

The WooLee Winder

Cleaning and Care Instructions

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Occasional oiling is the only regular maintenance your WooLee Winder should ever require. Apply any lightweight oil to the travel screw and the travel screw end bearing. This should be done before the initial use, after filling several bobbins, and after the winder has set for an extended period of time without use. The travel screw can be oiled through the slot in the flier arm. A couple drops of oil anywhere on the screw is fine. The traveler will distribute the oil as it moves.



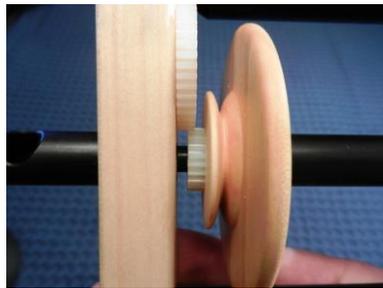
On each end of the flyer shaft where the bobbin gears ride on the shaft, a light application of any grease or Vaseline should ensure that the bobbin winds freely and without noise. You can use oil here as well; however, the grease is better at preventing any bobbin knocking noise.



Note: The WooLee Winder gears are nylon and need no lubrication. Oiling the gears just attracts dirt to them.



If your yarn should suddenly fail to wind onto the bobbin, first check the yarn to make sure it hasn't flipped itself around the moving eyelet. This occurs occasionally when all tension is released on the yarn i.e. if you treadle backwards when starting.



If your wheel has a movable maiden, check the bobbin to make sure the gears will stay engaged. If the bobbin is able to drift back to the point where the gears are not overlapping, move the maiden a little to keep the bobbin and flyer gears properly aligned. 50% overlap of the gears is the proper alignment.

The WooLee Winder only needs to be disassembled and cleaned if it should stop functioning smoothly. The disassembly of the winder mechanism is not a difficult task, but one which should be done with care. Attached to this document you will find a small bag containing a 0.050" Allen wrench and a 6-32 X 1 Allen cap screw which you will use as the handle screw. If you don't have the handle screw, the stationary eye from step 5 can be used in its place. These two tools, along with a household screwdriver, are all the tools you will need for the job. There are also some extra "Quiet-Glide" bushings in the tool bag as they tend to get lost when servicing the winder.

Simply follow the steps below to completely disassemble, clean, and reassemble your WooLee Winder.

Step 1 - *Install handle screw*



Hold the large gear to keep it from moving and install the handle screw into the threaded hole in the end of the travel screw.

Step 2 - Loosen set screw



Using the Allen wrench, loosen the set screw which holds the moving eyelet in place. Loosen it 1 to 1 1/2 turns. Do not completely remove the set screw as it is very easy to lose.

Step 3 - Remove moving eyelet



Remove the eyelet by sliding it away from the base of the flier. Make sure the little white "Quiet-Glide" bushing does not fall into the travel arm.

Also, turn the set screw back down the 1 to 1 1/2 turns you loosened it so it won't be in the way for further steps.

Step 4 - Remove large gear



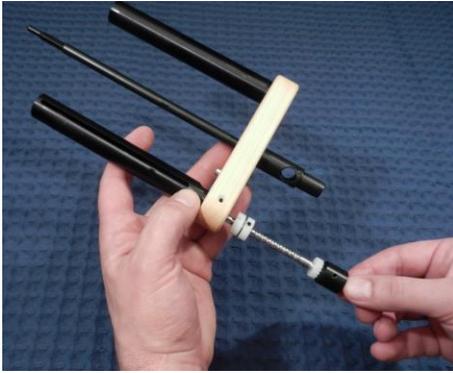
With a household screwdriver, remove the large gear.

Step 5 - Remove stationary eyelet



Using your fingers, unscrew and remove the stationary eyelet from the flier base. If it is too tight, try putting a pencil through the eyelet and then turn the eyelet with the pencil.

Step 6 - Remove travel screw assembly



Pull out on the handle screw and remove the complete internal travel screw assembly.

NOTE:

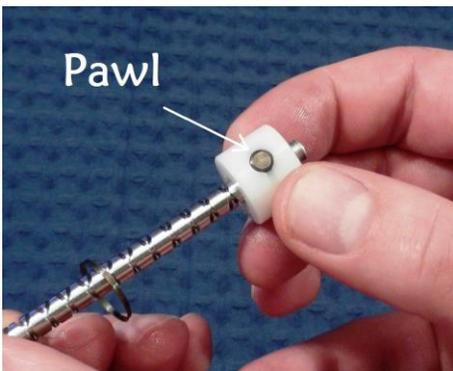
In most cases cleaning the travel screw at this point is fine. Simply clean it the best you can with warm soapy water and **skip to step 12**. Removing the smaller parts can be challenging and is most often not necessary.

Step 7 - Remove spring



To remove the coil spring that is wrapped around the traveler, locate the end of the spring that is nearest to the small gear. With your fingernail gently lift and push the end of the spring until it is off the traveler. Guide the rest of the spring with your finger while turning the traveler so as to unscrew the spring from the traveler.

Step 8 - Remove pawl

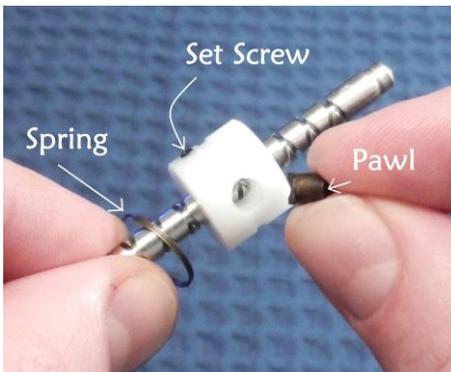


While holding onto the traveler, turn the travel screw until the traveler is at the end of the travel screw. Just as the traveler starts back down the travel screw, the pawl, which is located on the bottom of the traveler, should raise up slightly. Carefully remove the pawl from the traveler. If you are unable to get hold of it, a light tap of the traveler against the table should dislodge the pawl.

Step 9 - Clean

Slip the traveler off the travel screw. Clean any foreign matter from the pawl and the holes in the traveler. Using warm soapy water, wash the travel screw, traveler, and pawl. An old toothbrush will help remove any foreign matter from the travel screw. Dry all parts with a clean cloth.

Step 10 – Reassemble travel screw assembly



Slip the spring onto the travel screw and then slide the traveler back onto the travel screw. Make sure the end of the traveler with the set screw goes on first so that it is positioned on the side that is closer to the small gear.

Position the traveler so that a groove in the travel screw can be seen in the middle of the hole for the pawl. Align the pawl with the groove and push it into the hole. Gently push on the pawl while turning the travel screw until it slips down into place. It **must** be flush with the traveler.

Step 11 - Replace spring



Pull the end of the coil spring over the traveler and by guiding it with your finger, working a little at a time, slip the rest of the spring into place in the groove.

Make sure that the spring does not overlap itself anywhere. If it does, turn the traveler around while pressing on the spring with your fingernail. This will properly position the spring.

Step 12 - Replace travel screw assembly



The black front bearing has one end that has a sharp edge and the other side has a 45-degree chamfer cut into it. Slip the front bearing over the hub of the small gear with the 45-degree chamfered end toward the gear teeth.



Slide the travel screw assembly back into the flier arm. Be sure to align the screw hole in the top of the end bearing with the hole in the top of the flier base before pushing it in completely.



Use the Allen wrench from the tool kit to verify that the hole in the end bearing is lined up with the hole in the flyer base. Insert the Allen wrench into the eyelet hole and move the Allen wrench in a circle. The Allen wrench should go through both parts which will ensure that the two parts are properly aligned for the next step.

Step 13 - Replace stationary eyelet



Screw the stationary eyelet into place. Tighten it only enough to properly position it. Over-tightening can make it difficult to remove and may damage your winder.

Step 14 - Replace gear



Replace the large gear. If your model has a gear with a bevel on one side of the center hole, the bevel must face out (away from the flier base). Install the gear screw and tighten it with a household screwdriver.

This side toward wooden flyer base



This side faces out



Some models have no bevel but do have a black stick-on washer on them. This side goes toward the wood flyer base.

Step 15 – *Align the traveler and Remove handle screw*

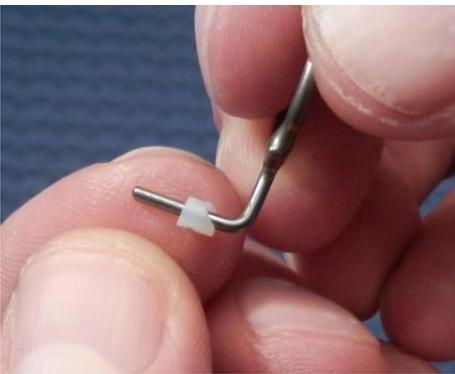


Turn the large gear until the set screw for the moving eyelet is visible. Insert the Allen wrench and loosen the screw 1 to 1½ turns. Leave the Allen wrench in place.

Hold the large gear with your finger to keep it from moving and remove the handle screw.

Step 16 - *Replace moving eyelet*

Step 16 A *Install bushing*



You will notice that the “Quiet-Glide” bushing has a 45 degree cut on one end of it. Place the bushing on the eyelet foot with this end first.

There are two replacement bushings included in the tool bag should one become damaged or lost.

Step 16 B – *Seat bushing*



Push the bushing up over the 90-degree turn in the eyelet foot and up against the eyelet. Make sure that the cut in the bushing is situated so that it meets the point at which the eyelet foot is soldered to the eyelet itself.

Step 16 C – *Install moveable eyelet*



Holding the flyer at a 90-degree angle to the floor will help the bushing to stay in place as you insert the arm of the eyelet back into the small hole on the side of the white traveler.

Pushing the eyelet down toward the orifice and rocking it side to side will help the bushing settle into place.



When the eyelet and bushing are properly installed, the bushing will be completely on top of the white traveler.

Step 16 D – Tighten set screw



Use the Allen wrench again to tighten the set screw so that it will hold the eyelet in place. Don't over tighten it -- just snug will do fine.

Step 17 – Oil

See the oiling instructions on the first page.

There - you have successfully completed it! Now on with your spinning and may you have many, many years of trouble-free spinning with your WooLee Winder!