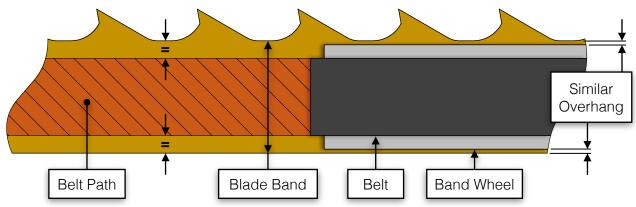
BLADE TRACKING OVERVIEW

Blade tracking is the fine-tuning of the band wheel angles to "hold" the blade during cutting. This "hold" position maintains the blade's location during most sawing conditions, with the guide bearings and blocks acting as occasional supports. A properly tracked sawmill will hold the band portion of the blade centred on the belts without any guides in contact with the blade.

This image shows the "ideal position" with the blade band centred on the belts & band wheels.



Precise measurements are not required to centre the blade band with the belts & band wheels. Visually confirming the front and back of the blade overhang a similar amount is adequate.

What Happens when Tracking is "Off?"

- ► Excessive blade guide bearing wear
- ► Wavy cuts caused by uneven tension within the blade
- ► Overheating blades / blade breakage
- ► Excessive belt wear
- ▶ Blade will not stay on the belts

Important Points:

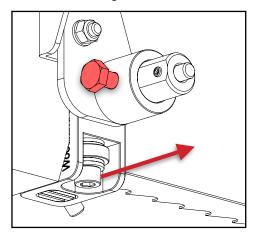
- ► Tracking testing can only be made with a blade installed.
- ► Tracking *testing* is done under <u>full blade tension</u>. A fully tensioned blade is when tension is set to 25 ft•lb using a torque wrench—or—when the tension handle is snugged to the thrust bearing and then rotated a further three (3) full turns.
- ► Tracking *adjustments* are made at three (3) turns off full blade tension.
- ▶ The blade should run in the same location on both the follower and drive-side belts.
- ▶ Guide assemblies should *always* be pushed all the way back, clear of the back of the blade. Nothing should ever be in contact with the blade when testing or making tracking adjustments.
- ► The following test and adjustments should only be attempted with drive and follower belts that are in good repair and keeping the blade up off the cast iron band wheels.
- ► Tuning the blade tracking is a process of testing and adjusting—re-testing and adjusting—re-testing and adjusting. The number of cycles is determined by how far off the tracking was at the start of the process.
- ▶ Please see the following pages for testing and adjustment procedures.

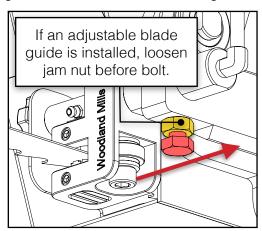




TEST PROCEDURE

- 1. Always wear safety gloves and eyewear. Never attempt to adjust the blade tracking with the engine running. Remove the spark plug cap as a safety precaution.
- 2. Loosen the blade guide assemblies, push them back as far as possible, and secure. This will ensure the guide blocks and bearings will not touch the blade during the test.



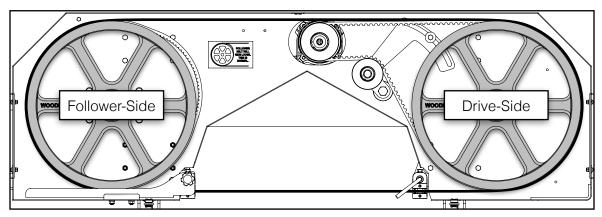


- 3. Install a blade if one is not already installed.
- 4. Fully tension the blade to 25 ft•lb using a torque wrench—or—snug the tension handle to the thrust bearing and then rotate it a further three (3) full turns.
- 5. Start rotating the band wheels by hand in the direction of cut observing how the blade moves *forward* or *rearward* on the belts to find its "hold" position.

If the blade looks as if it is going to come off during hand rotations—STOP—and proceed to the *Follower-Side* or *Drive-Side Adjustment* as required.

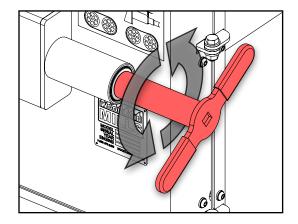
Important Points Before Making Adjustments:

- ▶ Start adjusting the side that is furthest out of spec first.
- ▶ Since adjustments made to one side can affect the other side, always adjust one side first, rerun this test procedure, then adjust the other side if needed.
- ▶ Because ¼ turn adjustment increments are recommended, it is common to run this test a few times between multiple adjustments before correct tracking is achieved.



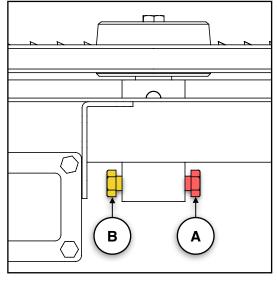


FOLLOWER-SIDE ADJUSTMENT



1. Back off the blade from full tension by three (3) full turns of the tension handle.

Ensure blade guides are still pushed back and clear of the blade.



2. Adjust the blade position:

ORWARD

To move the blade *forward* on the belt:

- i. Loosen the right-side bolt (A) 1/4 turn.
- ii. Tighten the left-side bolt (B) to clamp the follower shaft back in place.

-OR-

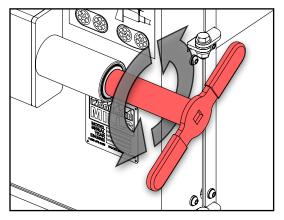
EARWARL

To move the blade *rearward* on the belt:

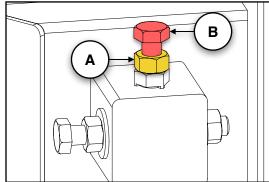
- i. Loosen the left-side bolt ® ¼ turn.
- ii. Tighten the right-side bolt **(A)** to clamp the follower shaft back in place.
- 3. Repeat the *Test Procedure* to see if further adjustment is needed.
- 4. Repeat the follower-side adjustment steps and test procedure as many times as necessary until the blade is tracking properly.



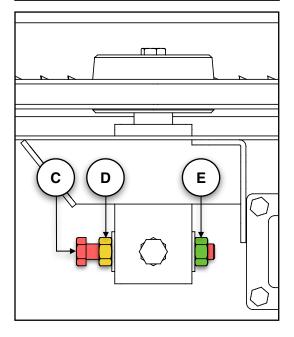
DRIVE-SIDE ADJUSTMENT



- 1. Back off the blade from full tension by three (3) full turns of the tension handle.
 - **Ensure blade guides are still pushed back and clear of the blade.**



- 2. Loosen the jam nut (A) on the upper bolt.
- 3. Loosen the upper bolt **B** ½ turn.



4. Adjust the blade position:

To move the blade *forward* on the belt:

- i. Hold the horizontal bolt © stationary with a wrench.
- ii. Loosen the right-side nut © ¼ turn.
- iii. tighten the left-side nut **①**.

-OR-

REARWARD

To move the blade *rearward* on the belt:

- i. Hold the horizontal bolt © stationary with a wrench.
- ii. Loosen the left-side nut D ¼ turn.
- iii. tighten the right-side nut **E**.
- 5. Re-tighten the upper bolt (B) followed by the upper jam nut (A).
- 6. Repeat the *Test Procedure* to see if further adjustment is needed.
- 7. Repeat the drive-side adjustment steps and test procedure as many times as necessary until the blade is tracking properly.



Sawmill Blade Tracking Handout

2020 Model Year and Newer Sawmills

TRACKING RUN-IN

Once the band wheel angles have been tuned and the blade's "hold" position is correct as per the test procedure:

- 1. Fully tension the blade to 25 ft•lb using a torque wrench—or—snug the tension handle to the thrust bearing and then rotate it a further three (3) full turns.
- 2. Disable lubrication by closing the valve on the tank.
- 3. Close and latch the band wheel housing doors.
- 4. Start the engine.
- 5. Take the engine slowly up to half throttle for fifteen (15) seconds, then full throttle for an additional fifteen (15) seconds, and then turn the engine off and wait for the blade to stop spinning.
- 6. Open the band wheel housing doors and confirm the tracking settings have held.
- 7. Bring the guides forward into place and set as per the manual.

