SETTING SPINDLE PULLEYS WITH LASER TACHOMETER

1. Set your VFD to Manual control by changing codes P0-000 to 0 and P0-002 to 0

2. Set the Hz settings in your VFD to your preference from 50 to a maximum of 120.

3. Follow the instructions in your Laser Tachometer manual for testing the spindle RPM.

4. Set your Hz setting to its maximum amount and read the spindle RPM with your tachometer.

5. Go to CONFIG>SPINDLE PULLEYS

6. In the Minimum speed set it to ZERO

7. In Maximum speed put in the reading from your tachometer less 25 RPM (see note below) and set the Pulley Ratio to 1.

8. Now set your VFD to Mach 3 control by setting P0-000 to 1 and P0-002 to 2

9. Now test your spindle with various M3S commands (M3S500, M3S750 etc.) and check the spindle RPM with your tachometer and compare to the spindle speed and STrue readings on your Mach 3 screen.

With some tweaking of the MAX speed settings you should be able to get the Mach 3 screen settings within a few RPMs of your tachometer reading.

NOTE: If you change the Hz amount in your VFD, you will need to test your RPM again with the tachometer and adjust the Max speed in your settings. We suggest you set the Max RPM at 25 less than your tachometer to insure a steady speed at maximum. If the setting is exactly at the maximum, the VFD may have a tendency to 'hunt" at the max setting and fluctuate up and down. By setting it a bit lower you are assured that the Hz reading will always be within a usable range.

NOTE: This procedure must be done in both MILL and TURN modes in Mach 3, as the pulley ratios are different.