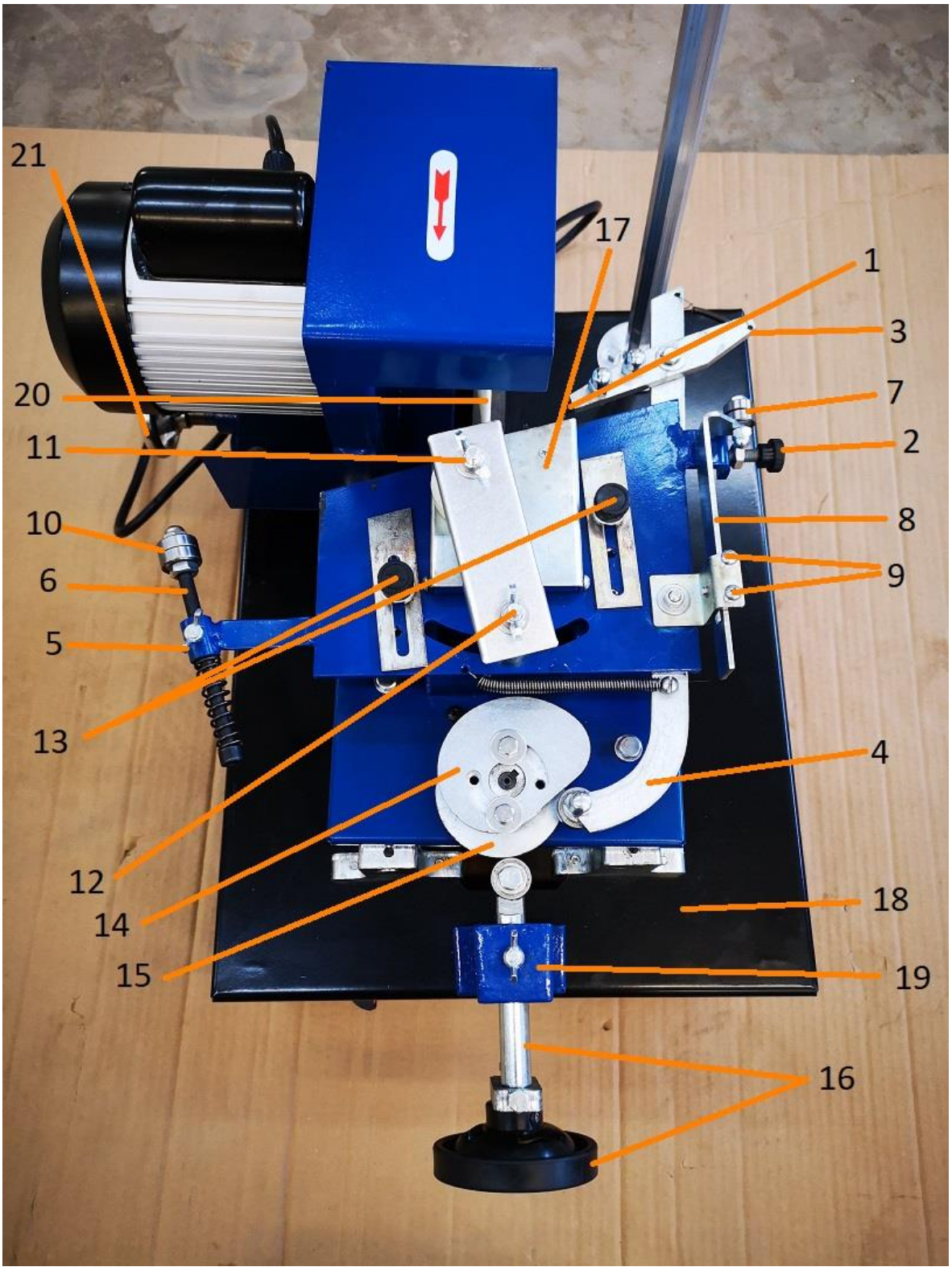
RR5055 Blade Grinder Owner's Manual

Assembly/Set-up



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ITEM	NAME
1	Push Tooth Pin
2	Push Pin Adjustment Screw
3	Push Pin Adjustment Plate
4	Push Arm
5	Left Pressure Wheel Lock Bolt
6	Left Pressure Wheel Adjustment Rod
7	Right Pressure Wheel
8	Pressure Wheel Plate
9	Pressure Wheel Adjustment Seat
10	Left Pressure Wheel
11	Compressor Handle
12	Compressor Support
13	Saw Blade Guide
14	Push Tooth Cam
15	Front and Rear Feed Cam
16	Front and Rear Adjustment Wheel
17	Saw Blade Press Plate
18	Workbench
19	Adjustment Support
20	Grinding Wheel
21	Grinding Wheel Forwards/Backwards Adjustment

Applications and Features

This tool is used for grinding band saw blades, it can also be used for the grinding of double metal band saw blades, and it can grind both the tooth throat and the rear.

Technical Data

1. Saw blade width size 6 - 75mm
2. Grinding teeth range 2 - 30mm
3. Tooth grinding feed rate 0 - 63 teeth/min
4. Grinding head motor 250W110V60Hz
5. Feed motor 15W110V60Hz
6. Grinding wheel size φ150 φ32×10mm
7. Grinding wheel speed 2800RPM

Grinding wheel dressing

If the angle of the bevel on the grinding wheel is off from the angle of the saw tooth, it should be dressed. Trimming can be done with a diamond pen, or a hard ceramic wheel can be used.

Grinding the back of the tooth

If the back of the tooth is to be ground, this can be achieved by adjusting the relative positions of the cams 14 and 15. This step needs to be performed after the blade has been installed onto the grinder. The specific operation is: stop state, loosen the screw on the cam 14, and point the pointer on it to the scale 5, and then tighten the screw, then turn the cam by hand to observe the contact between the back of the tooth and the grinding wheel when pushing the tooth. If it is not in contact, loosen the screw again, so that the index of the pointer on the cam 14 is increased. (If the contact is too tight, the index must be made smaller.) When the cam is rotating (during the feed, for example), the front of the serration and the tooth when the back side is in light contact with the grinding wheel, the adjustment is basically in place. At this time, you can start the machine and observe.

Note: Before turning on the power, first adjust the lever 16 back a short distance, and then slowly feed it to prevent the saw tooth from being worn out.

Maintenance and precautions

1. The saw blade interface must be smoothed before grinding, and there should be no obstacles when the saw blade advances.

2. Before starting and after stopping, the feed adjustment lever 16 must be retracted by a short distance to prevent the grinding when starting up.

3. This machine can be used in places where the altitude is not more than 1000 meters, the ambient temperature is -15°C to 40°C, and the relative humidity of the surrounding air is not more than 95%. The temperature rise of the motor is not more than 80°C.

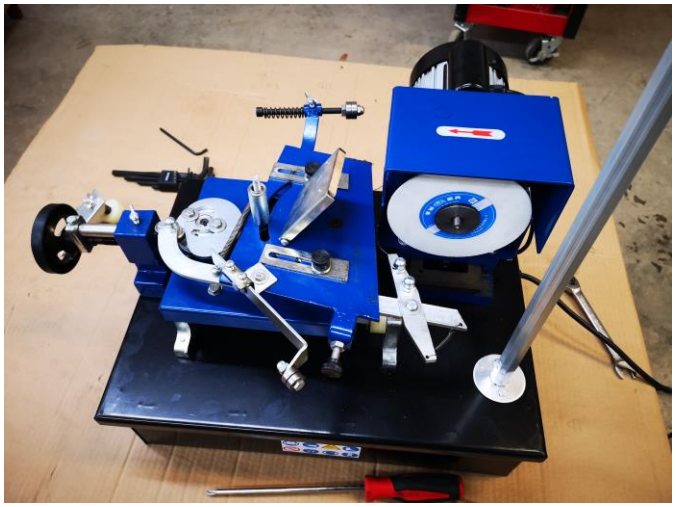
4. The linear guides are to be lubricated once every three months, and the other rotating parts are lubricated with oil as needed.

5. Clean off dust frequently and keep the countertop and electrical system clean and dry.

6. To replace the grinding wheel, just loosen the screw on the rounded corner of the protective cover and remove the outer cover. Before replacing, you should first check whether the speed rating of the new grinding wheel is consistent with the specifications listed in the manual. If it is lower than the regulations, it should not be used. When installing the new grinding wheel, the soft gasket on the chuck and the grinding wheel should be properly placed, and the grinding wheel should be balanced, and there should be no obvious yaw or vibration. The clamping wheel nut should also not be over-tightened to prevent the wheel from cracking. After the grinding wheel has been replaced, re-installed the protective cover and re-install the screws on the circumference of the housing.

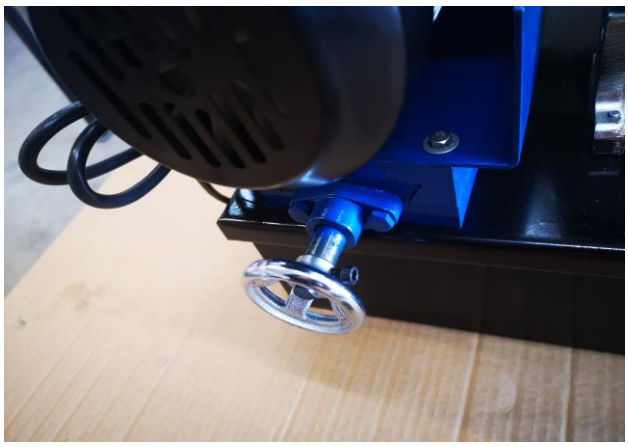
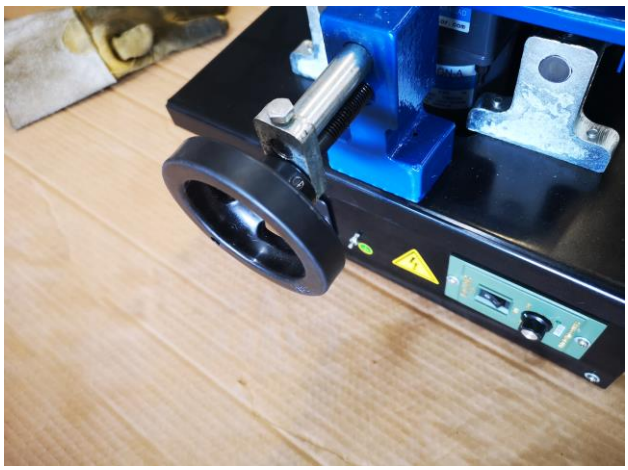
7. After replacing the grinding wheel, the grinder should be test operated. The wheel movement should be smooth and quiet, and there should be very little vibration. When testing, you should stand to the side of the grinder for safety.

RR5055 Blade Grinder



Ensure you are wearing gloves and eye protection when working with the Band saw blade Open the box Remove all items	
You will have 4 items The tower for holding the blade upright The grinding stone Some round handles and hardware will be in the 3rd bag Blade Grinder Assembly	

RR5055 Blade Grinder

Lift the Sharpener out of the box	
Open the bag with the handles and hardware	
Find the small, round, silver handle and attach it to the shaft located just below the grinding stone electric motor	
Lock the handle onto the shaft by tightening the Allen-head fastener	
Find the round, black handle. Attach this handle to the shaft on the same side as the electric motor controls	
Lock the handle to the shaft by tightening the small Allen head fastener	

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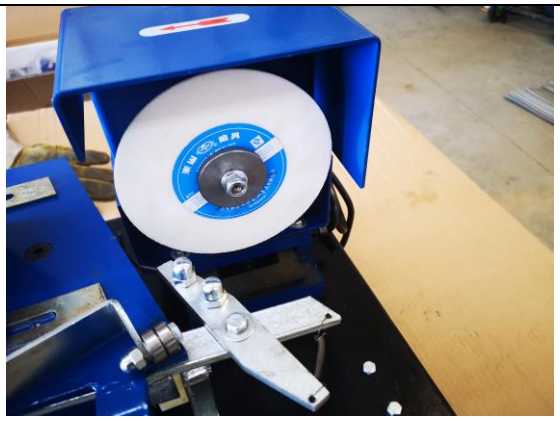
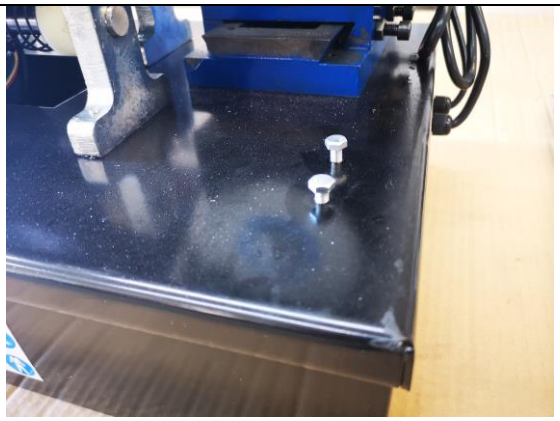
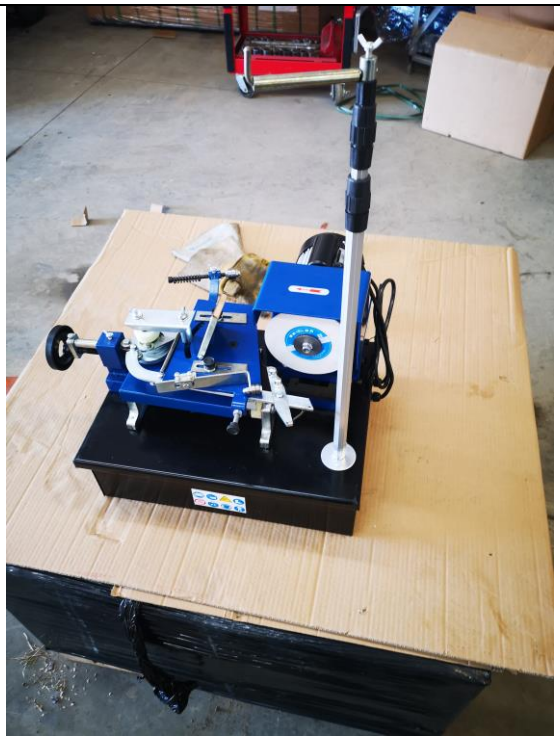
RR5055 Blade Grinder

Un-package the grinding stone Install onto motor shaft with the flat side towards the motor. Tighten up the lock nut	
There are two small bolts that are installed near one of the corners loosen and remove these bolts	
Un-package the tower Install the tower onto the top plate of grinder with the 2 small bolts we just removed in the previous step Make sure to align the tower so the flag is over top of the grinder and not facing away	

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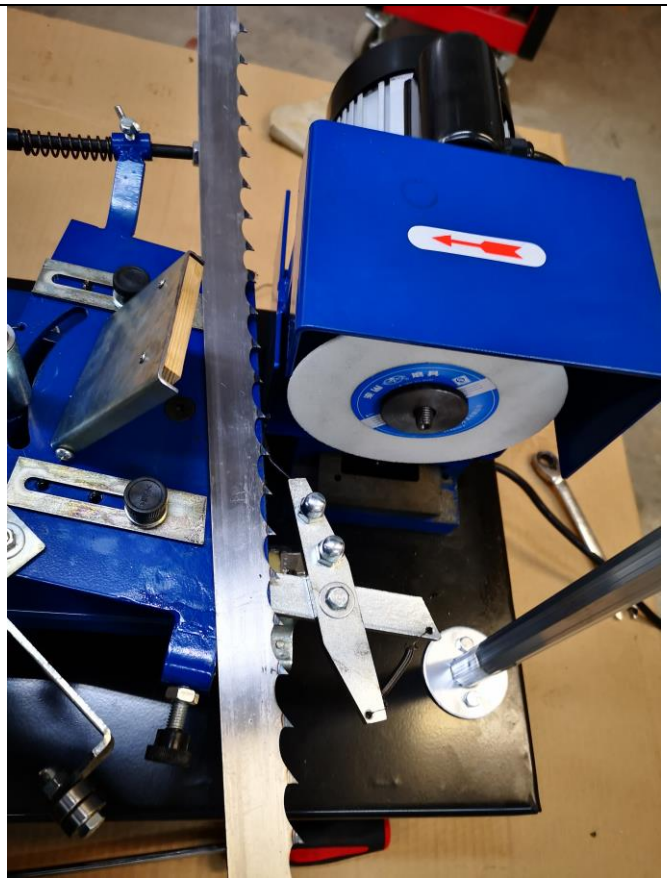
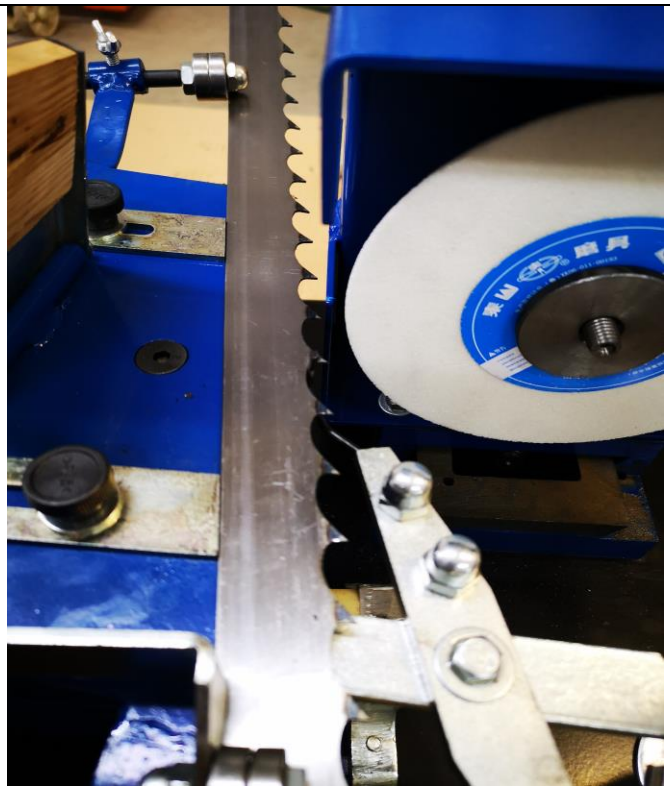
RR5055 Blade Grinder

Take the band saw blade to be sharpened, and set it on the machine as shown in the photo Take special notice as to what direction the teeth are facing If you set the blade on the machine and find the teeth are facing the **opposite** way; then you must turn your blade inside out to reverse the teeth Do so with caution as the blades are very sharp and have plenty of spring tension	
Once the blade is facing the correct direction, slide it towards the grinding wheel The teeth should be free and clear of the plate that the blade is sitting on - as seen in the photo	

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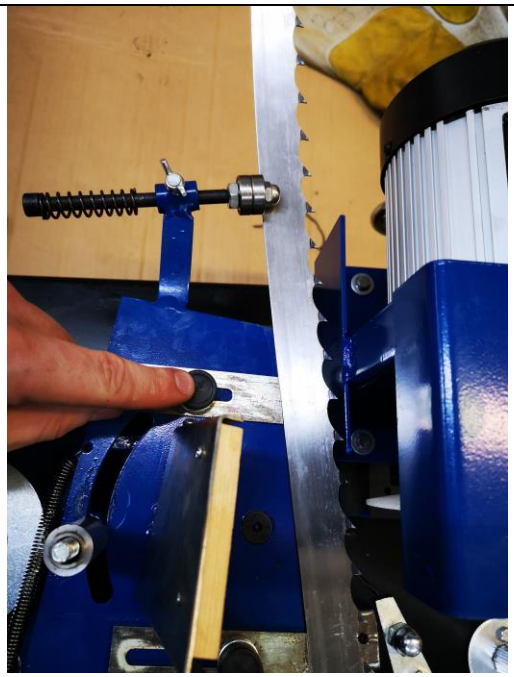
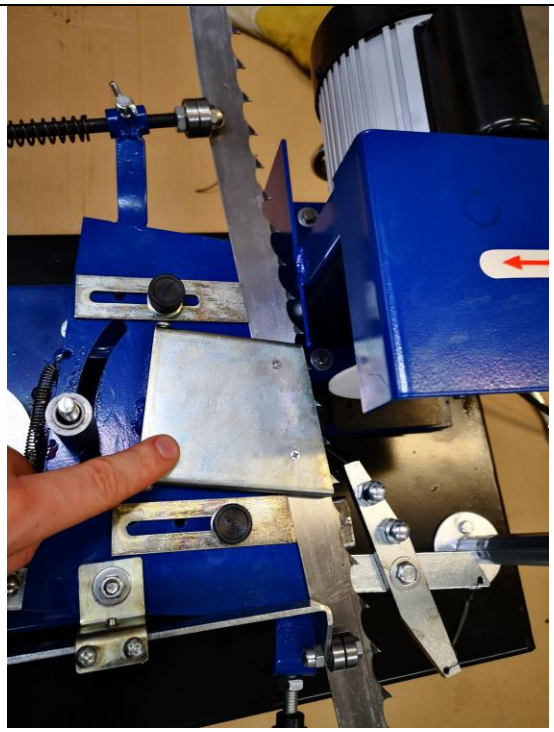
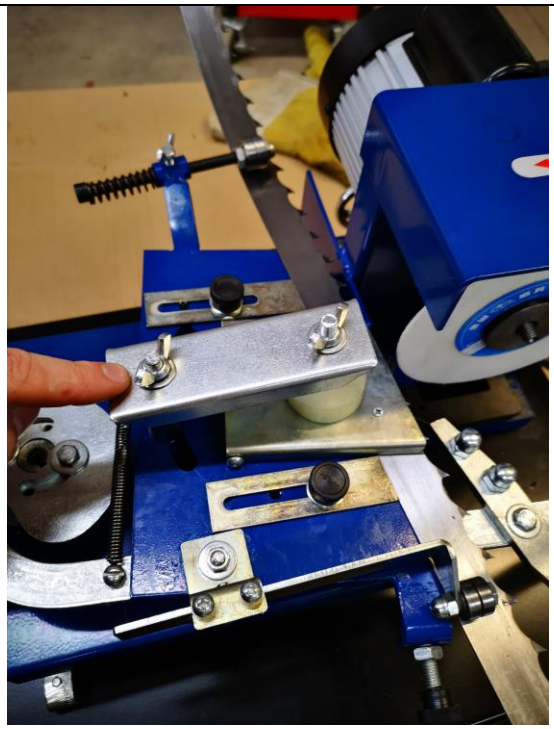
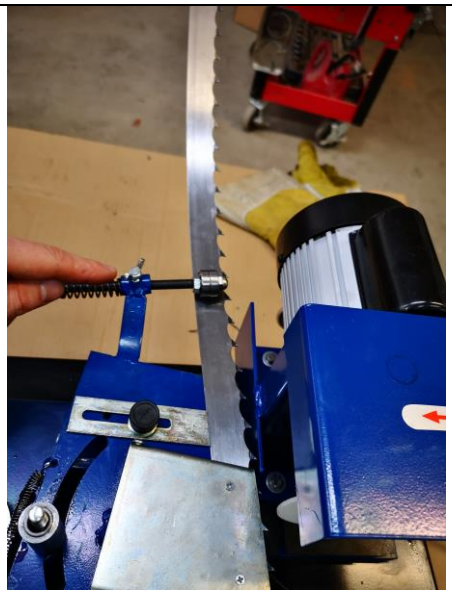
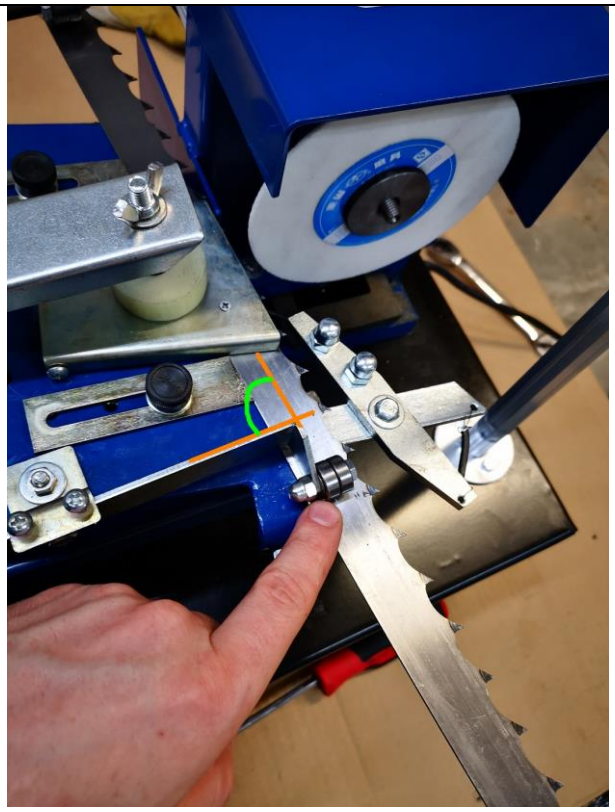
Now that the blade is sitting in the correct position, lock it into place Loosen the small black cap shown in the photo Adjust Band Saw guide so that it is snug against the back of the blade Tighten the black cap to lock guide into position	
Repeat the same process with the rear guide Lock into place by tightening the black cap	

Now that both guides are locked into place, set the press plate onto the blade	
Install compressor handle and compressor support on top of press plate Do not tighten wing-nut shown in picture yet Leave this loose for now as you will be adjusting the upper table assembly to line up with the grinding stone properly	

Slide the left pressure wheel over the center of the blade Lock into position by tightening wing-nut	
Slide the Right pressure wheel over the center of the blade In the photo shown, the angle between the pressure roller arm and blade is about 90° **Orange** lines to show the intersecting angles You don't want that angle to be any large than 90° as it will cause the blade to slowly come away from the guides during sharpening	

The blade is now set in the machine The next steps involve getting the blade lined up with the grinding stone to do the appropriate grind on the tooth	
Now, locate this panel on the side of the machine Make sure the other orange switch located just left of this panel is in the "off" position for now Turn the dial up to around the fourth dot- this is a nice speed to use when setting the blade up This dial controls how quickly the upper table assembly moves back and forth Now turn the black switch that is shown in this picture to the "on" position The upper table assembly should be moving back and forth now The blade should be fed, one tooth at a time by the Push Tooth pin at this time	

The other, orange switch will still be in the "off" position at this time - the grinder is **not** spinning at this time

Return to the round, black handle(16), and start turning **clockwise**

You will see that the upper table assembly gradually moves toward the grinding stone as you do this

Your table should still be moving back and forth during this step

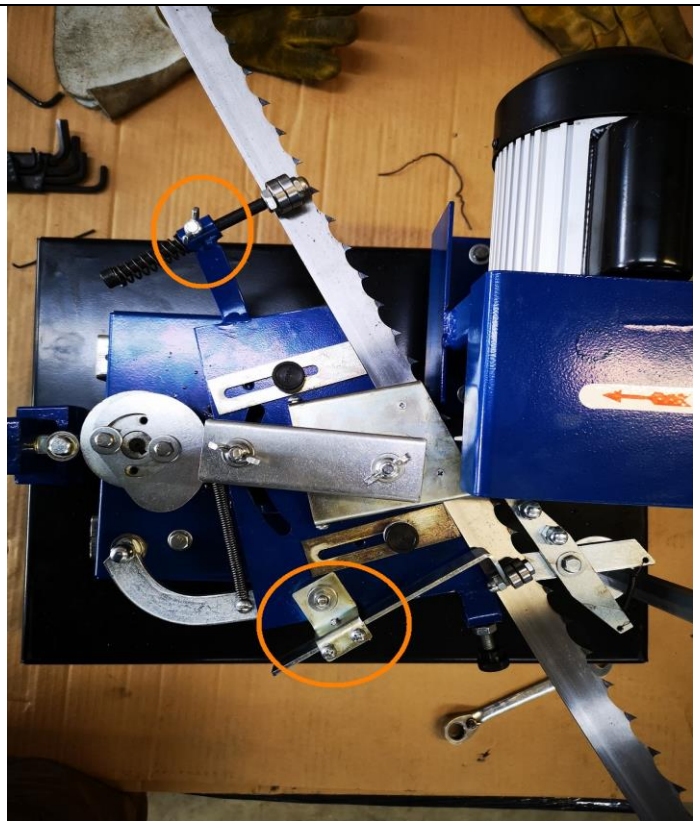
Keep adjusting until the blade moves right up against (but not touching) the grinding stone

Once you are happy with the adjustment made here, switch off the table when the blade is against the grinding stone.
(still not quite touching the stone)

The next adjustment is the upper table position

This adjustment changes the angle of the blade as it contacts the grinding wheel

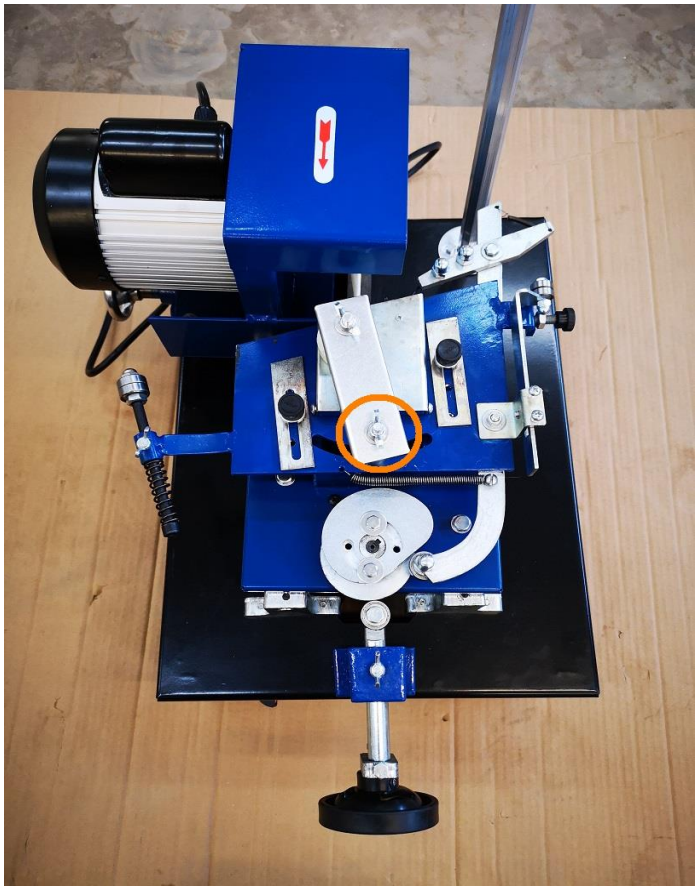
This adjustment is achieved by gripping the left pressure roller and the right pressure roller- circled in **orange**



Once gripped, pull one side and push the other side to achieve a change in angle in either direction- you are essentially turning the whole top table left or right in relationship to the workbench(18)

Use this adjustment to line up the angle of the blade tooth with the angle of the back of the grinding stone

You can lock the upper table into position by tightening the wing-nut on the compressor support(12)-The wingnut is circled in **orange** in the **2nd** photo



Take time to line up these 2 adjustments so that the blade is perfectly lined up with the stone-but still not touching

Switch the table back on, the upper table should be moving back and forth and the blade should be coming very close to the grinding stone with the appropriate angle

Turn the grinding motor switch on

The table should be moving back and forth and the grinding stone should now be spinning

The stone will not be contacting the blade tooth yet

Return to the silver handle, located under the grinding motor(21)

By adjusting this, you can run the motor inwards and outwards

Use this adjustment to line up the grinding stone to now touch the blade tooth

Now your machine should be self-feeding one tooth at a time and making a small grind at the appropriate angle for the blade

Be sure to mark the start point of the blade to identify when the blade has made a full circuit through the grinder.