KNEE AND COLUMN INTERACT
AXIS DRIVE SET UP - TNC 151-155

1) Set parameters 59 to 0.
Ensure all axes are at centre of travel.
Switch machine off disconnect wires 5, 6, 7 from terminal block.

At the pendant, turn the feedrate control (F% override) to maximum (fully clockwise).

At the X axis feed drive unit (DC1) connect at DC voltmeter between test points '5' and 'GND' - Press cycle start push button and adjust potentiometer R30 (strom) on the X feed drive plug-in compensation card, until the meter reads 4.8 v (5.9 v for 60 Hz supply).

Press the cycle stop button and change machine parameter 59 to the figure 6. At the Y axis feed rate unit (DC 2) connect meter between test points '5' and 'GND' - Press cycle start push button and adjust potentiometer R30 (strom) on the Y feed drive plug in compensation card, until the meter reads 4.8 v (5.9 v for 60 Hz supply).

Press the cycle stop button and change machine parameter 59 to the figure 14. At the Z axis feed drive unit (DC3) connect the meter between test points '5' and 'GND'. Press the cycle start push button and adjust potentiometer R30 (strom) on the Z feed drive plug-in compensation card, until the meter reads 4.8 v (5.9 v for 60 Hz supply).

Note: The 4.8 5.9 v should be achieved within seconds of pushing the cycle start button.

Switch off machine and reconnect wire numbers 5, 6 and 7 to the main terminal block.

2) ENSURE THAT THE TNC DISPLAY IS IN THE "LAG" MODE.

CHANGE MACHINE PARAMETER 65 TO '0' AND ADJUST 'OFFSET' POTENTIOMETER R9 ON EACH OF THE THREE DRIVE UNITS UNTIL THE CORRESPONDING POSITION DISPLAY READS 0 + 0.002 MM.

CHANGE PARAMETER 65 BACK TO '1'.

3) Set machine datum allowing a travel of X - 250 mm. Y - 250 mm and Z - 130 mm.

Change machine parameter 60 to '1' and re-reference the machine.

Set a programme to rapid the X axis backwards and forwards, press cycle start button on the X axis drive plug in compensation card, adjust potentiometer R23 (Tacho) to give DRO reading approximately balanced about 5,000 for the two directions. (e.g. 4,975 in one direction, 5,025 in the opposite).

Repeat the above procedure for the Y axis and the Z axis.

Change machine parameter 60 to '0' and re-reference the machine.

Change position display to nominal.