

Assembling The Ringinator ®



The blade goes on to the end of the arbor. Make sure the notch in the blade lines up with the pin. This prevents the blade from slipping under high cutting loads.

Next place the cap, a locking washer (important), and the bolt. Without the locking washer there is the chance it will vibrate free and unscrew while you are using it. This breaks the blade.

Double check the direction of the arrow and teeth.

Slide the arbor through a bronze thrust washer, the arbor holding block, another washer, and then the shaft collar. Followed by the flexible coupler and the small shaft that the drill attaches to.

Tighten the set screw in the shaft collar. Make sure the shaft spins freely, if not, loosen, reposition, and retighten the shaft collar.

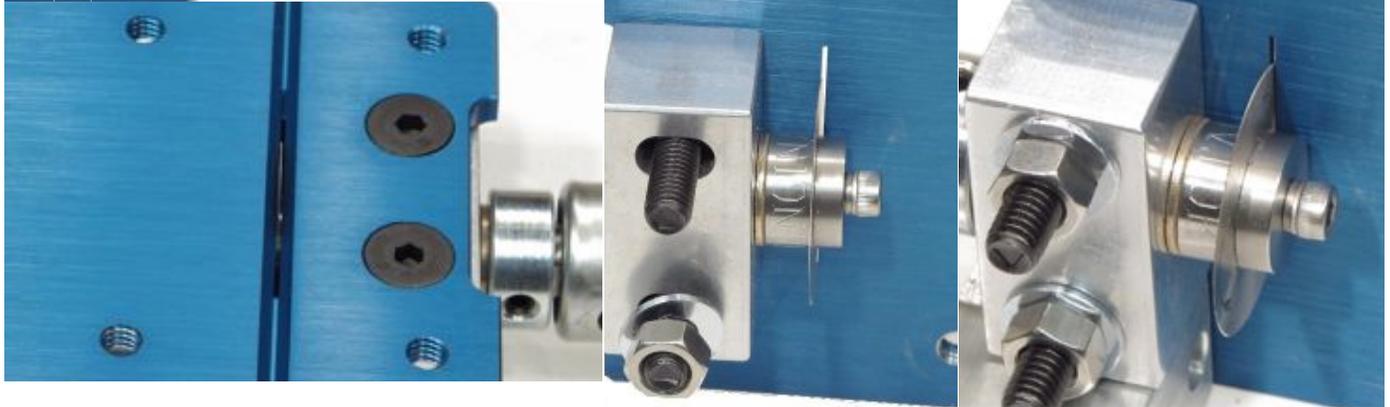
Note: Brand new tools may have slight high spots on the bearings and arbor. So at first, it may bind or stutter as you spin it. With use, those high spots will wear down and it will spin smoothly.





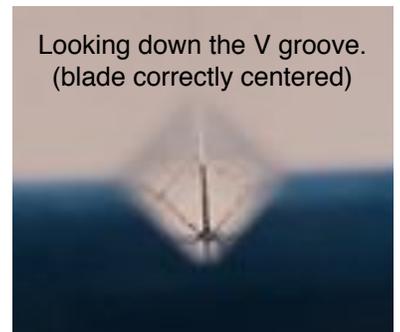
Next, take the two long cone bolts and pass them through the cutting plate. This is where the arbor holder mounts.

If you need to lower the depth that the blade cuts, place a washer or shim between the arbor holder and cutting plate.

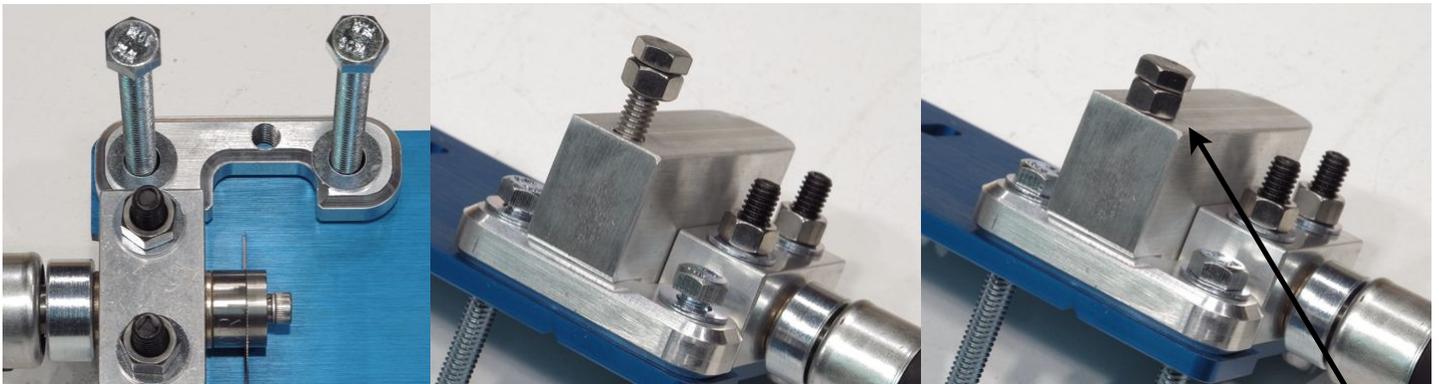


You will need to align the blade so that it is in the center of the slot. The blade must not touch the sides of the slot.

Hand tighten the hex nuts, then do the adjustments. After you have it lined up, carefully tighten the hex nuts with a wrench. Recheck alignment, and repeat if needed. (tightening can make it move)



Looking down the V groove.
(blade correctly centered)



Next install the bracket of the reservoir as shown. The wider bit will be by the arbor block.

To connect the reservoir to the bracket use the bolt with the extra hex nut on it. **Hand-tighten only.**

Then thread the two longest bolts through washers, the bracket, through the aluminum plate; then tighten them with a wrench.



Blades are SHARP. Be careful!



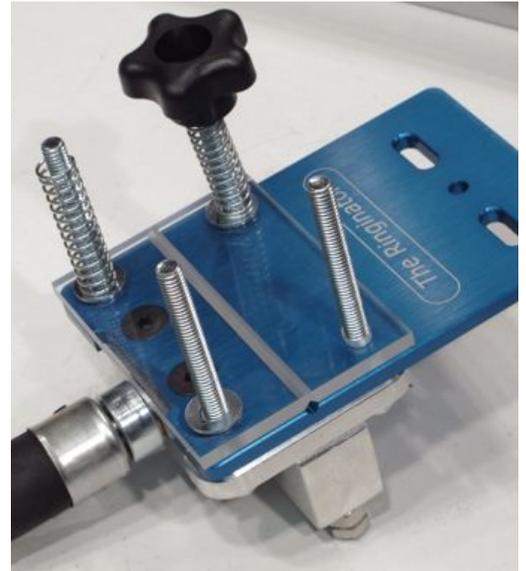


Next place a washer and the other two long bolts through the other set of holes, and tighten.

Next, slide on the plastic cover, making sure the V groove is on the underside.



Then place one washer, followed by a spring, followed by a knob.



Place two of the long 1" cone bolts through the holes on the plate. Place a spacer washer, and then screw on the post.



Next, install the U channel that holds the drill. This attaches to the two posts. Depending on the size of your drill, you may need to place another set of spacer washers.





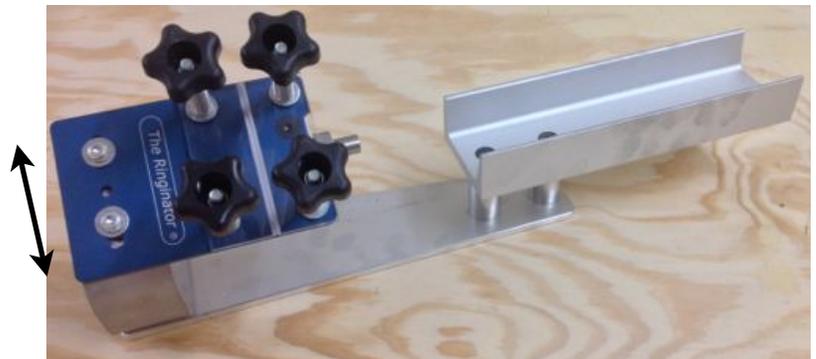
Next, install the C shaped part that the cutting plate attaches to.

Thread a 3/4" cone bolt, followed by a washer and nut.

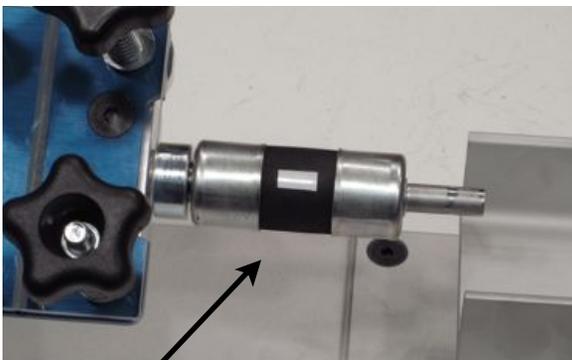


The cutting plate attaches next. Use the 1" button head bolts. Place a washer on each side. The entire assembly slides so you can line it up with your drill. After it is lined up, tighten the bolts.

When using, clamp the entire tool to your workbench and/or table.



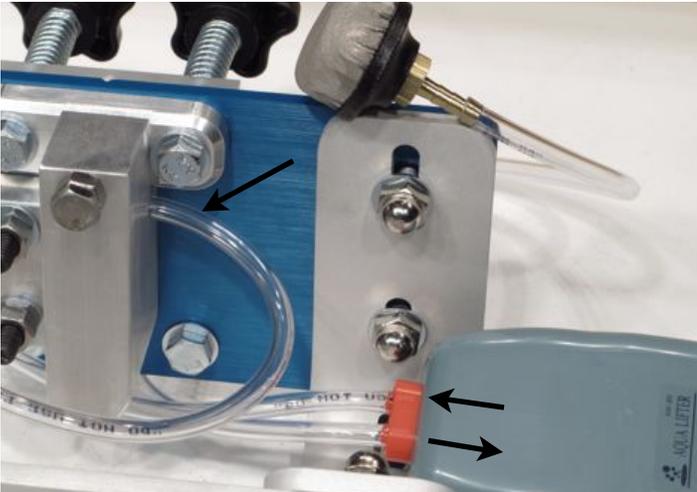
You will need to secure your drill to the U channel while cutting. Do this using plastic Zip Ties or a hose clamp. (not included)



To use the laser tachometer, you need to set up a target for it to bounce the laser beam off of. Cut a small piece of the included reflective tape and stick it on the black rubber portion of the coupling.

To measure the rotations per minute of the drill; simply point the laser dot of the tachometer at the target.

Lubrication



A lubricant hose goes from the “out” of the pump to the small hole on the aluminum reservoir.

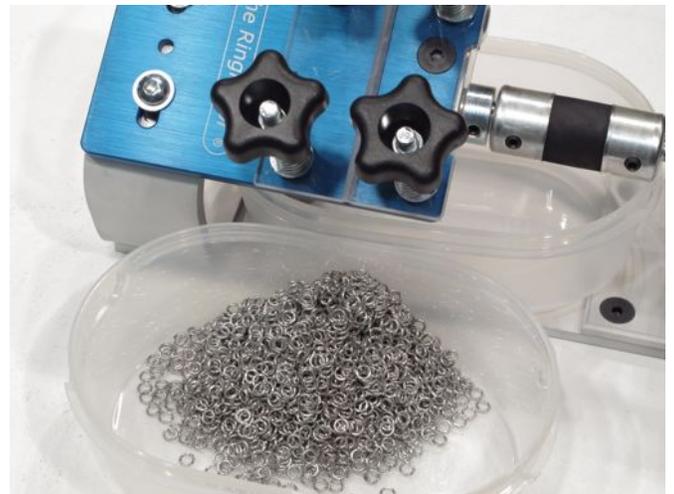
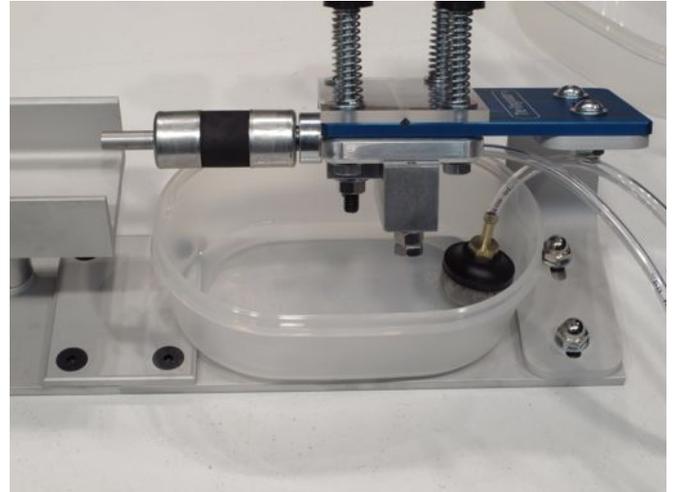
The hole is a little bit smaller, for a friction fit. Run some warm water over the tube to soften it if its too hard to push in.

The fluid comes out several ways. The spinning blade sucks it up into the cut and into the coil, flushing the sawdust out. (You can see that if you look down into the coil while it is running) Any overflow comes out from the notches on the rounded edge of the reservoir. This keeps the blade constantly submerged in fluid.

The intake hose attaches to the barbed filter on one end of it, and is connected to the pump. The filter prevents cutting dust from being sucked in to the pump. This will clog up, and will need occasional cleaning.

We suggest using two bins. One for the lubricant and one to catch the rings. Plastic tupperware works very well.

You can place the filter in the plastic bin that is used to catch the overflow from the reservoir. Using two bins, most of the fluid will end up in the bin under the Ringinator, with a little fluid ending up in the second bin that is used to catch the cut rings.



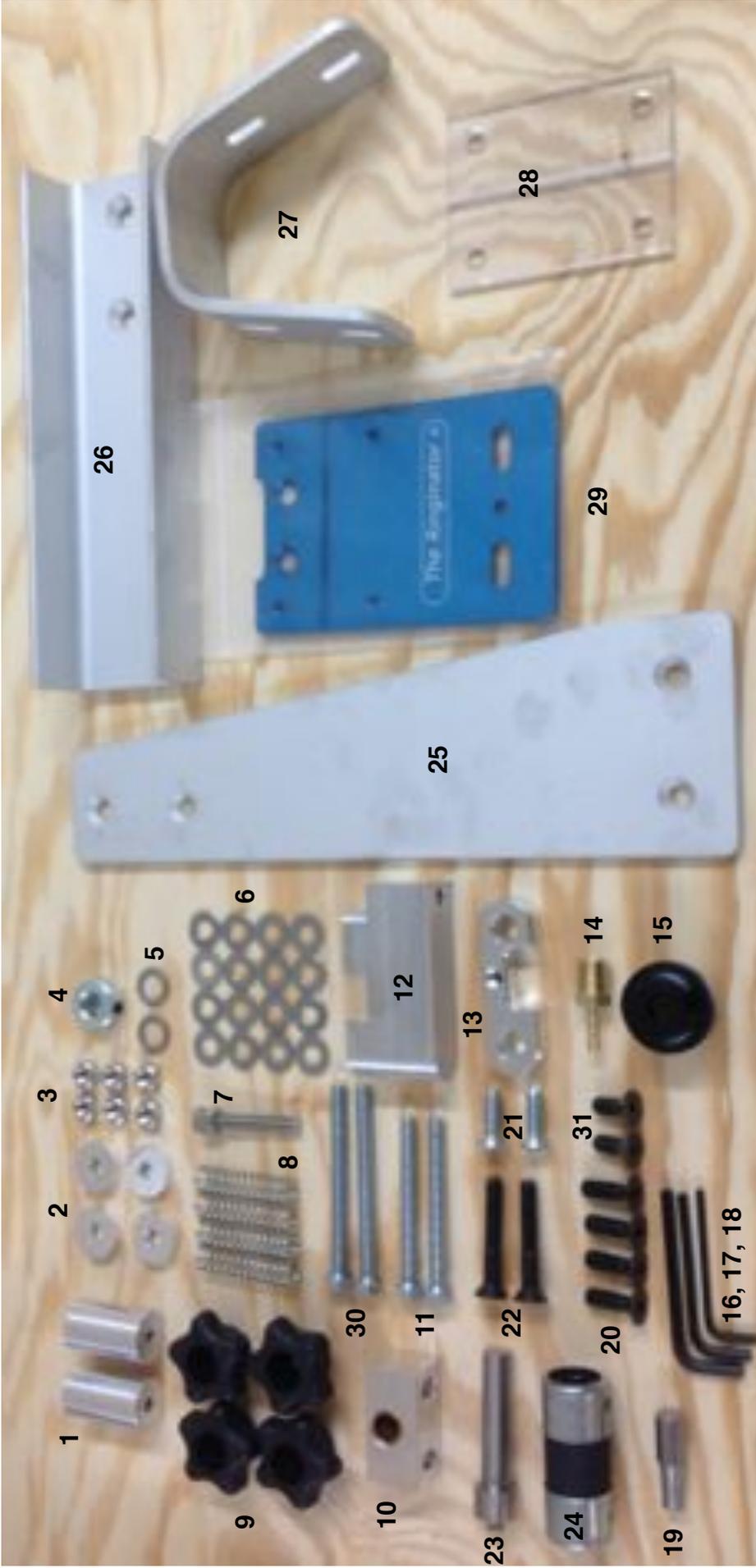
NOTE:

The included AW-20 Aqualifter pump will ***NOT*** work with pure petroleum oil, cutting fluid, or lubricants. They destroy the pumping bladder.

Use water soluble cutting fluids at the manufacturers recommended dilution ratio. Usually 20 parts water to 1 part fluid.

You can use liquid dish washing soap as a substitute. It does not work as well as cutting fluid, but it works better than plain water.

Links to some popular fluids can be found on our website.



- 1. Standoff posts [2]
- 2. Thick spacing washers [4]
- 3. 5/16-18 stainless steel nuts [6]
- 4. Shaft collar [1]
- 5. Powder metal thrust bearings [2]
- 6. Stainless steel washers [16]
- 7. 5/16-18 2" stainless bolt with nut [1]
- 8. Springs [4]
- 9. Plastic knobs [4]
- 10. Arbor bearing block [1]

- 11. 5/16-18 3" bolt [2]
- 12. Coolant reservoir [1]
- 13. Reservoir mounting bracket [1]
- 14. Brass barb for filter [1]
- 15. Fine mesh filter [1]
- 16. 1/8" Allen key [1]
- 17. 5/32" Allen key [1]
- 18. 3/16" Allen key [1]
- 19. Drill adaptor [1]
- 20. 5/16-18 1" cone bolt [4]

- 21. 5/16-18 1" button head bolt [2]
- 22. 5/16-18 2" cone bolt [2]
- 23. Arbor and arbor cap [1]
- 24. Flexible shaft coupler [1]
- 25. Base plate [1]
- 26. Drill mounting channel [1]
- 27. Angled C bracket [1]
- 28. Plastic cover plate [1]
- 29. Ringinator cutting plate [1]
- 30. 5/16-18 3.5" bolt [2]
- 31. 5/16-18 3/4" cone bolt [2]