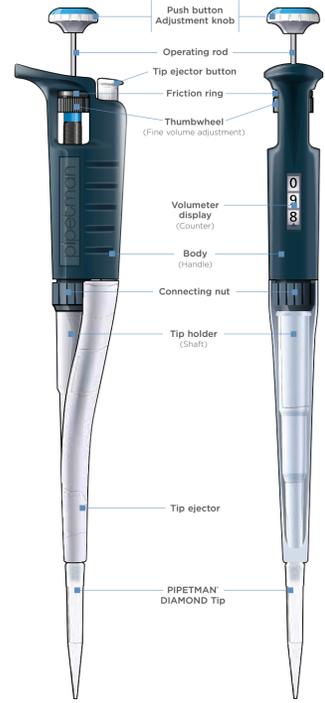


Two-Minute Inspection

pipetman®



1 STEP 1 Check the Records

- Use the serial number to identify the pipette and to determine its age.
- Check laboratory records for the date of last servicing.

Letter	Year	Letter	Month
A	2006	A	January
B	2007	B	February
C	2008	C	March
D	2009	D	April
E	2010	E	May
G	2011	G	June
H	2012	H	July
J	2013	J	August
K	2014	K	September
L	2015	L	October
M	2016	M	November
N	2017	N	December
P	2018		
Q	2019		
R	2020		
S	2021		
T	2022		
U	2023		
W	2024		
X	2025		
Y	2026		
Z	2027		

A	A	50001
Year	Month	Production number

2 STEP 2 General Appearance

CHECK POINT	POSSIBLE CAUSES
Operating rod Bent? Corroded?	<ul style="list-style-type: none"> Dropped Lengthy contact with a corrosive liquid Lengthy exposure to corrosive vapors
Volumeter Dial alignment? Clarity of numbers?	<ul style="list-style-type: none"> Autoclaving can change the appearance and function (refer to the user's guide for a listing of autoclavable parts) Overturning the counter
Tip ejector Corroded? (stainless steel only) Broken?	<ul style="list-style-type: none"> Lengthy immersion in corrosive liquid, for decontamination Lengthy exposure to corrosive vapors Trauma to pipette
Tip holder Physical or chemical damage?	<ul style="list-style-type: none"> Repeated forceful tip loading Blockage due to contaminate

3 STEP 3 Check Functions

PROCEDURE	POSSIBLE CAUSES
Large volume adjustment 1 Set volume at maximum (i.e., nominal volume) assessing the movement of the friction ring. 2 Activate the push button to test movement during aspirate and dispense strokes.	<ul style="list-style-type: none"> Irregular movement Hitching, due to damage to the friction ring No displacement Bent operating rod Jerky movement, corroded, dirty or scratched piston Clean and lubricate piston
Volumeter adjustment Go through the entire range. The settings should correspond to the pipette's useful volume range (minimum to nominal volume).	<ul style="list-style-type: none"> No adjustment Autoclaving Incorrect volume setting Misindexing; pipette adjustment screw has been incorrectly reassembled.
Tip ejection system 1 Fit tip and depress tip ejector button 2 Observe function of tip ejector 3 Disassemble tip ejector	<ul style="list-style-type: none"> No movement Broken return spring Improper fit Tip not securely attached.

4 STEP 4 Leak Test

PROCEDURE	POSSIBLE CAUSES
1 Fit PIPETMAN® DIAMOND Tip. 2 Set volume at maximum (i.e., nominal volume). 3 Pre-rinse the tip by aspirating and dispensing water several times. 4 Aspirate water. 5 Hold the pipette in the vertical position for 20 seconds. 6 For P2 to P200, re-immersion in the test liquid; fluid level in tip should remain constant. Observe if a drop or a leak appears at the orifice of the tip for P1000 to P10mL.	<ul style="list-style-type: none"> End of tip holder may be scratched/damaged (mechanical or chemical). Improper tip fit Use of non-Gilson tips Organic solvent, vapor pressure

CHECK THESE

Tip holder
Leak?

Tip
Leak?

5 STEP 5 Disassembly – Reassembly

DISASSEMBLY	REASSEMBLY
1 Eject the tip 2 Unclip ejector 3 Unscrew the connecting nut 4 Separate the handle from the bottom part 5 Remove the piston from the tip holder	To avoid losing or damaging fragile parts, reassemble the pipette immediately. Be sure to respect the correct order of parts: the O-ring should always be positioned before the seal guide.

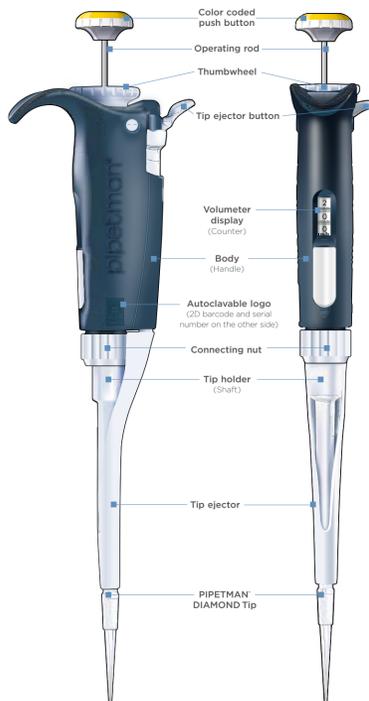
CHECK THESE

Piston
Surface corroded, scratched, or damaged

Tip holder
Leak?

Tip
Leak?

pipetman®



1 STEP 1 Check the Records

- Use the serial number to identify the pipette and to determine its age.
- Check laboratory records for the date of last servicing.

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T	2022		
U	2023		
W	2024		
X	2025		
Y	2026		
Z	2027		

A	A	50001
Year	Month	Production number

Check autoclavable logo before autoclaving PIPETMAN L

The first fully autoclavable PIPETMAN L produced have a serial number starting by NK. For prior models, refer to the User's Guide.

2 STEP 2 General Appearance

CHECK POINT	POSSIBLE CAUSES
Operating rod Bent? Corroded?	<ul style="list-style-type: none"> Dropped Lengthy immersion in corrosive liquid, for decontamination Lengthy exposure to corrosive vapors
Volumeter Dial alignment? Clarity of numbers?	<ul style="list-style-type: none"> Autoclaving can change the appearance and function (the body must not be autoclaved if the pipette does not have the autoclavable logo).
Tip ejector Corroded? (stainless steel only)	<ul style="list-style-type: none"> Lengthy immersion in corrosive liquid Lengthy exposure to corrosive vapors
Tip holder Physical or chemical damage?	<ul style="list-style-type: none"> Repeated forceful tip loading Lengthy immersion in corrosive liquid for decontamination Lengthy exposure to corrosive vapors

3 STEP 3 Check Functions

PROCEDURE	POSSIBLE CAUSES
Large volume adjustment 1 Unlock pipette to set volume at maximum (i.e., nominal volume) assessing the movement of the thumbwheel. 2 Lock pipette and activate the push button to test movement during aspirate and dispense strokes. 3 Press to the second stop, the thumbwheel should return in lock position.	<ul style="list-style-type: none"> Irregular movement Hitching, due to damage to the thumbwheel No displacement Bent operating rod Jerky movement, corroded, dirty or scratched piston Clean and lubricate piston
Volumeter adjustment Go through the entire range. The settings should correspond to the pipette's useful volume range (minimum to nominal volume).	<ul style="list-style-type: none"> No adjustment Autoclaving Incorrect volume setting Misindexing; pipette adjustment screw has been incorrectly reassembled.
Tip ejection system 1 Fit tip and depress tip ejector button 2 Observe function of tip ejector 3 Disassemble tip ejector	<ul style="list-style-type: none"> No movement Broken return spring Improper fit Tip not securely attached.

4 STEP 4 Leak Test

PROCEDURE	POSSIBLE CAUSES
1 Fit PIPETMAN® DIAMOND Tip. 2 Set volume at maximum (i.e., nominal volume). 3 Pre-rinse the tip by aspirating and dispensing water, several times. 4 Aspirate water. 5 Hold the pipette in the vertical position for 20 seconds. 6 For P2L to P200L, re-immersion in the test liquid; fluid level in tip should remain constant. Observe if a drop or a leak appears at the orifice of the tip for P1000L to P10mLL.	<ul style="list-style-type: none"> End of tip holder may be scratched/damaged (mechanical or chemical). Improper tip fit Use of non-Gilson tips Organic solvent, vapor pressure

CHECK THESE

Tip holder
Leak?

Tip
Leak?

5 STEP 5 Disassembly – Reassembly

DISASSEMBLY	REASSEMBLY
1 Eject the tip 2 Unclip ejector 3 Unscrew the connecting nut 4 Separate the handle from the bottom part 5 Remove the piston from the tip holder	To avoid losing or damaging fragile parts, reassemble the pipette immediately. Be sure to respect the correct order of parts: the O-ring should always be positioned before the seal guide.

CHECK THESE

Piston
Surface corroded, scratched, or damaged

Tip holder
Leak?

Tip
Leak?