1.0 SCOPE

This document establishes the procedures for up-loading parameters and PLC program to the Digital Positioning Spindle Drive. NOTE: these procedures assume that communications parameters have been previously set manually using a CTA test panel.

2.0 GENERAL

Operator should be familiar with the use of the OmniTurn CNC Control to perform this procedure.

3.0 TEST EQUIPMENT

3.1   Indramat Initialization Boot Disk

4.0 PRELIMINARY HOOK-UP

4.1   A. Insure that all AC power switches are set to OFF.
        B. Fully depress Emergency Stop switch on Control front panel.
        C. Insure that Emergency Stop switch on Operator's Station is disengaged.

4.2   Open Spindle Drive Cabinet and locate jumper wire from TB2-6 to TB2-8. Disconnect jumper at TB2-8 and connect it to TB2-9. This enables Parameter Mode. *NOTE: On later models, with PC board, locate J1 on left side, and move to PARA mode.*

This concludes the Section 4.0, Preliminary Hook-Up. Proceed to Section 5.0, Initial Power-Up.

5.0 INITIAL POWER-UP

5.1   Using a wrench or pliers, set spindle drive disconnect "ON" (1/4 turn CW).

5.2   Set control ON/OFF "ON". Wait for boot sequence to complete.

5.3   At prompt *Please Turn Servos On* disengage Emergency Stop switch on Control front panel, then press SERVOS ON button. Button should illumintate and RESET lamp on spindle drive should illuminate or flash.

5.4   Remove system disk (lower) and replace with Indramat Initialization Boot Disk disk. NOTE: if CNC has hard drive, go to CMOS setup and change boot sequence to A:C:.

5.5   Re-boot control by pressing and holding Ctrl-Alt-Del buttons. NOTE: if CMOS setup screen appears, press Esc, Y, Enter.

5.6   At conclusion of boot-up, Spindle Drive Setup Programs Menu should appear.

6.0 LOAD DRIVE PARAMETERS

6.1   On the Control keyboard, press A at Spindle Drive Setup Programs Menu to upLoad Drive Parameters,

There is only one prompt: *Press Q to Quit; any other key to load parameters*.

6.2   Press any key; the parameters will scroll down the screen.

6.3   Press q; the screen will clear and the main menu will re-appear.

Proceed to section 7.0, Load PLC Program.

7.0 LOAD PLC PROGRAM

7.1   In the Spindle Drive Cabinet, locate jumper wire from TB2-6 to TB2-9. Disconnect jumper at TB2-9 and re-connect it to TB2-8. This enables Auto Mode. (Or move J1 back to AUTO mode).

7.1   On the Control keyboard, press C at Spindle Drive Setup Programs Menu to upLoad PLC Program,

There is only one prompt: *Press Q to Quit; any other key to load parameters*.

7.2   Press any key; the program will scroll down the screen.

7.3   Press q; the screen will clear and the main menu will re-appear.

7.4   Set main power to drive OFF.

This concludes sections 6.0 and 7.0, Load Drive Parameters and PLC Program. Proceed to section 8.0, Power Down and Disconnect.

8.0 POWER DOWN AND DISCONNECT

8.1   Depress Control E-stop; set control ON/OFF switch to OFF.

8.2   Remove Indramat Initialization Boot Disk and replace with OmniTurn System disk for C Axis.

8.4   Using a wrench or pliers, set spindle drive disconnect OFF.

8.5   Close the Spindle Drive cabinet door.

This concludes uploading drive parameters and PLC program on the Positioning Spindle Drive.