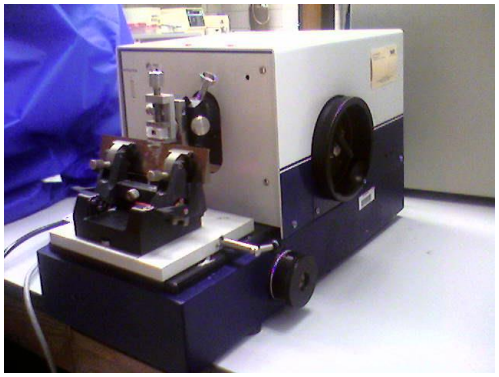

Historage-Elec Controls


Leica @ BRDG

***Caution: Never attempt to hold or grab any component of the machine to stop motion***

# Microtome SOP



Mechanical Controls

American Optical @BRDG

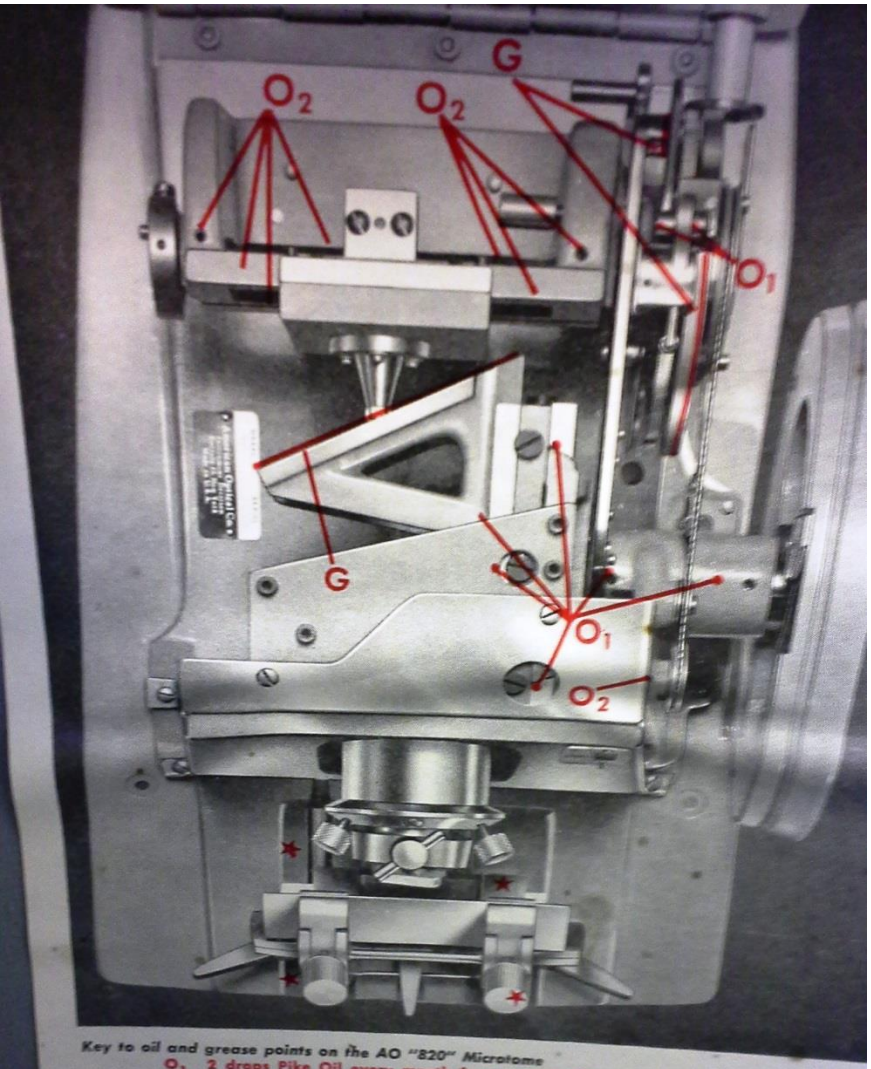
Prepared by: Bob Morrison
STLCC , Instrumentation Specialist
May 2008, updated Dec 2015 for models at BRDG

# Microtome: American Optical, Model 820, SN 70298


*Hotlink to* **Effective Use and Care of Microtome**…..*(LARGE pdf, 93 pgs)*

*Hotlink to* **American Optical, Model 820 Reference Manual**…..*(pdf)*

# Microtome: American Optical, Lube Schedule




*Key to oil and grease points on the AO "820" Microtome*

$O_1$ 2 drops Pike Oil every month for average usage and 2 drops every two weeks for heavy usage.

$O_2$ 2 drops of Pike Oil every month.

G Grease surface every 6 months for average usage and every 3 months for heavy usage.

★ Relubricate knife holder parts and knife holder slideway with thin covering of Pike Oil, or light grease, after each cleaning.

For maintenance instructions see Instruction Manual 820-301 (Effective Use and Proper Care of the Microtome) Chapter III, section D, Page 18.

NOTE: For best results, do not operate faster than one revolution per second. For checklist of "Sectioning Difficulties", see manual 820-301, Chapter II, Page 6.

AMERICAN OPTICAL CORPORATION SCIENTIFIC INSTRUMENT DIVISION BUFFALO, N. Y.

820-502

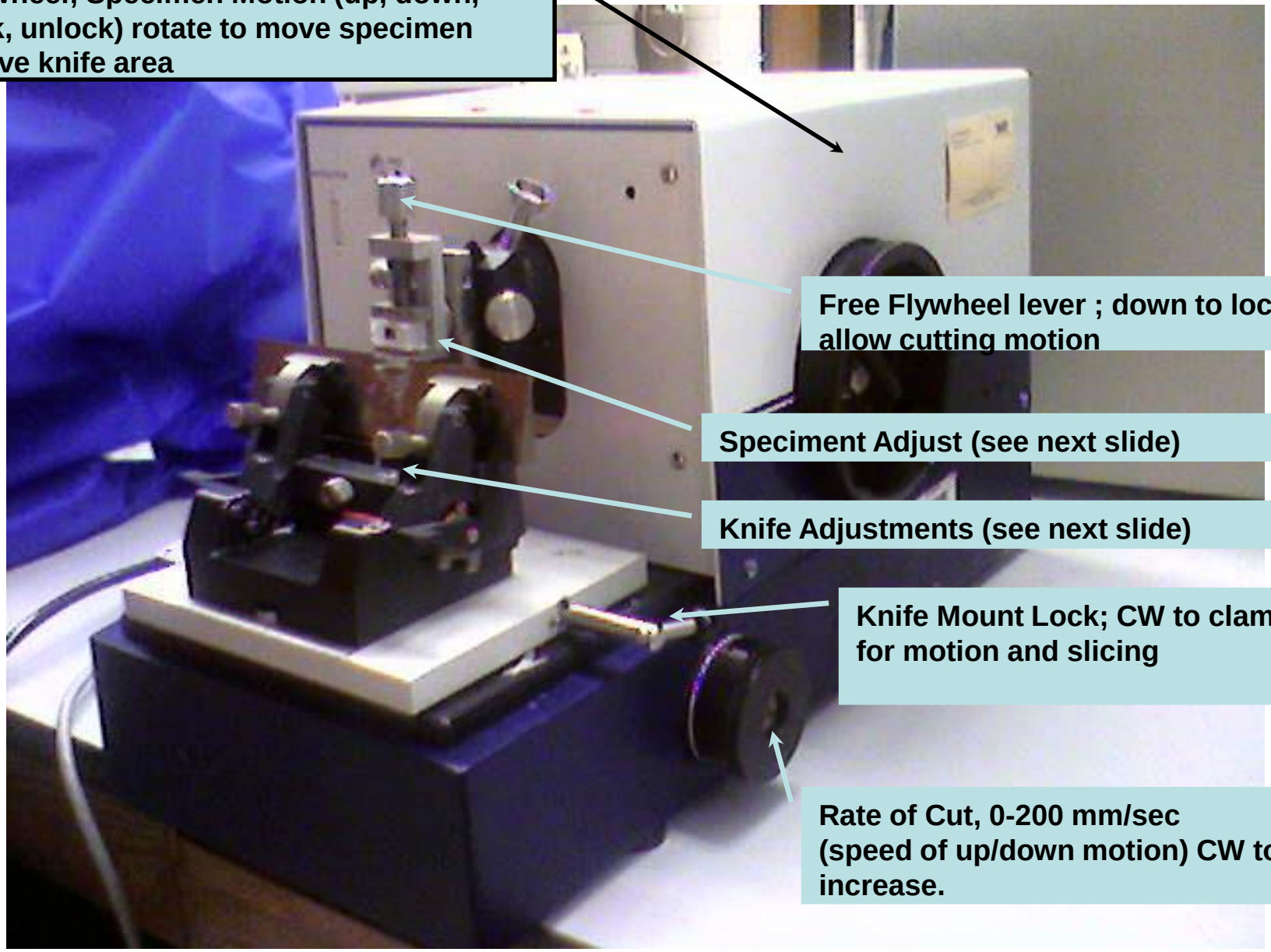
# Microtome: Leica, **Model** SM 2000R


*Hotlink to* **Leica Model SM2000R, Reference Manual***…..(pdf)*

# Microtome : General Setup and Operating Instructions

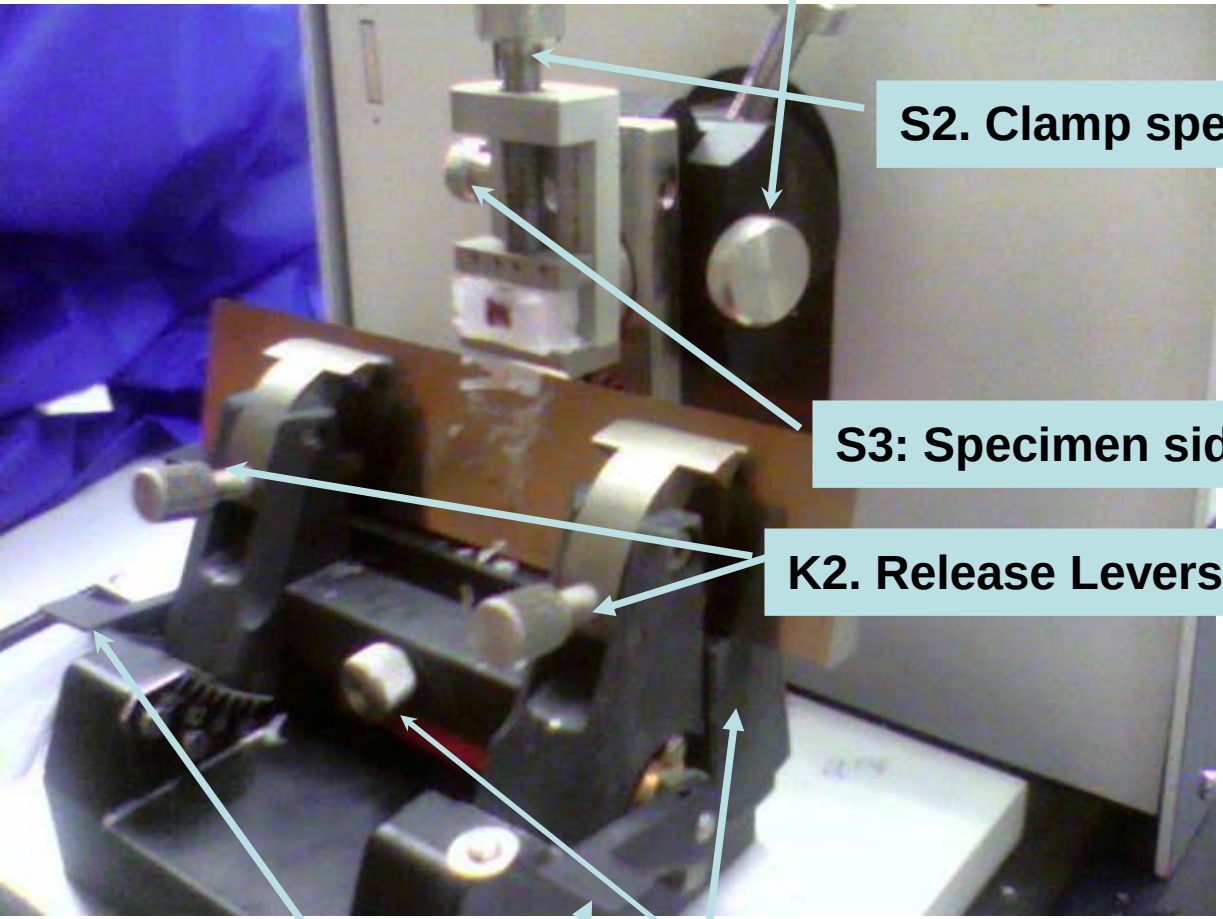
1. Prepare specimen in paraffin or desired mounting material
2. Before plugging in the device, mount specimen and the knife and adjust per page 4
3. Plug in the device and set electronic controls per page 5
4. Release the cutting flywheel by moving the locking lever up, page 3
5. Engage the flywheel motion by moving the lever on the flywheel clockwise (cw), page 3
6. Engage knife platform motion by rotating the platform lock lever clockwise (significant force is required), page 3
7. Cancel or stop using the electronic buttons ONLY. Never attempt to hold or grab any component of the machine to stop motion, page 5.

# Microtome; Mechanical Controls, Major



# Microtome; Mechanical Controls, Knife (K) and Specimen (S)

**(DO NOT PLUG IN DEVICE AT THIS TIME)**



S1. Release to remove entire block if needed

S2. Clamp specimen to block, CW

S3: Specimen side control lock

K2. Release Levers; set angle of knife mount

K3. Set height of knife, screw CCW, then slide bar

K1. Release Levers; set angle of knife mount

# Microtome; Historange with Electronic Controls

1. Plug in device

2. Select what to monitor; stroke, feed used, feed remaining

3. Reset to counters to zero

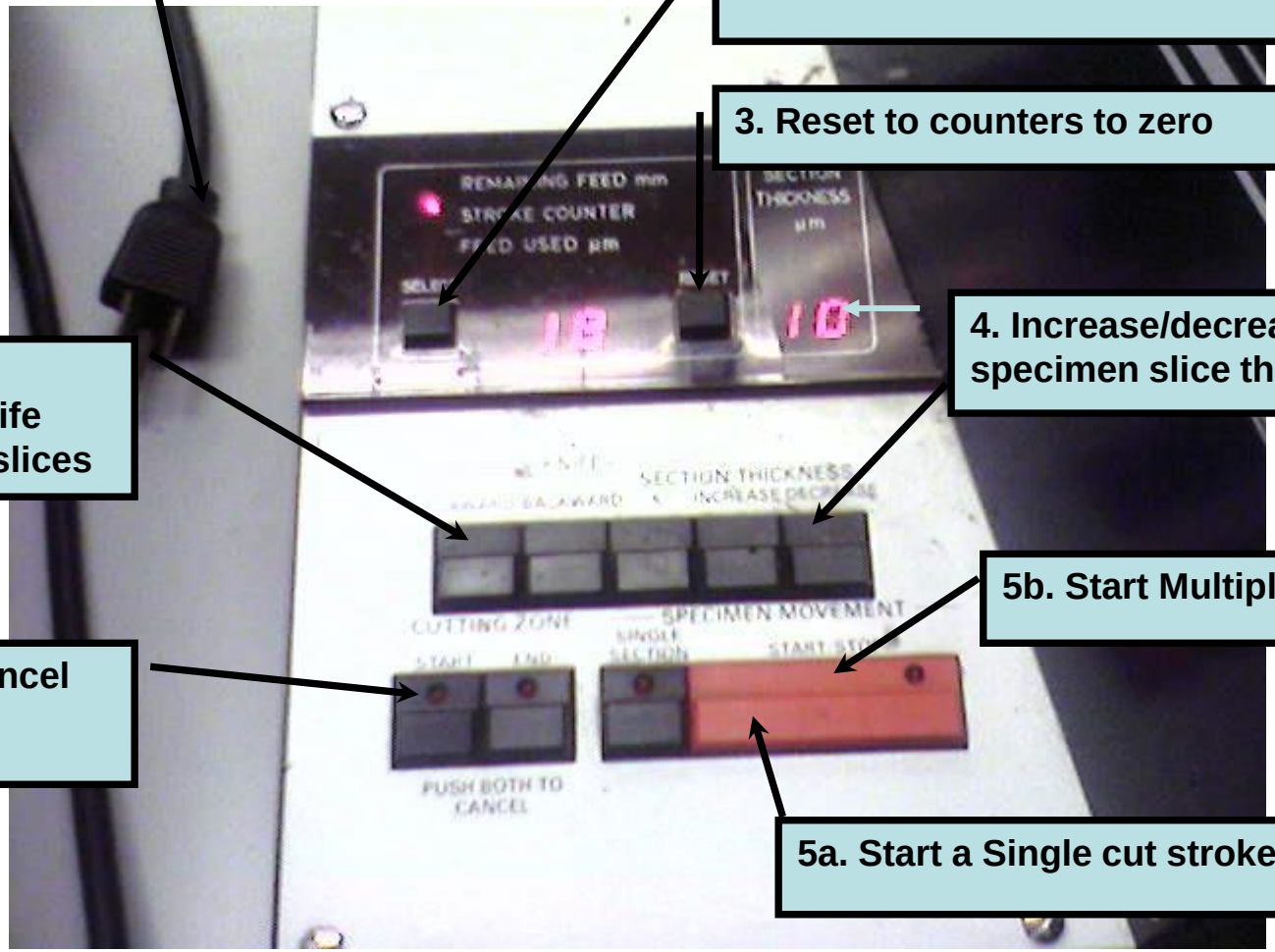
4. Increase/decrease desired specimen slice thickness

6. Must hold down button to move knife forward to obtain slices

5b. Start Multiple cut strokes

7. Push both to cancel slicing

5a. Start a Single cut stroke




*Hotlink to* **Historange model LKB 2218 Manual**…..*(pdf)*

# Microtome: Other Protocols or Notes

- Future home of other or more details protocols….