

Position Lead Screw

1. Ensure that the half nuts are disengaged (handle up).
2. Move the carriage to the center of its range of travel.
3. Slip the new lead screw through the half nuts so it is in approximately the correct position. The end with the keyway goes to the left.
4. Slip the left lead screw mounting bracket over the left end of the lead screw. Make sure the oil hole is on top.

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5. Slip the right lead screw mounting bracket over the right end of the lead screw. Make sure the oil hole is on top.

6. Use a 2½" C-clamp to hold the right lead screw mounting bracket so the lead screw is approximately horizontal. The position is not critical at this time.

7. Move the carriage as far to the left as it will go. Engage the half nuts (handle down).

8. Position the left lead screw mounting bracket so that the left edge of its base is flush with the left end of the way casting. Use a small C-clamp on the top ear of the bracket to hold it in position.

9. Snug the apron mounting bolts.

10. Release the half nuts and move the carriage as far to the right as it will go. Loosen the C-clamp holding the right lead screw mounting bracket as you move the carriage toward it.

11. Engage the half nuts (handle down), and re-tighten the C-clamp to lock the right lead screw mounting bracket in the correct position.

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12. Move the carriage back and forth, engaging the half nuts at each end and adjusting the position of the lead screw mounting brackets until you are satisfied with the position of the lead screw and the mounting brackets.

Left Lead Screw Bracket

1. Using either a transfer punch or the largest drill bit that will fit through the lead screw mounting bracket screw hole, mark the location for the bottom mounting screw in the left bracket. To mark with the drill, simply start to drill the hole, but stop as soon as a dimple is made.

2. Remove the C-clamp holding the left lead screw mounting bracket and remove the left lead screw mounting bracket.

3. Use a 5.0 mm or #9 (0.196") drill bit to drill the bottom mounting hole through.

4. Use an M6x1 tap to thread the hole.

5. Install the left lead screw mounting bracket using one M6x20 socket head cap screw.

6. Move the carriage back and forth, engaging the half nuts at each end and adjusting the position of the lead screw mounting brackets until you are satisfied with the position of the lead screw and the mounting brackets.

7. Using the same method as for the bottom mounting screw, mark the location for the top mounting screw in the left bracket.

8. Remove the left lead screw mounting bracket.

9. Use a #9 (0.196") drill bit to drill the top mounting hole through.

10. Use an M6x1 tap to thread the hole.

11. Install the left lead screw mounting bracket using two M6x20 socket head cap screws.

Right Lead Screw Bracket

1. Move the carriage back and forth, engaging the half nuts at each end until you are satisfied with the position of the lead screw. Adjust the right lead screw mounting bracket as required.

2. Use a 0.005" feeler gauge between the right lead screw mounting bracket and the threaded portion of the lead screw to make sure there is some play between the brackets.

3. Using the same method as for the left bracket, mark the location for the bottom mounting screw in the right bracket.

4. Remove the C-clamp holding the right lead screw mounting bracket and remove the right lead screw mounting bracket.

5. Use a #9 (0.196") drill bit to drill the bottom mounting hole through.

6. Use an M6x1 tap to thread the hole.
7. Install the right lead screw mounting bracket using one M6x20 socket head cap screw.
8. Using the same method as for the bottom mounting screw hole, mark the location for the top mounting screw in the right bracket.
9. Remove the right lead screw mounting bracket.
10. Use a #9 (0.196") drill bit to drill the top mounting hole through.
11. Use an M6x1 tap to thread the hole.
12. Install the right lead screw mounting bracket using two M6x20 socket head cap screws.

Adjust Lead Screw

1. Loosen the four socket head cap screws in the two lead screw mounting brackets.
2. Loosen the two socket head cap screws that secure the apron to the carriage.
3. Move the carriage as far left as it will go and engage the half nuts (handle down).
4. Snug, but don't tighten, the two socket head cap screws in the left lead screw mounting bracket.
5. Snug but don't tighten, the two socket head cap screws that secure the apron to the carriage.
6. Move the carriage as far right as it will go and engage the half nuts (handle down).
7. Snug, but don't tighten, the two socket head cap screws in the right lead screw mounting bracket.
8. Check that the lead screw turns without binding. Tap the lead screw mounting brackets with a soft-faced hammer or mallet until the lead screw turns without binding.
9. Tighten the four socket head cap screws in the two lead screw mounting brackets.
10. Tighten the two socket head cap screws that secure the apron to the carriage.
11. Check that the lead screw turns without binding. Repeat the adjustments as necessary.