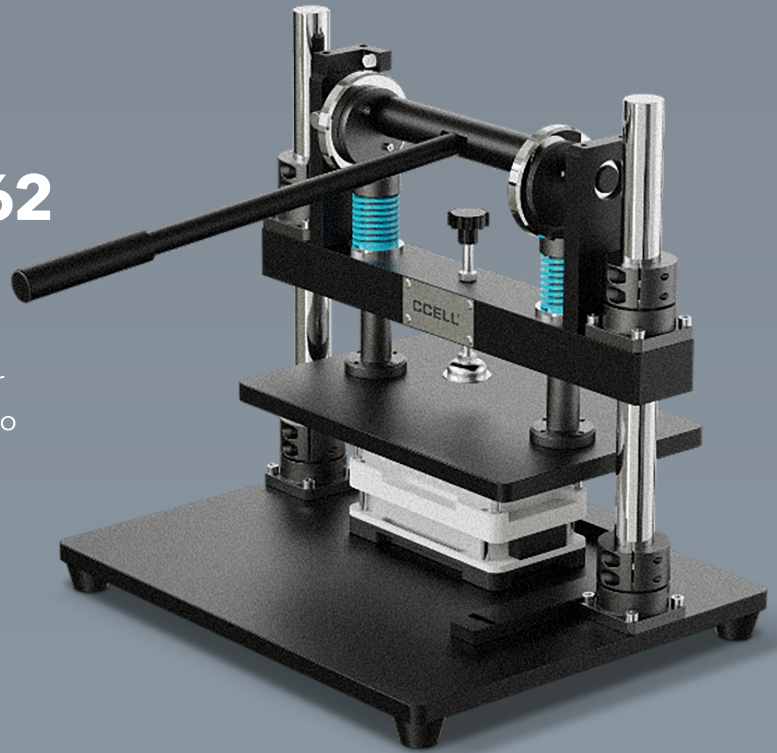


Arbor Press TL0000-162

Routine Maintenance

This work instruction provides basic instructions for routine maintenance of Arbor Press (TL0000-162) to promote reliable operation.



RESPONSIBILITY

Organizations utilizing Arbor Press (TL0000-162) are responsible for performing the maintenance described below at the recommended frequencies listed to promote reliable operation. Additional maintenance operations may be performed as deemed necessary by each organization.

TOOLS, GAGES, FIXTURES

- ▲ Cleaning cloths (rags)
- ▲ Conventional White Lithium Grease/Lubricant
- ▲ Torque Wrench, Ratchet Wrench, or Non-ratcheting Fixed Head Wrench
- ▲ Ruler or Caliper
- ▲ Spirit Level, Torpedo Level, or Digital Level

SAFETY REQUIREMENTS

Common maintenance safety precautions. The actions described do not present unique risks of injury.

Instructions

The table below describes recommended maintenance activities at specified frequencies, including detailed instructions where deemed appropriate.

Maintenance Activity	Frequency	Instructions
Clean and Lubricate Guide post and Bushings	Weekly	- Thoroughly clean old oil and grease. - Apply lubricant evenly to guide post and bushings. - Check operational performance.
Lubricate Bearings (4 Total Locations)	Monthly	- Apply grease to the bearings at both ends of the rotating shaft and to the two bearings on the eccentric wheel. - Check for rotational noise. If rotational noise is present, clean bearings and reapply lubricant.
Lubricate and Inspect Contact Surface Between the Eccentric Wheel and Bearing	Monthly	- Apply a small amount of grease to the contact surface between the outer ring of the eccentric wheel bearing and the pressure plate. - Visually inspect the eccentric wheel and the pressure plate for abnormal/uneven wear.
Tighten All Bolted Connections	Monthly	- Tighten all bolts in a diagonal sequence, especially the shaft seat clamping bolts, brace bolts, eccentric wheel fixing keys/bolts, and handle connection bolts. - See the Bolt Torque Specification Table below for torque specifications when using a torque wrench. - If using a ratchet wrench or non-ratcheting fixed head wrench, tighten based on feel. Apply steady arm force, feeling for the resistance 'inflection point.' Stop applying force when the bolt can no longer turn; this indicates the bolt is tight.

Maintenance Activity	Frequency	Instructions
Clean, Inspect, and Measure Free Length of Return Spring	Quarterly	▲ Clean the surfaces of the return spring. ▲ Visually inspect the return spring to detect abnormal wear or damage such as cracks. ▲ Measure the return spring free length to detect fatigue or softening. ▲ See section below titled, "Return Spring Free Length Measurement" for details. ▲ See section below titled, "Return Spring Softening Detection" for details.
Check Overall Frame Alignment	Semi-Annually	▲ Check whether the columns are vertical, the beams are horizontal using a level. ▲ Check for loosening or displacement of the bearing seats.

Bolt Torque Specification Table

Bolt Specification	Thread Standard Pitch (P)	Recommended Tightening Torque Range (N-m)	Common Target Torque (N-m)
M3	0.5mm	2.0-3.0	2.5
M4	0.7mm	4.5-6.5	5.5
M5	0.8mm	9.0-12.0	10.0
M6	1.0mm	15.0-20.0	17.0

Return Spring Free Length Measurement

Measure the spring length in the unloaded state with a ruler or caliper. 59mm $\pm$ 3mm is acceptable.



Return Spring Softening Detection

If the activation handle is in the highest position when not in use, the condition of the return spring is acceptable.



If handle does not return to the highest point, it means the spring has reached its design life.

