

# PREVENTATIVE MAINTENANCE LPM 22-POINT INSPECTION

SERVICE DATE: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

SUPPORT TICKET #: \_\_\_\_\_

COMPANY: \_\_\_\_\_

CUSTOMER #: \_\_\_\_\_

SERIAL #: \_\_\_\_\_

MODEL: \_\_\_\_\_

**Complete form by placing a checkmark in the boxes as task are completed.**

- 1**  Check level and tram. Adjust as necessary
- 2**  Check calibration tables in service code 123 and backlash tables in service code 128. Put indicator on each axis to Record backlash values: X: \_\_\_\_\_ Y: \_\_\_\_\_ Z: \_\_\_\_\_
- 3**  Pull back and clean beneath the way covers: X, Y, and Z axes
- 4**  Inspect couplings on X, Y, and Z axis
- 5**  Remove side panels from head and clean out around spindle and spindle motor, and belt
- 6**  Inspect Spindle Motor belt.
- 7**  Thoroughly clean and lubricate the automatic tool changer and check all sensors.
- 8**  Run service code 510: Check spindle orientation. Re-calibrate Spindle RPM.
- 9**  Check the current on the X, Y and Z axis (ideally when the machine is cold, use motion maestro)  
 \* X and Y axis, peak current values should not exceed 25.5 amps and the continuous current should be 12 or less  
 \* Z should be less than 14 amps continuous and 27 amps peak. If the values are higher than this, inspect drive train.
- 10**  Check rolling torque on X and Y axis - should be less than 18 in-lbs. Check torque in 3 places along the ballscrew to make sure the alignment is correct.
- 11**  Double check all motor index angles in service code 505. (Index angles must be checked in the positive direction.)
- 12**  Check ball lock locations and reset as necessary using code 500. Record previous values: \_\_\_\_\_
- 13**  Check tool change height using service code 501.
- 14**  Run service code 502: Check base tool height.
- 15**  Recalibrate spindle load meter in PMAC STAT. (section 5.12.7 of LPM service manual)
- 16**  Verify that error log is turned on.
- 17**  Check service code 506 to verify 4th axis centerline and home. (4th axis only)
- 18**  Check software and update when applicable.
- 19**  Inspect lubrication system and fill, if necessary.
- 20**  Replace filters on door and computer module.
- 21**  Inspect wires in the electrical cabinet and tighten as needed.
- 22**  Save Configuration file to thumb drive on Computer Module.

**List potential problems, observations, or recommendations:**

**TECHNICIAN**

**NEXT MAINTENANCE DATE**