# CNC MILL MAINTENANCE HISTORY

<table>
<thead>
<tr>
<th>YYYY-MM-DD</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>2005-03-04</td>
<td>Replaced drawbar (Kurt Cat No. 600-44)</td>
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<tr>
<td>2005-03-08</td>
<td>Replaced air-line filter/regulator/lubricator (Kurt Cat No. 312-06)</td>
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</table>
| 2005-07-29 | Drawbar air-wrench (CP720):
  - Replaced socket retainer and O-ring on anvil shank
  - Replaced O-ring on piston
  - Replaced O-ring on cylinder
  - Replaced socket
  - Parts came from repair kit PDB-RK (from Kurt Mfg.) |
| 2007-05-29 | Changed the Spindle Parameters in the controller (MAXGEAR3, 4, and 5) to 4200 to correspond with maximum possible spindle speed. |
| 2009-12-15 | Cleaned table in X-direction:
  - Removed the table (Slid it onto a utility table able to support weight, estimated to be between 375 - 400 lbs. Six people manipulated the table and one coordinated. Care must be taken not to squash the oiling tube going to the ball nut under the table.)
  - Cleaned ways and saddle/table gib (No. 46, p. 27).
  - Degreased ball nut (but did not disassemble it)
  - Replaced thrust bearings on RHS. (FAFNIR MM20BS47 replaced with NSK sealed unit 20TAC47BDGSUC10PN01.)
  - Replaced LHS bearing with new. (SKF 6204-2Z)
  - Replaced aluminum pipe feeding ball nut as it was crushed. (Crushed prior to removing the table. Machine most likely purchased that way.)
  - Replaced Ratio Distributor Restrictor on ball-nut oil line with No. 3. (Originally a No. 1 was present; when replaced with the same number no oil came out. Manual shows that a No. 3 is supposed to be used.)
  - Gear pulley changed (Browning 26LB050) because of eccentric shaft hole. This caused the ball screw to wobble and resulted in striation wear marks over the surface that mates with the bearing inner raceways.
  - Key made for gear pulley; original was not functional |
|            | Y-Axis:
  - Replaced Ratio Distributor Restrictor on ball-nut oil line. (No. 3 restrictor) |