


<b>Date</b>	19 Nov 2012	<b>Service Note #</b>	4500-1062	<b>Revision</b>	N/A
<b>Product</b>	Model 4500	<b>Description</b>	Acme Nut and Lead Screw Maintenance		
<b>Created By</b>	J. Yangco				

<b>Release</b>	<input checked="" type="checkbox"/>	<b>Internal</b>	<input checked="" type="checkbox"/>	<b>Distributors</b>	<input checked="" type="checkbox"/>	<b>Customers</b>
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<b>Parts Required</b>	<b>Serial Numbers Affected</b>
High Temperature Grease (Distek Item: 6300-0007)	All


## Acme Nut and Lead Screw Maintenance




*The Acme nut is a wear item and requires routine maintenance to extend the life, therefore a proper lubrication of the nut is critical.*

*The required replacement is when the backlash is equal to or greater than 1/3 of the pitch of the screw. The lead screw is 5/8-10" therefore the pitch is .10" multiplied by 1/3 equals about .30". If the backlash (movement between the screw and nut) is greater than or equal to .30" it should be replaced.*

Follow the maintenance procedure below:



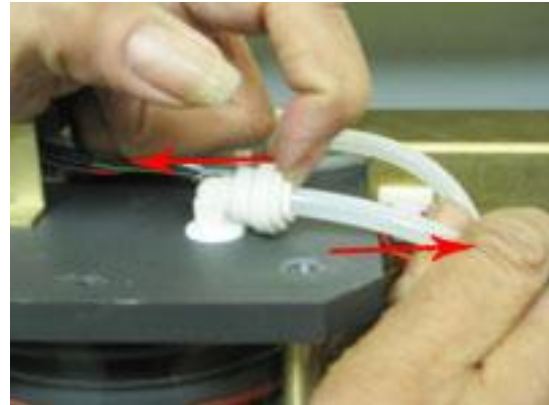
*Before proceeding, discharge any static electricity from your body by touching a bare screw on the instrument. Turn off the instrument and disconnect the AC power cord.*

<b>Step 1</b>	<p>With a Phillips Head Screwdriver, remove the two pan head screws each side of the unit (four in total).</p>	
		<b>Step 1</b>

<p><b>Step 2</b></p>	<p>With a Phillips Head Screwdriver, remove the four screws from back of the unit.</p>	 <p><b>Step 2</b></p>
<p><b>Step 3</b></p>	<p>Gently slide the back cover open without damaging the connecting wires.</p>	 <p><b>Step 3</b></p>
<p><b>Step 4</b></p>	<p>Verify the integrity of the lead screw. It should be securely fastened to the piston. Significant dust like buildup around the grey PVC stopper where the Acme nut is located is a sign that the Acme nut needs to be replaced (refer to Service Note 4500-1031 Acme Nut Replacement).</p>	 <p><b>Step 4</b></p>

**Step 5**

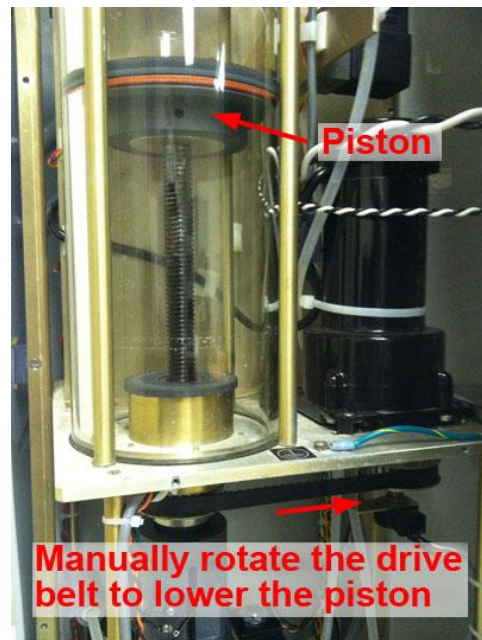
Remove the tubing from the white connectors by gently pushing in the white connector and pulling the tube out. (Label the tubing and connector before disconnecting them for proper re-installation.)



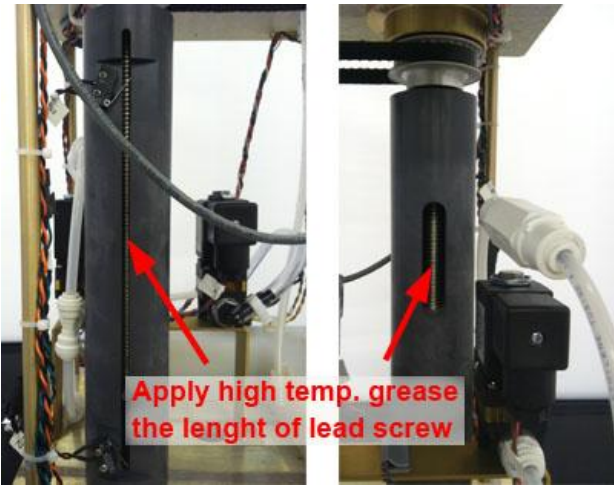
**Step 5**

**Step 6**

Manually lower the piston fully by moving the motor drive belt as shown.



**Step 6**

<p><b>Step 7</b></p>	<p>Lubricate the length of the lead screw with the specified grease through the slots of the PVC stopper using a foam swab or equivalent.</p>	 <p style="text-align: center;">Step 7</p>
<p><b>Step 8</b></p>	<p>Reconnect the tubing and run the instrument several times with the rear cover open. If the unit operates normally, reinstall the rear cover.</p>	