

This is a guide to replacing the drive belt for your WEN 3424, 3424T, or 34018 Wood Lathe. This guide is best used in conjunction with the lathe manual, included as a physical copy with your unit and available on the WEN website page for the 3424/3424T (link [here](#)), or 34018 (link [here](#)) by clicking “Click here to view the product manual”.

If at any point you need assistance, have questions, or want to order parts, call WEN customer service at 1-800-232-1195, M-F, 8-5 Central Time, or email techsupport@wenproducts.com.

If replacing any parts, use only genuine replacement parts purchased from WEN Products. Use of replacement parts not sold by WEN Products will void the product’s warranty and could lead to decreased performance or injury.

TABLE OF CONTENTS

Tools needed	1
Removing the old belt	1
Installing the new belt	3

TOOLS NEEDED

- Hex wrenches (included with your lathe)
- Faceplate wrench (included with your lathe)
- Cloth or cardboard
- Rubber, high-friction gloves
- Helper (optional)
- Rubber mallet
- Soft-face mallet, hammer, and block of wood (optional)

BEFORE BEGINNING, ENSURE THAT THE POWER TOOL IS DISCONNECTED FROM ANY AND ALL POWER SOURCES. AVOID ELECTRIC SHOCK. FOLLOW ALL SAFETY PROCEDURES LISTED IN YOUR OWNER’S MANUAL. USE COMMON SENSE.

NOTE: pictures in this guide are taken on model 3424T, but a similar procedure applies for models 3424, 3424T, and 34018. If changing the belt on model 34018, be careful to not damage the speed sensor. Refer to the exploded view and parts list in your manual.

REMOVING THE OLD BELT

1. Disconnect the lathe from the power source. Ensure that the motor is stopped.
2. Relieve tension on the lathe belt, as if you were going to change speeds. Move the belt off the motor pulley. Lock the motor in position. Consult your owner’s manual.
3. Open the belt access panels. Consult your owner’s manual.
4. Remove the faceplate (if installed) and spur center (if installed). Consult your owner’s manual. Use cardboard or a cloth to protect your hand, and/or the lathe bed, if removing the spur center.
5. Use a hex wrench to loosen, **but not remove**, the two set screws on the spindle handwheel (Fig. 1 below).

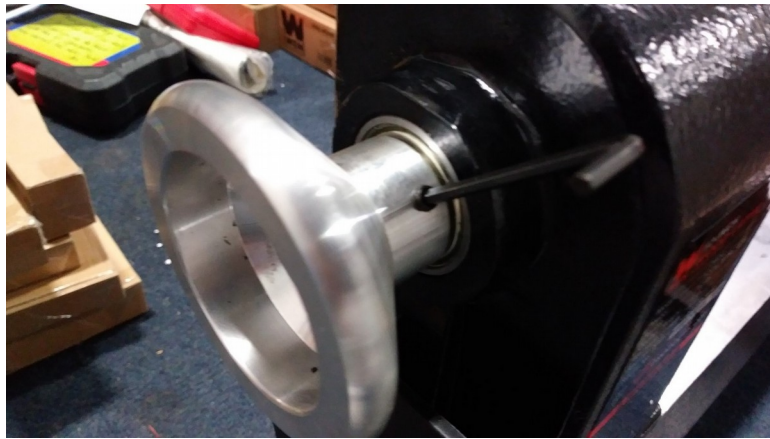


Fig. 1: There are two set screws; loosen both.

6. Put on your rubber, high-friction gloves. Grip the handwheel on the rear of the spindle. Use the faceplate wrench on the spindle's flats to loosen the handwheel. **NOTE:** the spindle handwheel is left-hand threaded. Turn the handwheel clockwise (as viewed from the back of the lathe, with the spindle stationary) to loosen it. Remove the handwheel and set it aside.
7. Use a hex wrench to loosen the set screw on the spindle pulley (Fig. 2 below). Note the pulley's position relative to the inside walls of the headstock. Take a picture if need be.



Fig. 2: Spindle pulley set screw.

8. Move the lathe tailstock as far away from the headstock as it will go. Lock it in place. Move the lathe banjo (the piece that holds the toolrest) as far away from the headstock as it will go. Lock it in place. Place a piece of cardboard, or thick cloth, on the bed of the lathe. Failure to do so could lead to the lathe bed or the spindle threads getting damaged when it is removed from the headstock. Alternatively, have a helper position him/herself to catch the spindle as it is removed.
9. Hold the spindle pulley in position (otherwise it will fall and possibly get damaged). Use a rubber mallet to tap the spindle out of the headstock. Tap the handwheel side (so the spindle will be ejected towards the lathe tailstock). **NOTE:** you may have to whack the spindle with some force. If a rubber mallet won't do the trick, place a block of wood over the handwheel end of the spindle and hit the block of wood with a standard

hammer. **NEVER STRIKE THE SPINDLE DIRECTLY WITH A METAL-HEAD HAMMER. YOU WILL DAMAGE THE SPINDLE.**

10. The spindle has now been removed from the headstock. See Fig. 3 below for reference. The faceplate-side bearing may still be on the spindle shaft; that is OK. Remove the old belt and the pulley.



Fig. 3: Spindle removed from headstock.

INSTALLING THE NEW BELT

11. Align the spindle with the bearings in the headstock and begin re-inserting it.
12. Re-install the pulley. **NOTE:** the keyway on the pulley (rectangular notch cut into the central mounting hole) must align with the key on the shaft, or it will not go back on.
 1. Make sure the pulley is oriented correctly, as shown in Fig. 2 above.
 2. If the pulley is difficult to re-install, use some steel wool to gently go over the pulley's mounting hole and the spindle to remove any metal burrs, wood shavings, etc. Wipe down with a cloth when done.
13. Take the new belt (part no. 3424-037 or 34018-050, depending on your lathe's model) and loop it over the spindle pulley.
14. Align the handwheel end of the spindle with the handwheel-end bearing. Using a rubber mallet, tap the spindle through the handwheel-end bearing. The same cautions apply as in step 9 above. **Do not strike the spindle directly with a metal-head hammer.**
15. Make sure the spindle is correctly seated in the housing. The outside of the faceplate-side bearing should be flush with the outside of the headstock.
 1. If working on model 34018, ensure the magnet (embedded in the spindle) is aligned with the sensor.
16. Slide the pulley into position. **NOTE:** there is a flat on the spindle (see Fig. 3 above, left of the key). The set screw on the pulley should be tightened until it contacts this flat. This will help you position the pulley, relative to the inside walls of the headstock (see also step 7). Make sure the belt is plumb when re-installing it onto the motor pulley. Make sure the belt is set to the same speed on both pulleys (i.e. if it is set to the slowest speed on the motor pulley, it is set to the slowest speed on the spindle pulley).
17. Re-install the handwheel. Tighten the set screws. Place the belt under tension. Make sure everything spins as it should and there is no abnormal vibration, etc. Close the belt covers.

QUESTIONS? PROBLEMS?

Contact WEN Customer Service at 1-800-232-1195, M-F, 8-5 CST, or email
techsupport@wenproducts.com