

Procedure for the Replacement of the Upper X-Axis Linear Bearings on a Sabre or a Profile

Gerber FastFact # 5043

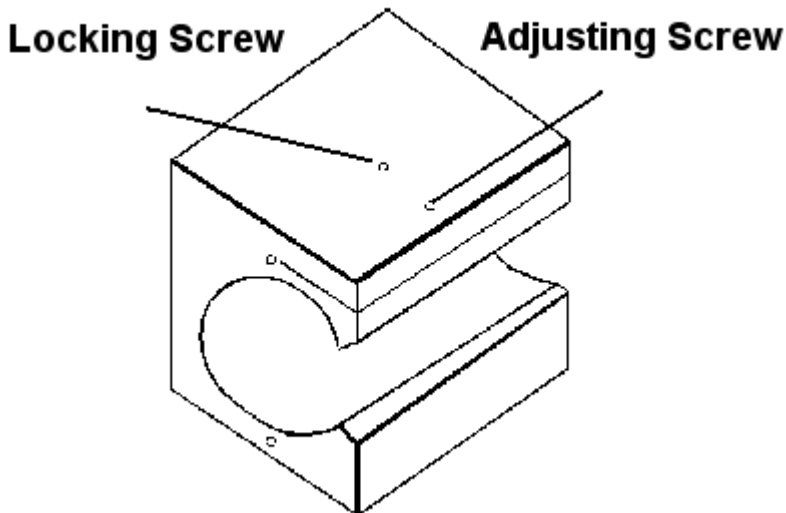
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Summary: This document provides a procedure for replacing the upper X-axis linear bearing on a Sabre or a Profile.

Removing/Replacing Upper X-Axis Linear Bearings on a Profile & Sabre w/o ATC:

1. Move the carriage up (Z-Axis) as high as it will go.
2. Remove the 2 screws (5mm) attaching the bearing block to the Z carriage. You will need to move the carriage all the way up to reach the lower screw and all the way down to reach the upper screw.
IMPORTANT: Only remove one bearing at a time to ensure that the machine stays in square.
3. Pull the block off the end of the way.
4. Remove the 2 screws (small Phillips screwdriver) securing the seal on one side of the bearing and pry the seal off (small flat head screwdriver).
5. Remove the locking set screw (the one farthest away from the opening in the bearing block – smaller set screw – 1mm) that locks the bearing in the block.
6. Loosen the adjusting set screw (the one closest to the opening in the bearing block – larger set screw – 2mm). See picture below for details.



7. Pry out the old bearing (small flat head screwdriver).

8. Pack the new bearing with a generous amount of white lithium grease (be sure to rotate the bearings)
9. Snap bearing into the block and make sure it is centered in the block and the small hole in the bearing faces the locking set screw hole.
10. Reinsert the seal (you may need to use a small plastic hammer to pound it in lightly) and make sure it is centered in the block.
11. Insert the 2 screws that secure the seal to the block.
12. Insert the locking set screw and tighten until the bearing does not move side-to-side or back & forth. Do not over-tighten or you may push the ball bearings out of the bearing. Make sure the set screw is in the hole on the bearing.
13. Place the bearing block back on the way and run it back & forth along way to seat the bearings.
14. Adjust the force on the bearing block by loosening or tightening the adjusting set screw (the one closest to the opening in the bearing block – larger set screw – 2mm) to 9-11lb. Use a spring scale to determine the force on the bearing. The block should still move smoothly and easily along the way.
15. Move the bearing into position and insert the 2 screws (5mm) attaching the bearing block to the Z carriage.
16. Repeat the process (Steps 2-15) for the other upper X-axis linear bearing.

Removing/Replacing Upper X-Axis Linear Bearings on a Sabre w/ATC:

1. Remove the 10 Hp Colombo Spindle Motor.
2. Follow Steps 2-15 outlined above.
3. Install the Spindle Motor