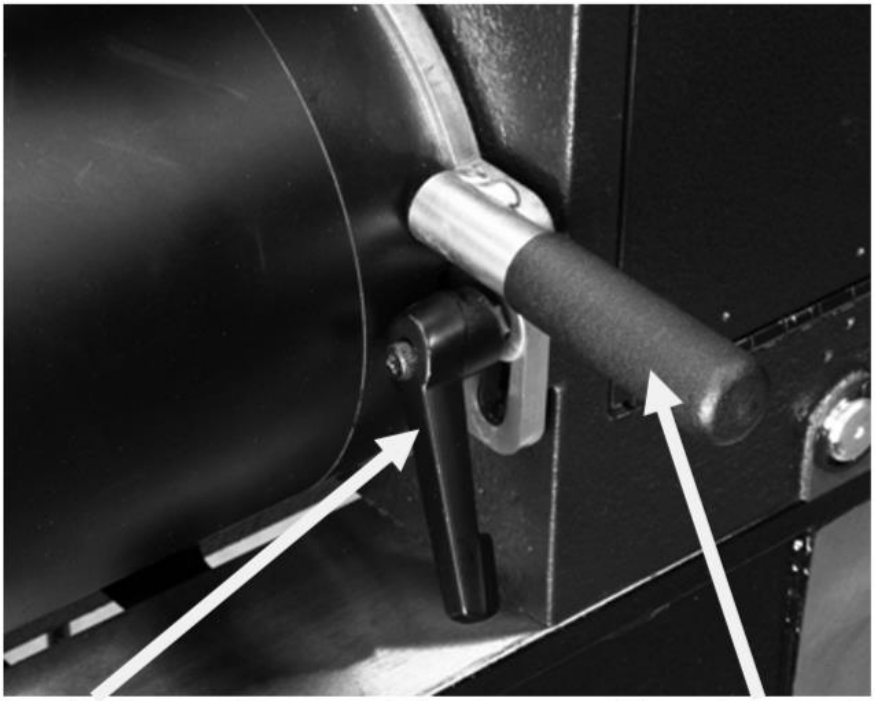
Removal of Laguna 1836 Wood Lathe Spindle

This manual is made by Laguna Tools Technical Support team for the purposes of changing the spindle, the drive belt, and/or the bearings. If you notice any errors in the document, have questions, or find further issues with your unit, please contact us at Customer_Service@LagunaTools.com

T. D. / Laguna SC Technical Support / 12-24-2019

Step 1: Remove Drive Belt from Pulley

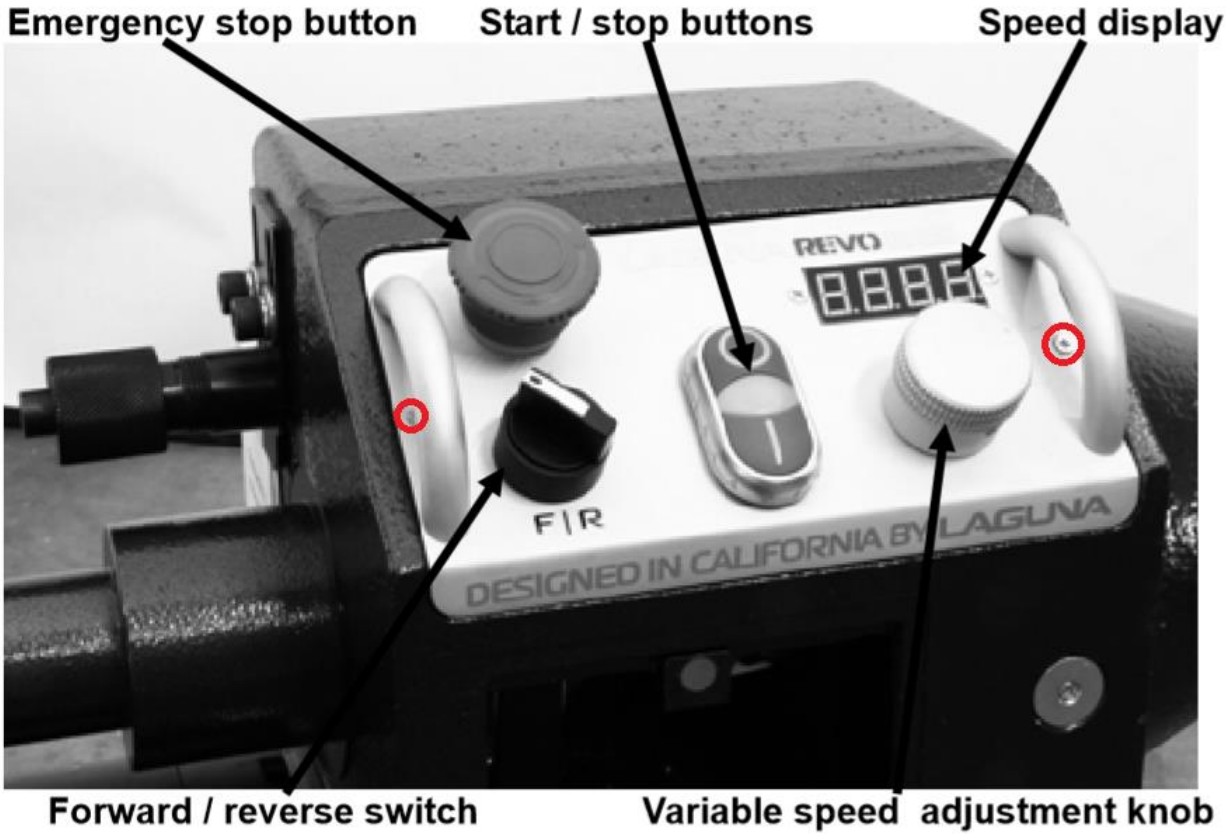
First you will need to remove the tension off of the drive belt so you can remove it from the spindle pulley. To do this, simply loosen the **Motor Lock Handle** on the motor mounting plate and use the **Motor Adjustment Handle** to pull it up and remove the belt.



Motor lock handle **Motor adjustment handle**

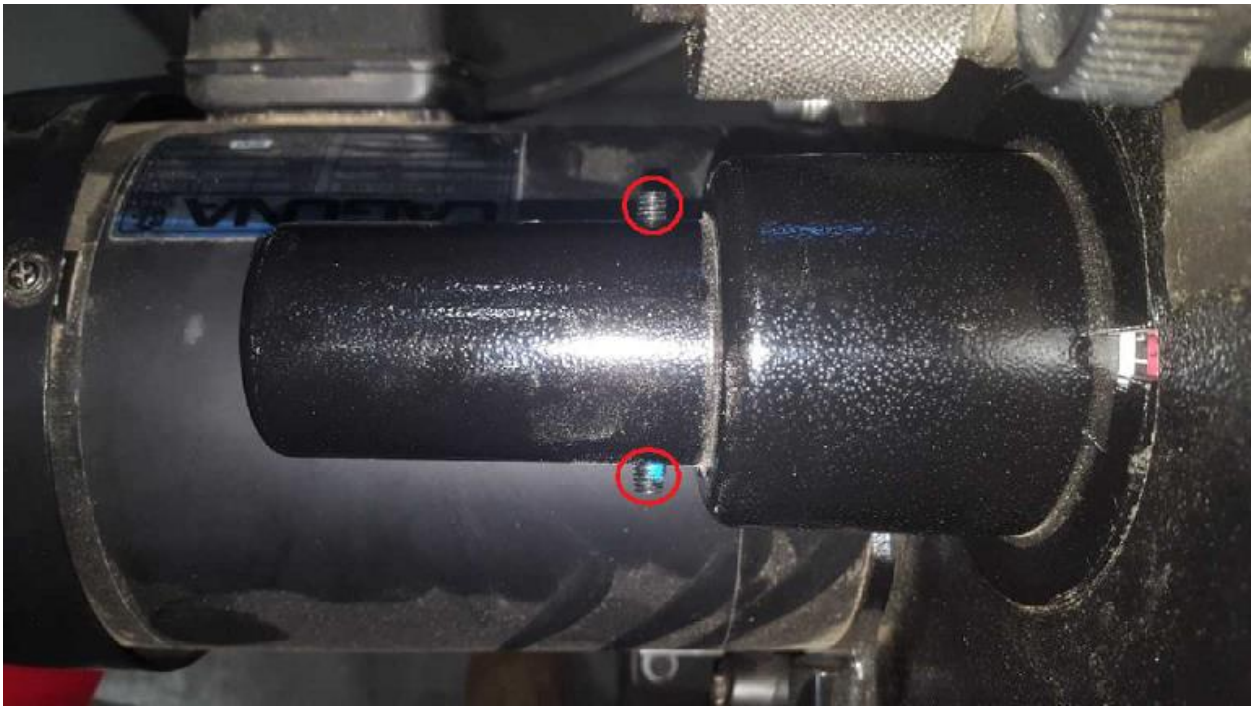
Step 2: Remove the Control Box from the Headstock

Next, we will need to remove the control box. This can be achieved by removing the 2 screws under the handles on the control panel. Once you have removed these, the box should come out of the headstock.



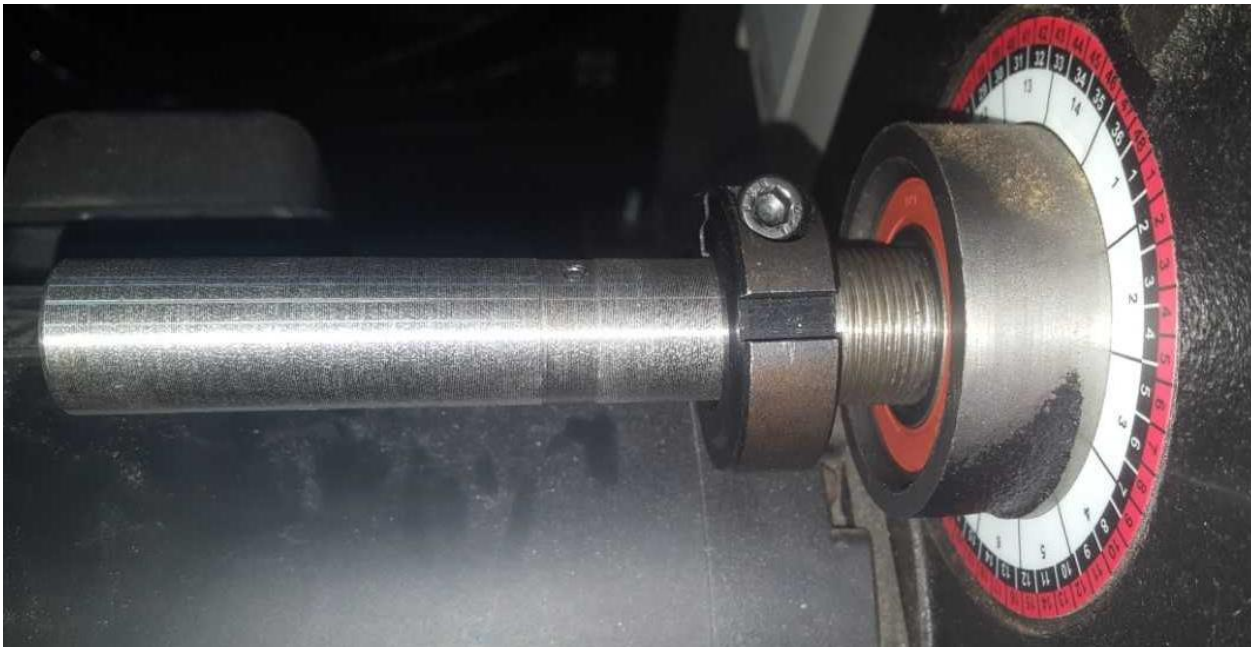
Step 3: Remove the Outboard Spindle Handle

Next, we will need to remove the handle of the spindle. There should be couple of 3mm hex screws holding this on. By loosening these 2, the handle should slide right off.



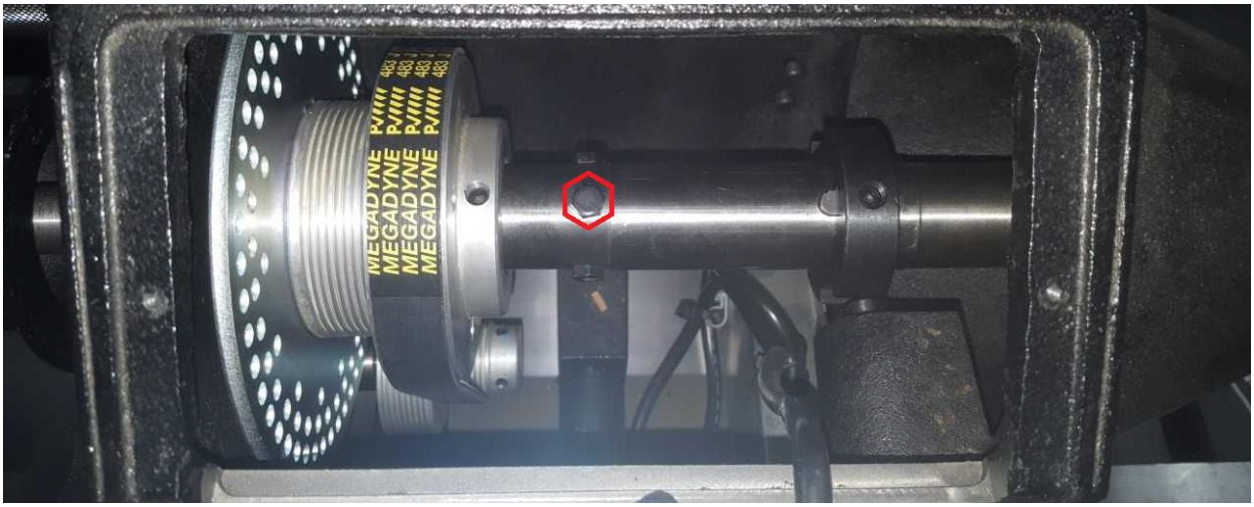
Step 4: Remove the Bearing Nut

Underneath the handle, you will notice a bearing nut. This is used to lock the outboard side of the spindle in place. To remove this, you will need to loosen, but not remove, the 5mm hex bolt that clamps it in place. Once this is loose, the nut should thread off.



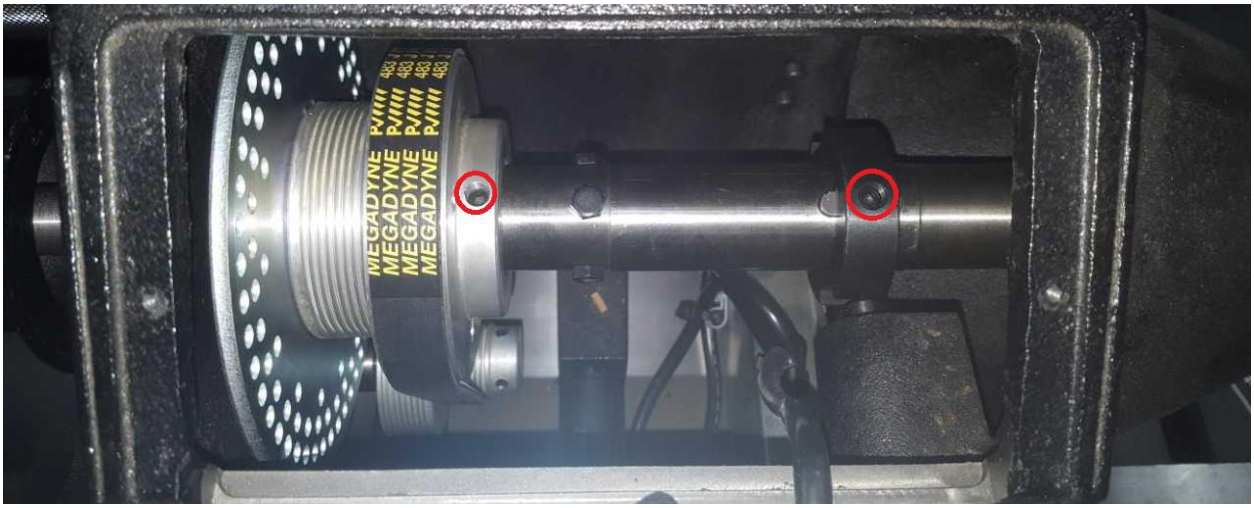
Step 5: Remove the Sensor Bolts

Now we're going inside of the headstock. The next step is to remove the 4 hex head bolts that the sensor reads to calculate the RPMs. To remove these, simply use a 10mm socket.



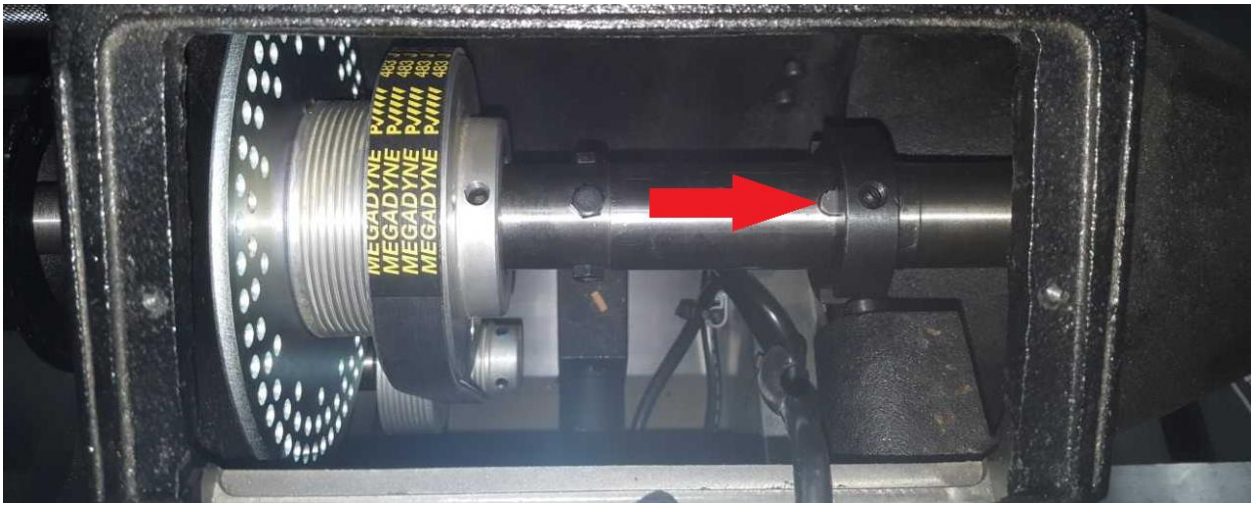
Step 6: Loosen set screws on Spindle Pulley and Locking Collar

The components on the spindle are held in place with set screws. To move these, loosen the 4mm set screws. There are 2 in the pulley and 1 on the collar. This should allow the pulley and collar to slide left and right on the spindle.



Step 7: Remove Key from Under the Locking Collar

There are keys under both the collar and the pulley and these need to come out to remove the spindle entirely. Simply slide this component down the spindle and use a pair of pliers to remove the key.

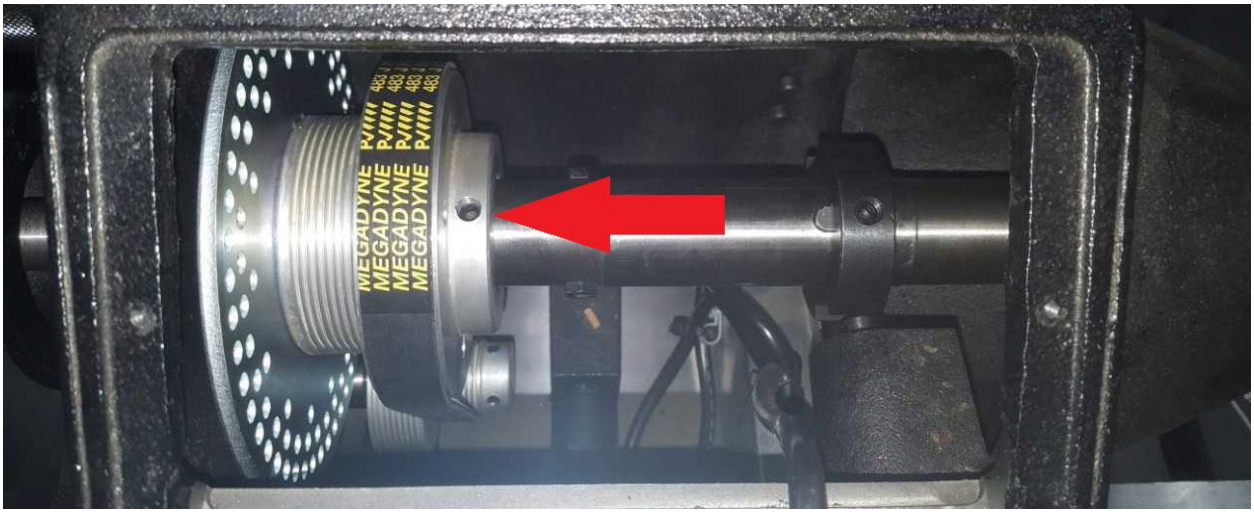


Step 8: Tap Spindle Out Using Rubber Mallet

Finally we get to manipulating the spindle. By using a rubber mallet on the handle end of the spindle, it should slowly move out of the headstock towards the tailstock. Be careful not to knock out the bearings unless you plan on replacing these anyway. Once the spindle has moved forward about 5 inches, move to the next step. If you do not have a rubber mallet for this step, using a normal mallet with a piece of wood as a buffer is fine.

Step 9: Slide Pulley and Remove Key Underneath

The reason for moving the spindle down was to give room for the pulley to move down the spindle. The key underneath it is considerably longer than the one under the collar which is why the spindle needed to be moved down.



Step 10: Finish and Reassemble

Once you've removed the key under the pulley, there should be nothing else holding the spindle in the headstock aside from friction. Simply repeat Step 8 until the spindle is removed. If you are just changing the drive belt, you need only but to get the spindle far enough out of the headstock to take the old belt off and put the new one on. Once you have completed this process, you simply just follow the steps in reverse to reassemble the unit. I've listed a few notes below to address issues that may arise during this process:

1. On Steps 7 and 9, to reseat the keys may take a bit of force. I recommend seating it as best as you can by hand and then gently taping it into place with a piece of wood and a mallet.
2. On Step 6, make sure the pulley and collar are aligned properly on the spindle before tightening the set screws back down as this could cause damage to your belt or your spindle lock to not engage correctly.
3. When placing the spindle back into the headstock, be careful not to knock the bearings out of the headstock as this could cause further complications.
4. After you've reassembled the unit, you may experience some issues with your digital display not displaying the correct RPMs. This is somewhat common as when customers go through Step 2, they bend the bracket with the yellow sensor on it. This works by having the crosshairs in the picture below pointed directly at the 4 bolts from Step 5. The sensor should be as close to these bolts as possible without making contact.