

Checking and Adjusting the Backlash Parameters

The machine may have a slight mechanical looseness that will keep the table from moving briefly when the axis change direction. This is called backlash and can be compensated for by the control. A procedure to check the backlash follows.

Use a good solid magnetic base and a .0005 Inch indicator. Install the magnetic base on the machine table in close proximity to the spindle. Clean the area that the indicator will be in contact with.

Go into PARAMETERS – SETUP - password / validation code = PROTO3 and 3 then go into AXIS arrow down to BACKLASH press F1 EDIT and set X, Y and Z to zero. (Before setting them to zero note original settings)

Find the high spot on the spindle by moving the indicator back and forth and set indicator to zero. (See point A on diagram)

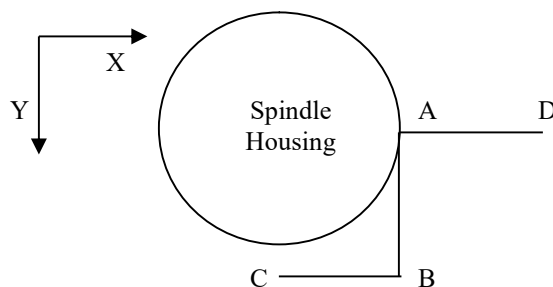
The next step is easiest if done in jog mode. (Select distance and 1 inch increments) You may have to press the jog key several times for the desired direction to clear the spindle.

Press the jog key for the desired direction for A to move towards D (see diagram) and then back to A, the indicator may have moved, adjust it back to zero and repeat this step until it stays at zero.

Jog the desired axis or tool (*see diagram*) from point A to B to C back to B then back to the start point A. The reading on the indicator is backlash and should be put into the backlash parameter under PARAMETERS – SETUP- password / validation code = PROTO3 and 3 then go into AXIS arrow down to BACKLASH

After putting the backlash into the table, repeat the procedure to ensure the numbers took affect. If the indicated error seems to increase this is add lash, and you may have to subtract the indicated number from the backlash parameter.

The X axis procedure is shown, repeat procedure for Y and Z.
Remember to save these new changes to your parameter disk.



The control can compensate for approximately .0025 in. of backlash. More than this means a mechanical problem that should be investigated. See the mechanical information in this section.