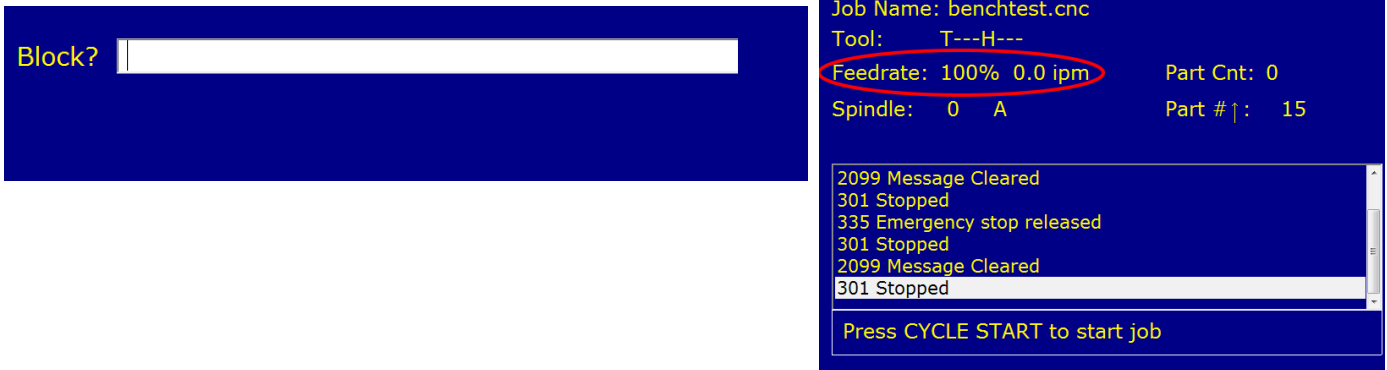# TB285 (Rev1) – Motor Doesn't Move – No Error or Fault

NOTE: This Technical Bulletin does not address movement prevented by obvious faults such as Full Power Without Motion (FPWM), Position Errors, Encoder Errors, SV_STALL Errors, Lube or Spindle Faults etc.. Please see TB###

1. Confirm there are no faults preventing motion. Press F3-MDI to open an MDI command block as shown (below left). If the block prompt immediately disappears and returns to the Main screen, there are faults preventing motion. Cycle Estop to to clear any existing faults and confirm that the messages "Emergency stop detected" and then "Emergency stop released" are displayed and then press F3-MDI again. If the block is displayed as below, no faults or errors detected. If the block immediately disappears and returns to the Main screen, please view the fault displayed in the status window (below right) and see the appropriate Technical Bulletin to continue troubleshooting.

Block?	

Job Name: benchtest.cnc
Tool: T---H---
Feedrate: 100% 0.0 ipm   Part Cnt: 0
Spindle: 0   A   Part #↑:   15

2099 Message Cleared
301 Stopped
335 Emergency stop released
301 Stopped
2099 Message Cleared
301 Stopped

Press CYCLE START to start job

2. The feedrate override is turned down to zero. Observe the Status window (above right) and confirm that the feedrate override is set to ~100%

3. Take the control out of incremental jog mode. Look at the INCR/CONT key to the left of the X1 key on the jog panel. If the LED is lit on the INCR/CONT key, the control is set to incremental jog. Press the INCR/CONT key to toggle the LED off and attempt to jog.

4. Confirm that the drive parameters have been set correctly in parameters 35, 256 & 300-307 NOTE: These drive parameters do not apply to CPU7 & CPU10 based systems (motion control board plugged into PC motherboard)

For DC3IOB, ALLIN1DC 2 & 3 axis systems, parameters 35 = 6, 256 = 0, 300 = 1, 301 = 2, 303 = 3. For ALLIN1DC 4 axis systems, parameters 35 = 6, 256 = 0, 300 = 2, 301 = 3, 303 = 4, 304 = 1.

For systems utilizing ACDC drives or systems utilizing Optic Direct operating in precision mode parameters 35 = 6, 256 = 2, 300 = 1, 301 = 2, 302 = 3, 303 = 4

For velocity mode systems utilizing the analog outputs on the GPIO4D, Optic4 or Optic Direct interface boards parameters 35 = 6, 256 = 1, 300 = 1, 301 = 2, 302 = 3, 303 = 4

For DC systems (Servo1, QuadDrive, Servo3IO, DC3IO drives) utilizing the LegacyAdd interface parameters 35 = 6, 256 = 0, 300 = 17, 301 = 18, 302 = 19, 303 = 20

For AC systems -SD1 & SD3 drives utilizing the LegacyAdd interface parameters 35 = 6, 300 = 21, 301 = 22, 302 = 23, 303 = 24