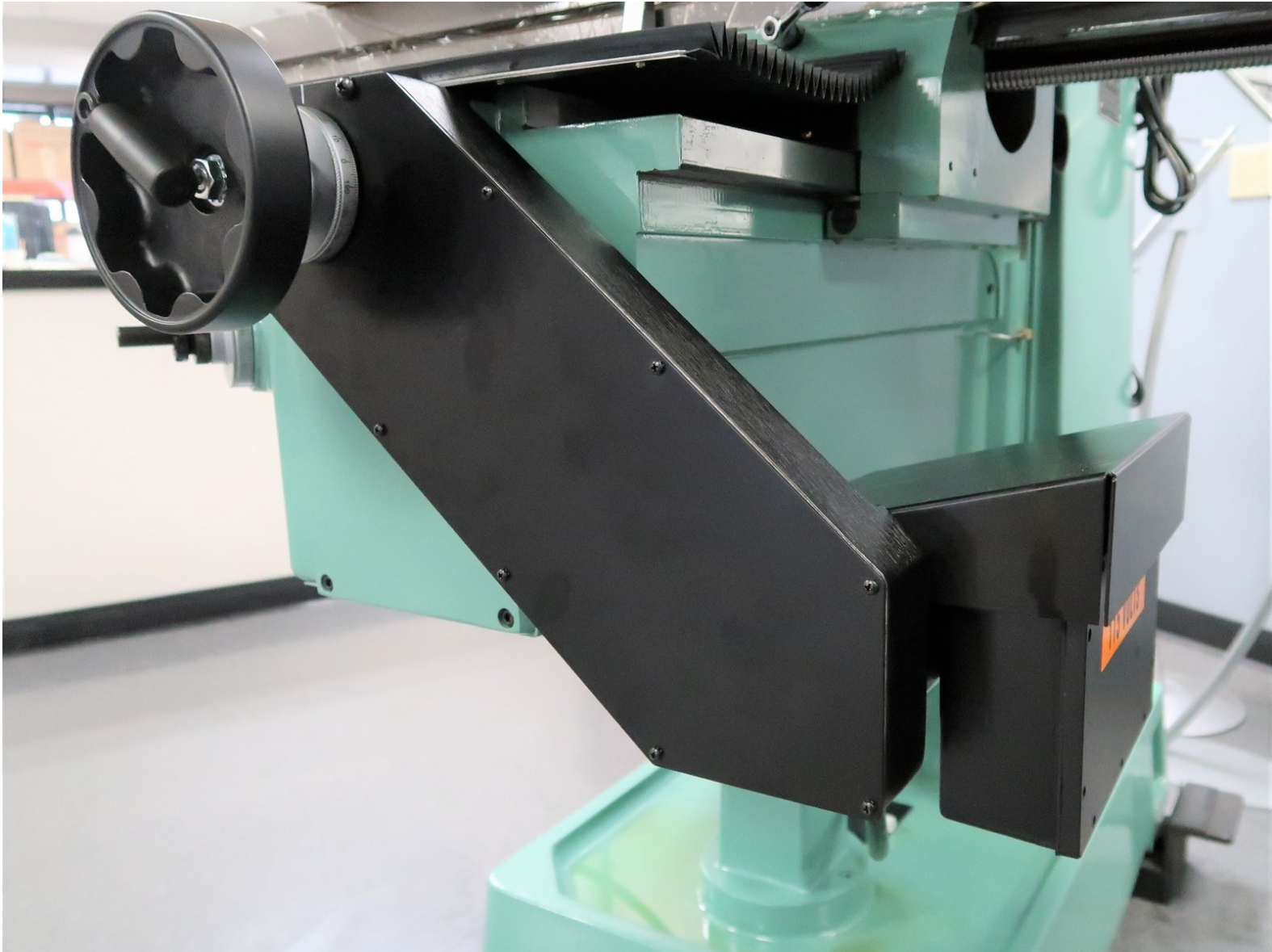




Replace Knee Mill Y Axis Motor

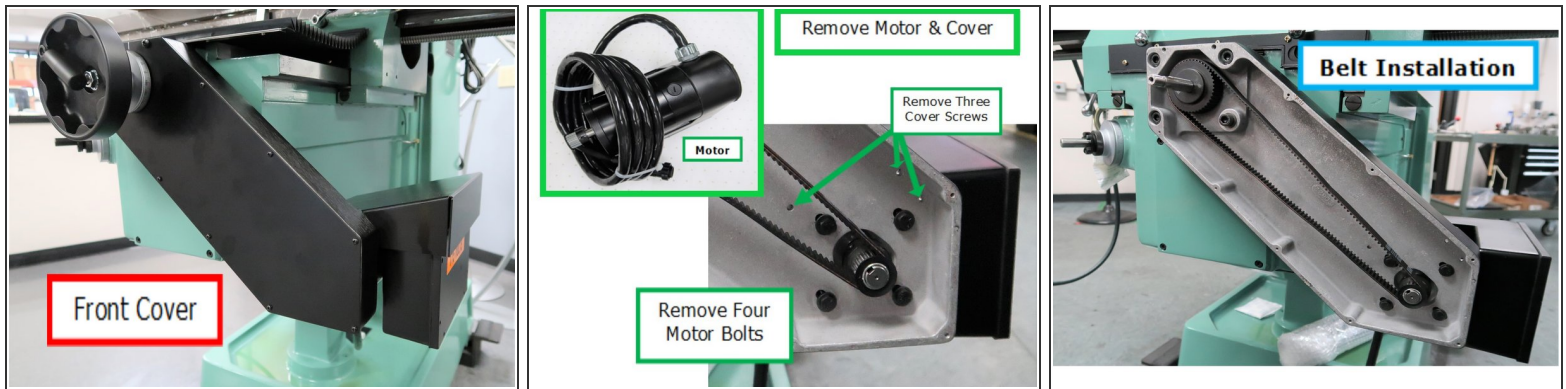
Written By: Trent Plungas



INTRODUCTION

For a detailed drawing of the parts involved with this motor, see the drawing attached at the end of this guide.

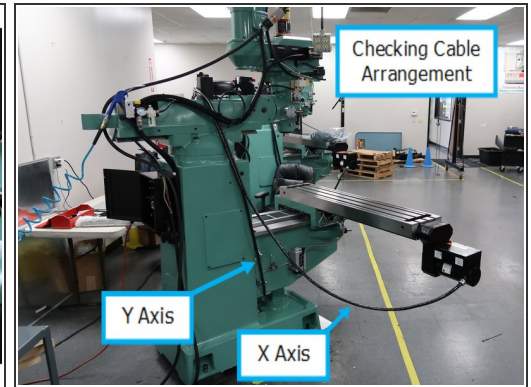
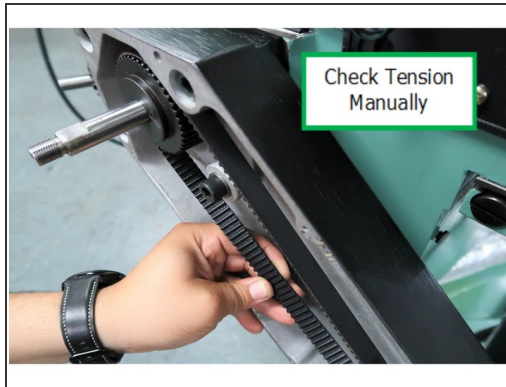
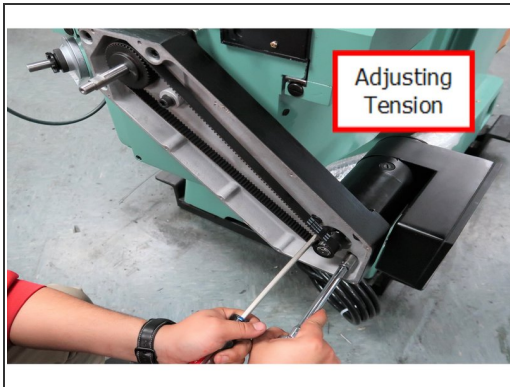
Step 1 — Remove Y Axis Brushed Motor



⚠ Safety First -Power Down Mill

- Loosen the bolts around the perimeter of the front cover. Slide the cover out of the way to loosen the four support bolts for the axis motor. Lift the motor slightly in order to remove the belt from the pulley.
- Based upon configuration and options, the electric cable is connected to the pendant or auxiliary input output box. Follow the wires and remove tie bands as needed to disconnect the motor cable at its source. The replacement motor comes with the cable attached.
- Remove the 3 screws to remove the cover above the motor, then remove the 4 bolts to remove the motor with the electric cable attached.
- If you are going to replace the belt, you will have to remove the handwheel, vernier dial and the front cover for access. Keep any shims used between parts in the same over for reassembly.
- Replace the old motor with the new one P/N 20296 or equivalent on the housing. The bolts should be loose enough to adjust the belt. Slide the belt over the both pulleys and reattach the front cover to the mill and tighten the bolts.

Step 2 — Tension the Belt and Reassemble



- Replace the old motor with the new one P/N 20296 or equivalent on the housing. The bolts should be loose enough to adjust the belt. Slide the belt over the pulley and apply downward pressure on the motor and tighten the bolts to 7 ft lbs.
- Verify tension on belt by twisting it to 90 degrees max and or check rolling torque not more than 15 in lbs. Redo the downward force while tightening the bolts to correct the belt tension if needed. Photo shows the belt at about 45° from the original position.
- Reattach the front cover. In case you changed the belt, also reattach the vernier dial, hand wheel along with any bushings in the correct order.
- The photo for this step shows the knee mill with both X & Y axes fully extended. Keep in mind the travel spans of either axis when you install the cable so it will not bind or run out of travel under normal operation. Install the cable neatly securing it with tie bands along the original path.
- Note in this case the Y axis cable is a little tight but usable.