

**WARNING:**

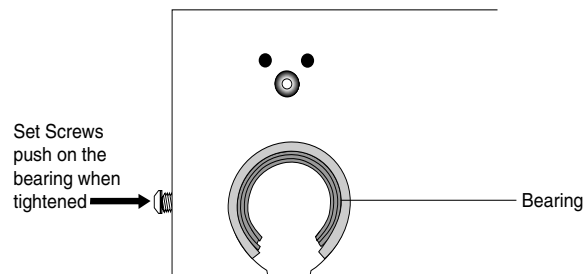
Always disconnect power to the machining center before making adjustments. Failure to do so follow may result in serious personal injury.

## Adjustment

You can adjust the linear bearings to remove any play in the saddle or spindle. The bearings are factory-adjusted and should not require adjustment for at least 1000 hours of use. Be very careful not to overtighten the bushings because overtightening can cause overworking and overheating of the motor, and excessive wear to the rods, bushings and ball screws. To adjust the linear bushings, follow the steps below.

1. Jog to the extreme positive end of motion on the axis you are adjusting. Shut off power to the system. Unplug the machine.
2. Remove part of the servo motor cover for the axis you are adjusting. Loosen the screws but do not remove the portion of the cover that has the wires coming out of it. Do not remove the whole cover at once or you may damage the wiring.
3. Loosen all eight recessed allen setscrews on the axis you are adjusting. They are located on the four sides of the saddle for the X and Y axes, and on the sides of the spindle for the Z axis.

A side view of the Saddle.



4. Tighten the two setscrews for each bearing while checking the force it takes to turn the ball screw. Tighten the setscrews (applying approximately 4-8 in/lb of torque) until the force required to turn the ball screw pulley increases when turning it by hand. Then back the setscrews off by 1/8-turn. Repeat this procedure for all four bushings on each axis.

If you need to use excessive force to turn the lead screw, you have adjusted the bearing too tightly.

5. Replace the servo motor cover.