



Bar Feeder - Ballscrew - Replacement

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Translation Available

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Prerequisites

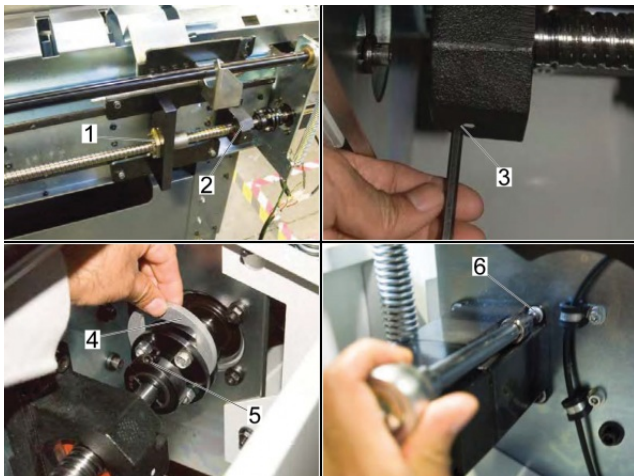
Tool T-1451 is required to install the motor coupler. This part is purchaseable through your local HFO.

Tools Required



Coupler Tool

STEP 1

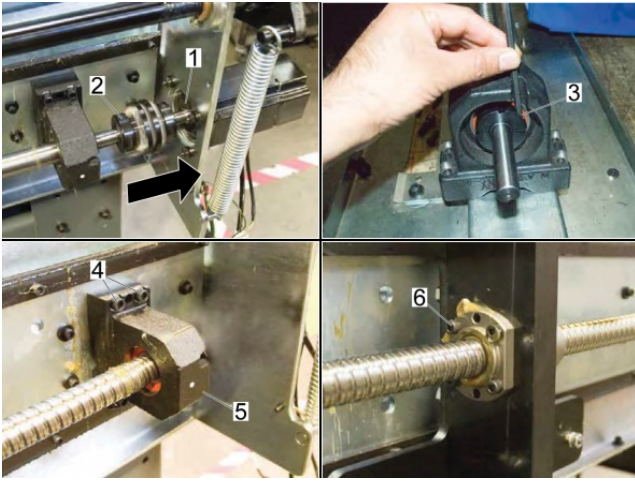


Jog the V Axis until the ballscrew nut bearing [1] is about 12" (305 mm) from the axis motor-side support bearing assembly [2].

Disconnect the axis motor cables. On the support side bearing assembly, loosen the lock-nut screw [3] off the bearing locknut.

Loosen the coupling assembly at the ballscrew end [5] with the T-1451 [4] tool, and remove the (4) bolts [6] that support the servo motor.

STEP 2



Remove the motor [1] with the coupling [2].

On the motor end, loosen the screw for the bearing locknut [3]. Remove the bearing locknut.

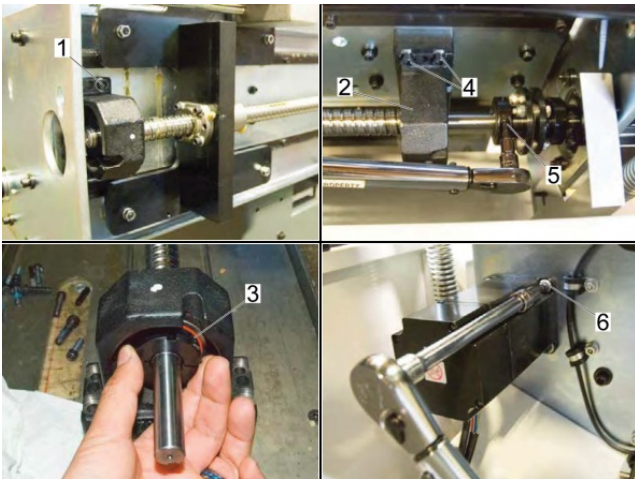
Remove the (4) bolts [4] that attach the bearing support [5]. Remove the bearing support [5] from the ballscrew.

Remove the (4) bolts [6] that attach the ballscrew nut to the ballscrew bearing.

Push the ballscrew bearing toward the motor until it clears the ballscrew nut.

Push the ballscrew toward the motor until the ballscrew clears the support-side bearing support. Remove the ballscrew.

STEP 3



Install the new ballscrew: Put one end of the ballscrew through the ballscrew bearing. Put the other end through the support-side bearing assembly.

Attach the ballscrew nut to the ballscrew bearing with the (4) bolts. Leave the bolts loose for alignment.

Loosen the support-side bearing bolts [1]. Install the bearing locknut finger-tight, then loosen it one turn.

Install the motor-side bearing housing [2] and leave the (4) bolts [4] loose enough for the bearing housing [2] to be aligned later.

Install the motor-end bearing locknut [3]. Tighten the locknut [3] by hand until the ballscrew turns as you tighten the locknut, then loosen the locknut 1/4 turn.

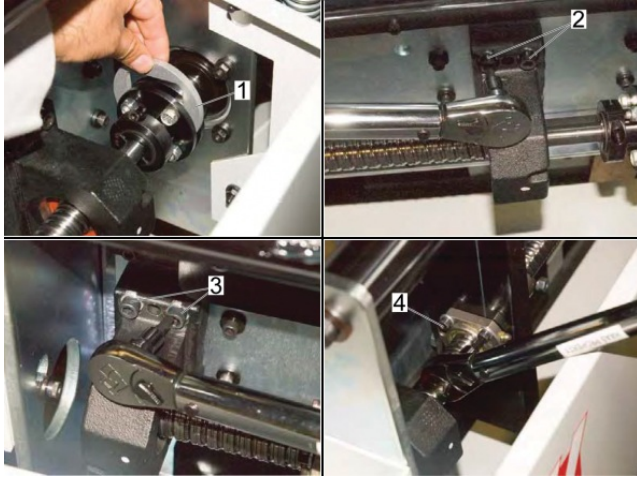
Torque the locknut screw [5] to 4 in-lbs.

Tighten the ballscrew nut on the support-side of the ballscrew in this sequence:

1. Tighten the nut by hand until the ballscrew turns as you tighten the nut. Then loosen the nut 1/4 turn.
2. Torque the lock screw to 4 in-lb.
3. Install motor with the coupling.

Tighten the locknut screw [5]. Torque the motor bolts [6] to 30 ft-lb.

STEP 4



Adjust the position on the ballscrew nut to the ballscrew centerline. These (3) components are loose:

1. The ballscrew nut to the ballscrew bearing bolts.
2. The motor-end ballscrew bearing to the base bolts.
3. The support end ballscrew bearing to the base bolts.

Remove the T-1451 tool [1] from the motor coupler.

To align the new ballscrew into position. Jog the V Axis several times from right to left several times to center the ballscrew bearing.

Jog the axis toward the motor end and torque the (4) motor-side bearing support bolts [2] to 30 ft-lbs.

Jog the V Axis toward the support end and torque the (4) support-side bearing support bolts [3] to 30 ft-lb.

Lubricate the ballscrew with lithium grease. Jog the V Axis from right to left several times.

Torque the ballscrew nut screws [4] on the ballscrew bearing to 15 ft-lb.

If the ballscrew pitch has changed from 12.7 mm (1/2 in) to 10 mm, contact your local HFO to verify the parameters are correct.