

# Functional testing and maintenance of pipettes



## Pipette calibration & Maintenance

Calibration and maintenance is recommended in regular intervals, every 3 to 12 months. However, the interval may be adjusted to your individual requirements.

Immediate maintenance is required if the following situations occur:

- + Liquid has been aspirated into the pipette shaft
- + Pipette is dripping when aspirating aqueous solutions
- + Pipetting button does not move or any signs of damage
- + Functional testing with the PLT unit or calibration show irregularities



## Functional testing (leakage test)

The most frequent cause of inaccuracy in piston-operated pipettes is leakage. The BRAND pipette leak tester (PLT unit) for air displacement pipettes detects even the smallest leaks within seconds and can be used to confirm compatibility with tips from other manufacturers.



## Adjustment – Easy Calibration

If adjustment is necessary, it can be done quickly and easily using Easy Calibration technology. Easy Calibration is also suitable for setting the equipment for solutions of different density and viscosity, or specially-shaped pipette tips.



Quick and easy adjustment of the Transferpette® S scan QR-Code.



## Disassembly and cleaning

### Single-channel pipettes

1. Detach the pipette shaft (S) from the hand grip by unscrewing it.
2. Unscrew the upper part of the ejector unit (A) from the pipette shaft. Pull out the shaft (B, C and D) from the lower part of the ejector unit (E). Unscrew the piston unit (B). Remove seal with spring (C) (not possible on Transferpette® S 1 µl, 2.5 µl and 10 µl).
3. Clean the parts shown with isopropanol or soap solution, then rinse with distilled water. Dry the parts thoroughly (max. 120 °C/ 248 °F).
4. Grease piston and seal with a very thin layer of supplied silicone grease.
5. Reassemble the cooled parts in reverse order. Only handtighten the piston unit and the upper part of the ejector unit (A, B).

**Note:**  
The pipetting unit can be autoclaved (121 °C) for electronic pipettes and the entire device for manual pipettes.



### Multi-channel pipettes

1. To separate, pull the pipetting unit downward as far as possible, only then, turn it clockwise. After one revolution, the unit no longer needs to be pulled downward while turning.
2. Rotate both closures of the pipette housing cover by 90° (e.g. using a coin) and pull off the pipette housing.
3. After removing the shaft (using the installation tool M), push the piston unit all the way down. The seal is located either in the shaft or on the piston. Remove and inspect the seal and clean or change as necessary. If required, re-grease the piston with the supplied grease.
4. Slide the seal onto the piston with the flat side upwards. Mount and tighten the cleaned or new shaft using the installation tool.
5. Reassemble the pipetting unit. The pipetting unit must be screwed onto the hand grip in a counter-clockwise direction until it clicks into place. Check the instrument for leaks.

