

Ballscrew Alignment

- 1) Install the ballscrew and align it from end to end.
- 2) With a clamp-on ammeter, clamp to the brown wire connected to the axis amplifier. If an AC amplifier, attach your ammeter to one of the output wires R, S or T.
- 3) Jog the axis to the + limit.
- 4) Enter one of the following into MDI, adjusting values to reflect the total travel of the axis. As an example, a VMC 4020 will have the following travels. X40, Y20 and Z20/28
 - a. GI F25. G91 X-_. M49
 - b. GI F25. G91 Y-_. M49
 - c. GI F25. G91 Z-_. M49
- 5) Monitor the ammeter display while traversing along the axis. The readings should not vary more than 2 amps for MM screws and 1 amp for inch ballscrews.
- 6) Watch for variations at either end when being approached. If higher than normal values, check and adjust alignment.
- 7) If the ballscrew is realigned, adjust backlash again and retest.