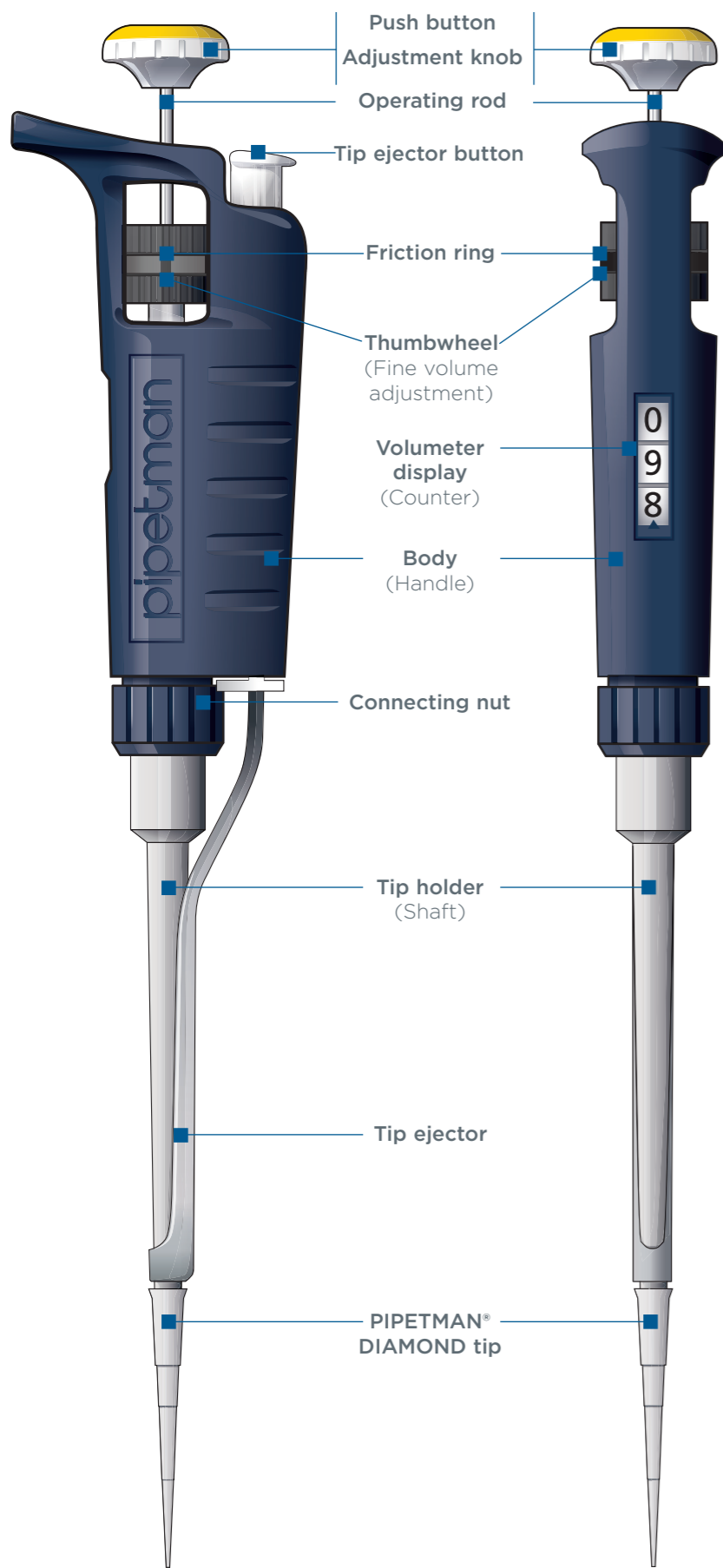




# pipetman®

## Two Minute Inspection



### 1 STEP 1 Check the Records

- ▶ Use the serial number to identify the pipette and to determine its age
- ▶ Check laboratory records for the last service date

**NOTE**

The updated line of PIPETMAN Classic is identified with an underlined serial number starting with **QG**.



| Letter | Year        | Letter | Month     |
|--------|-------------|--------|-----------|
| A      | 1984 / 2006 | A      | January   |
| B      | 1985 / 2007 | B      | February  |
| C      | 1986 / 2008 | C      | March     |
| D      | 1987 / 2009 | D      | April     |
| E      | 1988 / 2010 | E      | May       |
| G      | 1989 / 2011 | G      | June      |
| H      | 1990 / 2012 | H      | July      |
| J      | 1991 / 2013 | J      | August    |
| K      | 1992 / 2014 | K      | September |
| L      | 1993 / 2015 | L      | October   |
| M      | 1994 / 2016 | M      | November  |
| N      | 1995 / 2017 | N      | December  |
| P      | 1996 / 2018 |        |           |
| Q      | 1997 / 2019 |        |           |
| R      | 1998 / 2020 |        |           |
| S      | 1999 / 2021 |        |           |
| T      | 2000 / 2022 |        |           |
| U      | 2001 / 2023 |        |           |
| W      | 2002 / 2024 |        |           |
| X      | 2003 / 2025 |        |           |
| Y      | 2004 / 2026 |        |           |
| Z      | 2005 / 2027 |        |           |

| Before 1984 |      |                   |
|-------------|------|-------------------|
| G           | 80   | 12345             |
| Month       | Year | Production number |

| Jan. 1984 - Dec. 2005 |                   |       |
|-----------------------|-------------------|-------|
| G                     | 10369             | H     |
| Year                  | Production number | Month |

| After January 2006 |       |                   |
|--------------------|-------|-------------------|
| A                  | A     | 50001             |
| Year               | Month | Production number |

### 2 STEP 2 General Appearance

| CHECKED POINT  | POSSIBLE CAUSES   |
|--|---|
| <b>Operating rod</b><br>- bent?<br>- corroded?                 | <ul style="list-style-type: none"> <li>• Dropped</li> <li>• Lengthy immersion in corrosive liquid for decontamination</li> <li>• Lengthy exposure to corrosive vapors</li> </ul>        |
| <b>Volumeter</b><br>- dial alignment?<br>- clarity of numbers? | <ul style="list-style-type: none"> <li>• Autoclaving changed the appearance and function (the body must not be autoclaved)</li> </ul>   |
| <b>Tip ejector</b><br>- corroded?<br>- broken?                 | <ul style="list-style-type: none"> <li>• Lengthy immersion in corrosive liquid for decontamination</li> <li>• Lengthy exposure to corrosive vapors</li> </ul>                           |
| <b>Tip holder</b><br>- physical or chemical damage?            | <ul style="list-style-type: none"> <li>• Repeated blows</li> <li>• Lengthy immersion in corrosive liquid for decontamination</li> <li>• Lengthy exposure to corrosive vapors</li> </ul> |

### 3 STEP 3 Check Functions

| PROCEDURE  | POSSIBLE CAUSES  |
|--|--|
| <b>Large volume adjustment</b><br>1 Set volume at maximum (i.e., nominal volume) assessing the movement of the friction ring<br>2 Activate the push button to test movement during aspirate and dispense strokes | <ul style="list-style-type: none"> <li>• Irregular movement hitching, due to damage to the friction ring</li> <li>• No displacement bent operating rod</li> <li>• Jerky movement corroded, dirty, or scratched piston</li> </ul> |
| <b>Volumeter adjustment</b><br>1 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"> <li>• No adjustment autoclaving</li> <li>• Incorrect volume setting Misindexing; pipette adjustment screw has been incorrectly reassembled</li> </ul>   |
| <b>Tip ejection system</b><br>1 Fit tip and depress tip ejector button<br>2 Observe function of tip ejector<br>3 Disassemble tip ejector   | <ul style="list-style-type: none"> <li>• No movement broken return spring</li> <li>• Improper fit not tight enough</li> <li>• Can't disassemble corrosion</li> </ul>   |

### 4 STEP 4 Leak Test

| PROCEDURE   | POSSIBLE CAUSES  |
|---|--|
| 1 Fit PIPETMAN® DIAMOND tip<br>2 Set volume at maximum (i.e., nominal volume)<br>3 Pre-rinse by aspirating and dispensing water several times<br>4 Aspirate water<br>5 Hold the pipette in the vertical position for 20 seconds<br>6 For P2 to P200, re-immerses in the test liquid; fluid level in tip should remain constant<br>7 Observe if a drop or a leak appears at the orifice of the tip | <ul style="list-style-type: none"> <li>• End of tip holder may be scratched/damaged (mechanical or chemical)</li> <li>• Improper fit</li> <li>• Use of non Gilson tips</li> <li>• Organic solvent, vapor pressure</li> </ul> |
| <b>Check these</b><br><b>Tip holder</b><br>- leak ?<br><br><b>Tip</b><br>- leak ?   |  |

### 5 STEP 5 Disassembly - Reassembly

| DISASSEMBLY  | REASSEMBLY  |
|--|---|
| 1 Eject the tip<br>2 For PIPETMAN® Classic models manufactured before June 2019, with a blue tip ejector head, pull the tip ejector down<br>For the updated models, with an underlined serial number starting from QG and a white tip ejector head, push laterally the tip ejector to slide and remove it<br>3 Unscrew the connecting nut<br>4 Separate the handle from the bottom part<br>5 Remove the piston from the tip holder | To avoid losing or damaging fragile parts, reassemble the pipette immediately<br>Be sure to respect the correct order of parts: the piston seal should always be positioned before the O-ring |
| <b>Check these</b><br><b>Piston</b><br>surface corroded, scratched, or, damaged<br><br><b>Piston Seal and O-ring</b><br>damaged (mechanical damage or chemical attack)   | <p><b>NOTE</b> You should never disassemble the body (handle) of the pipette.</p>   |