



Accu-Wedge®

Installation

See the YouTube videos on our website
www.accu-slice.com

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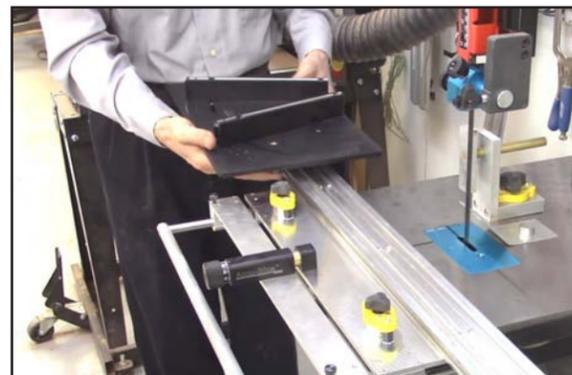
Step 1: Install a 3/4" wide x 10 to 14 tpi blade on your band saw – "VERY IMPORTANT"

A 3/4" wide band saw blade is critical for the accurate cutting of segments for segmented woodturning when using the Accu-Wedge on the band saw. Accurately tense the blade to assure there is no movement of the blade when cutting. Smaller blades with less tension will not perform as well as these 3/4" wide bandsaw blades.



Step 2 – Install the Accu-Wedge System onto the Accu-Slice Table

Slide the Accu-Wedge onto the rail on the Accu-Slice system by guiding the 4 roller bearings onto the rail.



Step 3 – Adjust the position of the Accu-Wedge

Loosen the two course adjustment screws and the two MagJig clamps on the Accu-Slice system and move the Accu-Wedge table so that the edge of the table is close to, but not touching, the band saw blade. A gap of 1/16" to 1/8" is suggested. Then retighten both the course adjustment screws and the two MagJig clamps.



Step 4 - Make sure the Bandsaw Blade is perpendicular to the Accu-Wedge table

Use a machinists square to check the angle between the band saw blade and the Accu-Wedge table. If they are not exactly perpendicular, adjust the table on the band saw.



**WARNING:
KEEP FINGERS REMOVED
FROM THE BAND SAW
BLADE AT ALL TIMES**

Step 5 – Install the Diversion Ramp and the Accu-Stop

Attach the Diversion Ramp with its magnets onto the band saw table. The diversion ramp should be close to, but not touching the band saw blade. The purpose of this ramp is to divert the cut segments away from the band saw blade so they don't catch in the blade. Install the accessory Accu-Stop (must be separately purchased) – it will be adjusted later.



Step 6 – Select the number of segments

Loosen the two locking bolts on the Accu-Wedge fences with an allen driver and move the fences to the indexed position for the number of segments required. After setting the position, relock the two locking bolts.



Step 7 – First angle cut

Position the board to be cut onto the Accu-Wedge table. Make sure the board is in tight against the fence and also flat against the Accu-Wedge table. Use one or two clamps to hold it in place. Make the first cut.



Step 8 – Cutting the segments

Move the board to the other fence. Adjust the Accu-Stop for the required length of the wedge and the diameter of the segmented ring. Continue cutting the wedges by alternating back and forth between the two fences.



Step 9 – Finishing the segmented rings

Sand the edges of the wedge segments to remove the burr from the end of the band saw cut as well as the fuzzies on the edges of the wedges. Assemble the wedges to produce the segmented rings. If the rings are not perfect and there are gaps, there are two solutions to this issue. (1) You can sand the faces of the wedges on a flat sheet of sandpaper and putting a little extra pressure on the edge opposite the gap. (2) It may be necessary to increase the tension on the band saw blade to eliminate the gap due to band saw blade drift.



Cutting Accurate, Segmented Wedges on the Accu-Wedge®

Band Saw Maintenance

1. Band Saw Blades -- Use only a ¾" wide 10-14 tpi band saw blade to minimize blade drift. The more tpi, the finer the cut.
2. Use a clean, sharp blade. If you start to see any discoloration of the wood you are cutting, the blade is either dull or gummed up – install a new blade.
3. Band Saw Blade Tension – Set tension high, so the blade does not move. I set my tension to just over the ¾" marking on my Laguna gauge.
4. Blade Guides – Keep the blade guides as close to the board you are cutting as possible. This is not only safer, but it minimizes any band saw blade movement. We prefer the Laguna Ceramic blade guides because they cradle the entire width of the blade.

Accu-Slice Maintenance

1. On the Accu-Slice system, make sure that the course clamping screw is locked and that the MagJig clamps are engaged and securely clamped to the band saw table.

Accu-Wedge System Maintenance

1. On the Accu-Wedge, make sure that the Accu-Wedge table rides smoothly and fairly snugly on the rail with no rocking of the table. If loose, the roller bearings can be adjusted as shown in the Accu-Slice roller bearing maintenance video.
2. Verify that the band saw blade is perfectly perpendicular to the Accu-Wedge table as shown in the Accu-Wedge installation directions.
3. Make sure that the Accu-Stop face is parallel to the Accu-Wedge table. Make sure that is locked to the table with the MagJig clamp and does not slide on the band saw table.
4. Make sure that the fences are locked on the Accu-Wedge table by tightening the Allen locking screws on the fences.
5. Keep the Accu-Wedge table area and especially the area around the roller bearings clean of sawdust. Sawdust can clog the roller bearings and cause the Accu-Wedge to be hard to move. If clogged, clean the roller bearings and Accu-Slice rail with a cloth dampened with water. Do not use other solvents.

Cutting the Wedges for Segmented Rings

1. The board you are cutting must be straight and sit flat against the table and fence.
2. Draw a line on the top surface of the board you are cutting. This will remind you to keep this side oriented up during cutting and will also aid in the assembly of the wedges into the segmented rings
3. Any movement of the wood when cutting will produce inaccurate wedges which will result in gaps in your segmented rings.
4. Make sure that the board to be cut is:
 - a. flat against the Accu-Wedge table
 - b. tight against the Accu-Wedge fence
 - c. just touching the Accu-Stop.
5. Clamp the board onto the Accu-Wedge table using clamps which lock into the channel on the Accu-Wedge fences. The clamps must be secure so that the wood does not move when cutting. As you clamp make sure that the wood is tight against the fence, tight against the table and also tight against the Accu-Stop.
6. You can use one or more clamps. Make sure the board does not move when cutting – this is the major cause of inaccurate cuts.
7. If you prefer you can also use a spring clamp to clamp the board against the fence. This helps keep the wood against the fence.
8. If there are any burrs on the end of the wood that is being aligned against the Accu-Stop, remove these burrs. Lightly sand them off with 220 grit sandpaper being careful not to round the edges of the wood.
9. Feed the wood slowly into the band saw blade – the slower you cut, the smoother the finish on the cut surface.
10. After the wedges are cut, lightly hand sand the wedge edges and surfaces with 220 grit sandpaper. Be careful not to round the wedge edges.
11. If there is a minor gap in the assembled segmented ring, this can usually be eliminated by hand sanding the surface of the wedge and applying a little extra pressure on one edge of the wedge.
12. If the gap is major, repeat all of the steps above to resolve this problem. Major gaps are usually due to the wood board moving during the cutting of the wedges on the Accu-Wedge.