

VM15 Greasing Instructions

Milltronics recommends greasing the machine every 400 hours of operation or once per quarter (unless equipped with Autolube). Use Mobilith AW Series Multipurpose EP Grease or other equivalent for all lube points. See the lubrication drawing in the mechanical manual for more detailed lubrication specifications.

The best approach for greasing the machine is to begin with the Y axis bearing blocks and the X axis ballscrew, followed by the X bearing blocks and Y ballscrew, then finally the Z bearing blocks and Z ballscrew.

Before beginning this process make sure the machine is cleaned out well inside the enclosure. It makes for a better working condition and will help the process to go more smoothly. **Tools required** are a grease gun with extensions and a set of Metric hex keys.

X axis ballscrew

Center the table in the Y-axis, and move the X-axis to the extreme negative position.

Dispense a few pumps of grease into the X-axis ballnut, located near the bottom end of the saddle on the operator panel side of the machine (see photo #1).

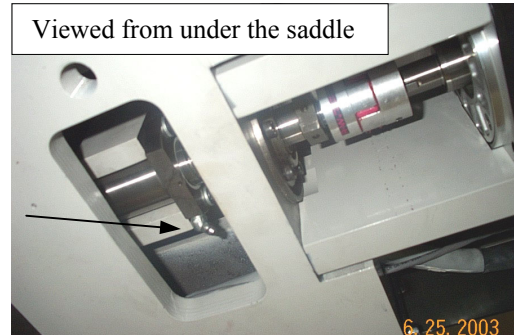


Photo 1

Y-axis bearing blocks

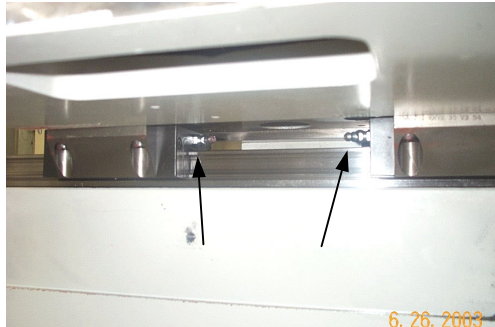


Photo 2

Center the table in both the X and Y-axes.

Dispense a few pumps of grease into each of the four Y-axis bearing blocks (see photo #2), two on each side of the machine.

X-axis bearing blocks

Each cover is mounted by 4 screws in 4 slots through the 4 access holes along the bottom (see photo #3). Using a 2.5mm allen wrench, loosen but do not remove the 4 screws holding each cover, then slide each cover off.

*Note: The X axis will have to be moved in order to gain access to all of the screws. **Do not reinstall these covers until the next step is complete.***

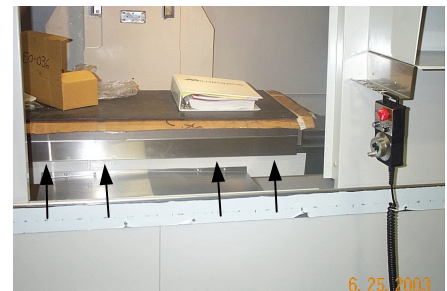


Photo 3

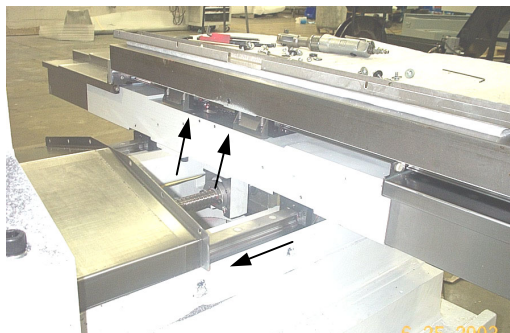


Photo 4

Dispense a few pumps of grease into each of the four X-axis bearing block grease points, two front and two rear (see photo #4).

Y-axis ballnut

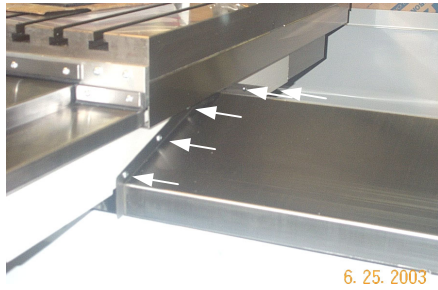


Photo 5

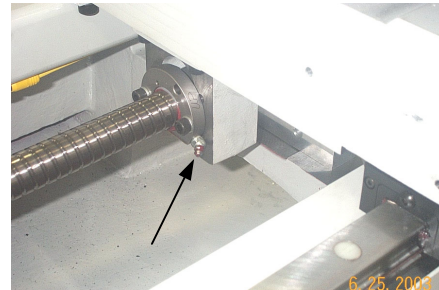


Photo 6

Using a 4mm Allen wrench, remove the six screws holding the rear Y-axis way cover to the saddle (see photo #5).

Slide the way cover back toward the column in order to gain access to the Y-axis ballnut grease point (photo #4).

Dispense a few pumps of grease into the Y-axis ball nut (photo #6).

Reassemble the rear Y-axis way cover and the front and rear table shields in the reverse order making sure to install the rear Y-axis cover first.

Z-axis bearing blocks

This process is the same as greasing the X-axis and Y-axis bearing blocks, except that the Z-axis blocks need to be accessed via the plugged holes in the sides of the left and right head covers. Pry the hole plugs out with a screwdriver to remove them.

Dispense a few pumps of grease into each block (photo #7).



Photo 7

Z-axis ballnut

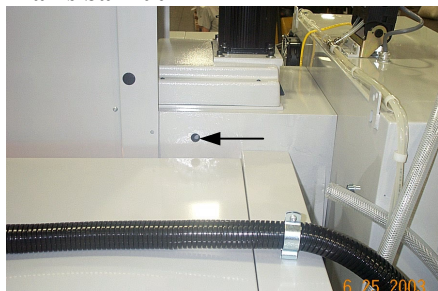


Photo 8

The Z-axis ballnut grease point is accessed through a hole in the right side of the column (photo 8). Move the head up to the home position. Remove the hole plug, then locate the grease point. Dispense a few pumps of grease into the ballnut grease point.

Note: The position of the Z-axis may have to be moved in order to access the grease point.

Replace the hole plugs when complete

ATC Lubrication

Two grease points are provided on the ATC for lubrication. Dispense a few pumps of grease into each of the two points located as shown in photos 9 & 10. The ATC should be in the parked position to access each grease point.

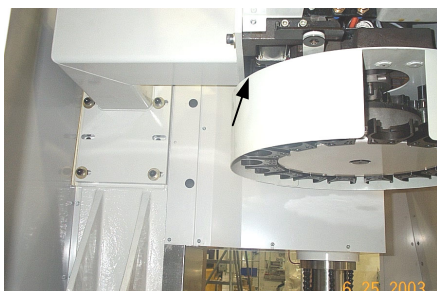


Photo 9

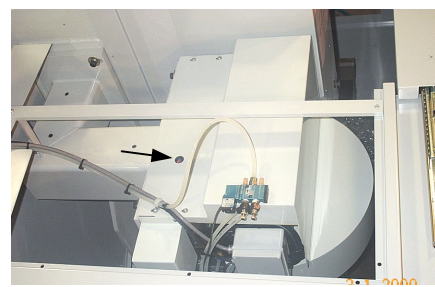


Photo 10