KNOB X 1/2" ASSEMBLY	N	1	Ĺ	EA	В	N
0	030	PP0003087	WSKTS-KO BLADE GRINDING ATTACH TENSIONER	N	1	ı	EA	В	N
0	035	PP0003109	WSKTS-KO BALL BEARING - 1/4 X 11/16 X 5/16"	Ν	1	1	EA	В	N
0	040	PP08068FF	1/4" X 5/8" DOWEL PIN	X	1	1	EA	В	N
0	045	PP0003133	WSKTS-KO .480 X 2 X .045 SPRING	N	1	1	EA	В	N
0	050	PP0003084	WSKTS-KO BLADE GRINDING ATTACH TRACKING MOUNT	N	1	1	EA	В	N
)	055	SA0002600	WS3000 BELT SHARPENING SYS TRACKING KNOB SUBASSY	N	1	1	EA	В	Ν
)	060	PP0002554	WS3000 BELT SHARPENING SYS TRACKING CAP	N	1	ĺ	EA	В	N
)	060	PP0002353	NUT 10-32 X .125 THICK	N	1	Ī	EA	В	N
)	067	PP0002458	10-32 NYLOCK JAM NUT	X	1	Î	EA		N
)	070	PP0002351	PLAIN WASHER - #10 TYPE A	Х	1	ĺ	EA	3800	N
)	075	PP0003086	WSKTS-KO 10-24 X .5 SHCS	X	1	i	EA		N
)	080	PP60034PF	PIVOT LOCK LEVER	N	1	ì	EA		N

#### DAREX, LLC

Function: BILI

### Single Level Bill

Option: A

In Eff: 071717

Pt Use

Out Eff: 123179

Parent: WSSAKO81112

Desc: WSKTS-KO BLADE GRINDING ATTACHMENT

Revision: 0

Um: EA

Run Lead Time: 5

Fixed Lead Time: 0

Planner: AP

Lt: N

Planning Policy: N

Seqn

Drawing:

Component

Starting:

Pt				С		Q		M	L
Use	Seqr	Component	Description	T	Quantity	Т	Um	В	Т
0	085	PP0003116	WSKTS-KO BLADE GRINDING ATTACH SHARPENING PAD	N	1	1	EA	В	N
0	090	SA0003202	WSKTS-KO BGA BELT KIT SUBASSEMBLY	N	1	j	EA	М	N
0	095	PP0003201	WSKTS-KO BLADE GRINDING ATTACH RETAIL BOX - ENG (WSSAKO81112)	N	1	1	EA	В	N
0	100	PP0003213	WSKTS-KO BLADE GRINDING ATTACH USERS GUIDE - ENG/GER/FRE	N	1	1	EA	В	N
0	102	PP0003520	WSKTS-KO BGA LOT DATE CODE STICKER	Р	1	1	EA	M	N
0	105	WC[R]WSLABOR	WORK SHARP LABOR	R	.2	1	EA	M	Ν