Gerber Scientific Products Inc.

D200 X-Axis Lead Screw Assembly Replacement Procedure

Gerber FastFact # 5037

Supplied by: Gerber Service

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Summary: This document provides the procedure for replacing the D200 X-Axis Lead Screw Assembly.

Please read this guide in its entirety before replacement. When re-installing screws, a medium strength thread locking compound is recommended.

1) Move the beam to the front of the table and the carriage to the center of the beam. Turn off main power switch and disconnect the power cord from the a/c outlet.
2) Disconnect the power cable for the Mill motor (Router , Engraver, or Spindle) and remove the Mill motor from the carriage.
3) Remove the left and right beam end covers.
4) Remove the four (4) cap screws that secure the x-axis lead screw nut block to the bottom of the x-axis carriage assembly. The x-axis carriage can now freely slide to the left or right.
5) Remove the four (4) cap screws that attach the x-axis motor to its mounting block on the right of the beam. Slide the x-motor out of the block and place it out of the way on the right beam support. Check the coupler on the end of the lead screw. If the “centering pad” is stuck to the lead screw, transfer it to the x-motor now.
6) Remove the Phillips screw, stop washer, compression spring and cup washers from the left end of the lead screw. Slide the lead screw to the right until the left end is clear of the bearing block. Remove the coupler, cir-clip bearing retainer and bearing from the right end of the lead screw. Angle the left end of the lead screw forward to clear the beam and slide it to the left for complete removal.
7) Orient the replacement lead screw assembly so the machined groove for the cir-clip bearing retainer is at the right and insert it through the right bearing block in the beam. Install the bearing, cir-clip and coupler onto the right end of the lead screw then insert the left end back through the left bearing. Install the cup washers, compression spring, stop washer and Phillips screw onto the left end of the lead screw. **BE CAREFUL!! Do not drag the threads of the lead screw across metal surfaces - damage will occur!**
8) Slide the carriage to the left end of the beam. Rotate the lead screw until the nut block is also at the left end. *HINT: A power screwdriver used on the left end Phillips screw makes positioning the nut block much easier.* Align the carriage and lead screw nut block and reinstall the four (4) cap screws to secure the lead screw to the carriage.
9) Move the carriage all the way to the right end of the beam. Align the coupler on the X motor with the coupler on the lead screw and install the X motor. Finish tightening the cap screws in a diagonal pattern as this aids in centering the motor in its mount.

10) Reinstall the beam end covers, remount the Mill motor, reconnect the Mill motor power cable and reconnect the main power cord to the a/c outlet. Turn the unit on and slew the x-axis side-to-side while checking for any sync-out of the X motor or mechanical binding. Should either problem occur recheck the alignment of the nut block to the carriage and/or proper seating of the coupler onto the lead screw.

11) Mount a piece of scrap stock and rout a small test job before resuming production work.

Contact Gerber Service at 800-828-5406 or 860-643-1515 should any questions or problems arise during this procedure.