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PIPETMAX SERVICE PLAN

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PIPETMAX 268

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After the release of the PIPETMAX 268 and as design updates were being made, Gilson, Inc.'s R&D group implemented accelerated longevity / lifetime testing to draw out any low frequency failures, extended use failures, etc... With the updates, increased testing and recommended maintenance we are confident that PIPETMAX will provide the customer with a robust solution without any major service issues during the usable lifetime of the instrument.

Usable lifetime of the PIPETMAX

Minimum of 5 Years

Preventative Maintenance

Maintaining the PIPETMAX (XYZ)

Recommended Interval: Yearly

Required Time: 40 mins – 1 hour

- Remove the removable tray
- Clean the polyurethane running pads beneath the fixed tray
- Wipe down the fixed and removable tray
- Reinstall the removable tray
- Test the removable tray for correct positioning
 - Any observed "wobble" should be addressed
- Clean the X rail using methanol and re-grease
 - Remove any excess grease
- Clean the Y rails using methanol and re-grease
 - Remove any excess grease
- Clean the Z lead screw using methanol and re-grease
 - Remove any excess grease
- Clean the Z rails using methanol and re-grease
 - Remove any excess grease
- Wipe down the internal surfaces





- Inspect the X belt for any signs of excessive wear and make sure the belt is properly tensioned
- Clean the debris tray noting any signs of excessive belt wear
- Reinstall the removable tray
- Wipe down the external surfaces of the PIPETMAX
- Run the alignment protocol to align the system

Maintaining the pipette heads (Will Require Recalibration & Adjustment)

Recommended Interval: Yearly & Time of Service

Required Time: 20-30 mins

- Remove the pipette head(s) from the PIPETMAX
- Disassemble the pipette head(s)
- Clean the tip holders
- Examine the piston and the piston rake for damage or defect
 - Replace damaged or defective parts
- Clean the pistons
- Grease the pistons
- Replace the O-ring (when servicing a 1mL pipette head)
- Reassemble and wipe down the pipette head(s)
- Reinstall the pipette head(s)
- Run the alignment protocol to align the PIPETMAX

Recommended Calibration Offers

Recommended Interval: Yearly at minimum (more frequently as required by customer)

Required Time: 35 – 420 minutes

The table below demonstrates our recommended calibration levels and the time required to achieve each service:

Pipette Head Calibration Matrix									
Time Requirement (Min)									
Service Type	Volume Points X Data Points		Single Channel (1 x 1000)	Volume Points X Data Points		Multichannel (all channel leak test w/ 1 channel calibration)	Volume Points X Data Points		Multichannel (all channel leak test w/ all channels calibration)
	As-Found	As-Returned		As-Found	As-Returned		As-Found	As-Returned	
LVL1	-	2X2(4)	35 min	-	2X2(4)	55 min	-	2X2X8(32)	85 min
LVL2	-	2X4(8)	40 min	-	2X4(8)	60 min	-	2X4X8(64)	105 min
LVL3	3X5(15)	3X10(30)	80 min	3X5(15)	3X10(30)	100 min	3X5X8(120)	3X10X8(240)	420 min

If you have any questions regarding the servicing outlined above, refer to the service manual (Service PIPETMAX) or contact Gilson, Inc. at techsupport@gilson.com.