## OmniTurn - Trouble shooting guide, G4 CNC

## Input Monitor Function (Alt-I Diagnostic)

|                     |                  |           | ]           |
|---------------------|------------------|-----------|-------------|
| 1.Slow              |                  |           | Position    |
| 2.Medium            |                  |           | X: +0.00000 |
| 3.Fast              | X+ Jog:          | 1         | Z: +0.00000 |
| 4. 0.00005"/.01°    | X- Jog:          | 1         |             |
| 5. 0.00100″/.1°     | Z+ Jog:          | 1         |             |
| 6. 0.01000″/1°      | Z- Jog:          | 1         | Feed        |
| 7. 0.10000″/10°     | C+ Jog:          | 1         | 0.0000 IPM  |
| 8. 1.00000″/90°     | C- Jog:          | 1         | 100 %       |
| 9.Establish Home    | Left CS:         | 1         |             |
| H.Go Home           | Right CS:        | 1         |             |
| T.Set Tool          | Motion Stop:     | 1         | Speed       |
| M.Manual Data Input | Collet Open:     | 1         | 0 RPM       |
| A.Automatic         | Collet Close:    | 1         | 100 %       |
|                     | Spin. Off/Auto:  | 0         | Tool 0      |
|                     | Guards:          | 0         |             |
|                     | Inhibit:         | 1         |             |
|                     | M91 input:       | 1         |             |
|                     | M93 input:       | 1         |             |
|                     | M95 input:       | 1         |             |
|                     | X Ref LS :       | 1         |             |
|                     | Z Ref LS :       | 1         |             |
|                     | 0 indicates acti | ive input |             |

Input Monitor Function (Alt-I Diagnostic)

Pressing Alt-I in Jog Mode displays status of inputs. Active inputs (on) are displayed as 0, inactive inputs (off) are shown as 1.

This diagnostic is helpful for quickly determining if the states of the various switches and M-functions are being communicated to the motion control card.

For example: if the machine won't jog, you can quickly verify that the motion control card is reading the state of the Jog Stick by moving the Jog Stick and watching the 1's change to 0's.

Also, when door interlock switch (Guards, above) is open (1), the Spindle Off/Auto switch is shown as off (1) regardless of its actual condition, and Motion Stop is shown as on (0) regardless of its actual condition.

To cancel Alt-I press Alt-I again.

## Temporarily Bypass Guards (Alt-G Diagnostic)

If the slide won't jog, and "Guards" stays at 1 and Motion Stop stays at 0 regardless of whether the door is open or closed, press and hold the Alt key, then press G key (Alt-G), then press Esc. Note that Motion Stop will change to 1, but Guards will remain at 1. Select a jog speed and attempt to jog: if the slide jogs with Alt-G active, the problem is a bad door switch or open connection in the door interlock string.

Alt-G is cancelled if Auto mode is selected.