

Cleaning SOP

1. Open the cell assembly, tune the button to align the red line with the Marker.

Only positions “locked” or “open” are allowed.

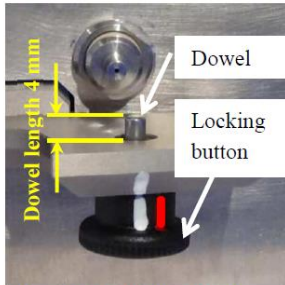
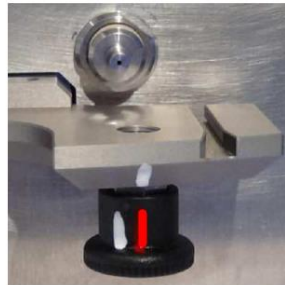


Fig. 4-2 Locking button
Position “locked”



Position “open”



Undefined, not acceptable

2. Illustration of the inside structure of the Cell assembly.

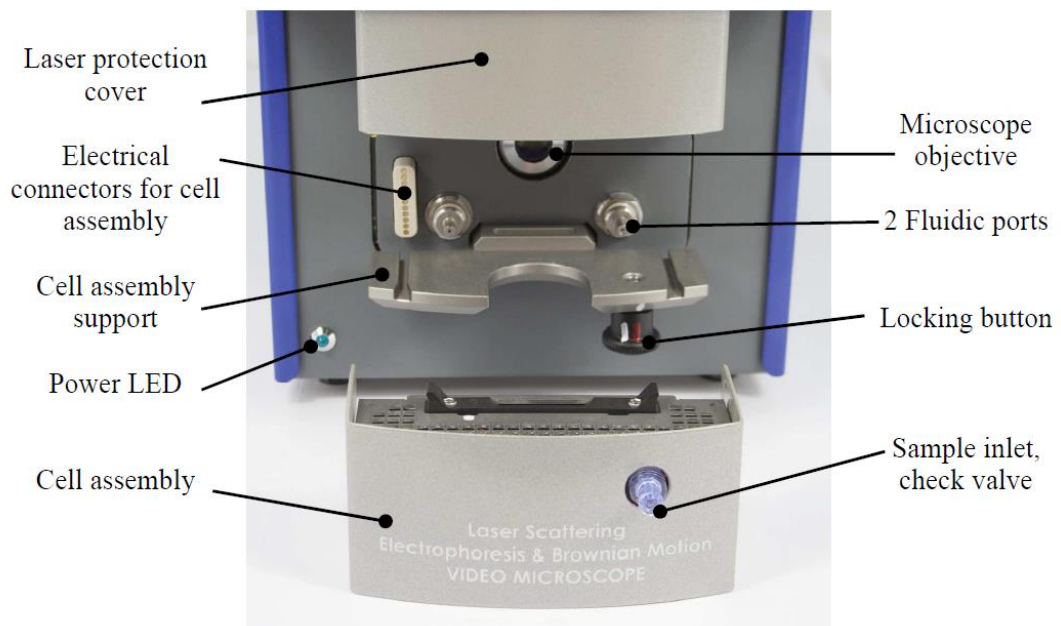


Fig. 3-3: Front panel.

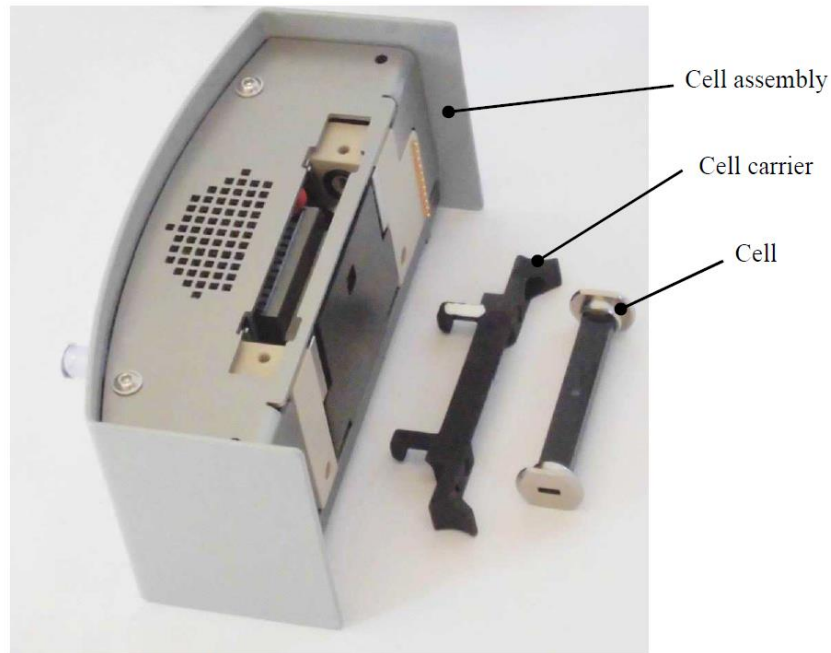


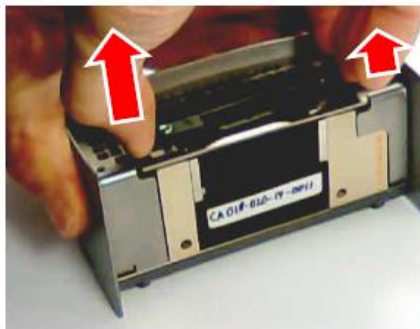
Fig. 4-1: Cell assembly, cell carrier and cell.

3. Remove cell carrier from cell assembly. Reminder: DO never touch the transparent optical windows in the middle part of the cell via the optical windows. Any contamination of the windows may lead to poor image quality.

1. Put cell carrier on a flat even surface.
2. Remove cell carrier from cell assembly.
 - a. Unscrew the two M3 screws (length = 6 mm) with the allen wrench, size 2.5 mm (supply box)



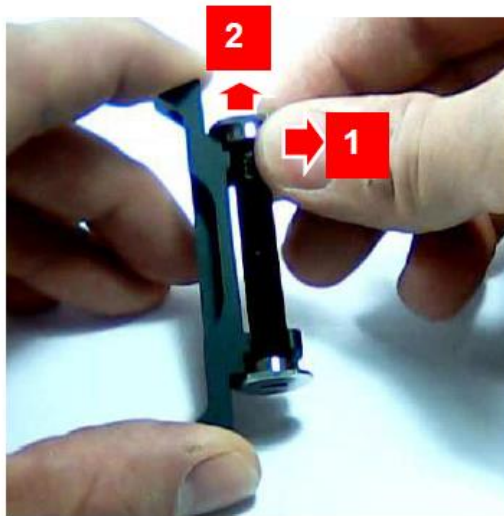
- b. Pull out the cell carrier using the handles, alternating left and right handle



d. Place cell carrier beside cell assembly



3. Remove cell from cell carrier
 - a. Open first clamp with thumb and push cell on the flange with index finger gently towards you with



Caution

Do never touch the transparent optical windows in the middle part of the cell! Microscope and laser access the cell via the optical windows. Any contamination of the windows may lead to poor image quality.

4. Clean the cell by using 20% acetone in water

For cell cleaning prepare:

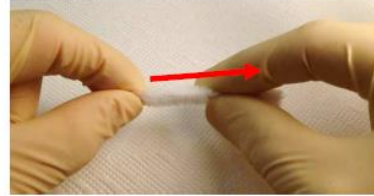
- Safety goggles
- Gloves
- Cell
- Soft brush (supply box)
- Beaker or falcon tube (V = 50 mL) for cleaning solution
- Cleaning solution, e.g. 20% acetone in water
- Distilled water for rinsing
- Paper tissues
- Optical lens paper (supply box)



Caution

Straighten soft brush before use!
Do not touch outside of cell with soft brush!
The wire ends of the brush may damage the cell surface and could result in irreversal damage of the cell and deteriorated image quality

1. Straighten soft brush



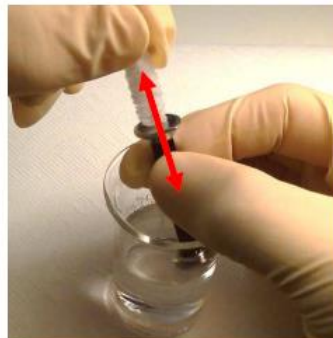
2. Immerse soft brush in cleaning solution



3. Clean cell in ca. 50 mL cleaning solution
 - a. Gently insert wetted soft brush in cell axis



- b. Wipe inner surface by moving soft brush in alternating directions
- c. Turn cell 180°
- d. Repeat once starting from a.)



5. Dry cell on paper tissue

6. Clean outside of cell

- a. Clean flanges of cell with a tissue wetted with mixture of acetone/water (20:80)



- b. Put 100% acetone dropwise on lens tissue



- c. Clean optical windows lens tissue, acetone should evaporate quickly



- d. Visual check for successful cleaning

7. If applicable, dry inside of cell with oil-free and particle-free compressed air.

5. Assembly of cell and cell carrier into cell assembly

4.4.3 Assembly of cell and cell carrier into cell assembly

1. Place cell assembly and cell carrier with cell beside each other
2. Verify correct fit of O-rings on each side. The O-rings are inside the cell assembly.
If necessary, adjust O-rings with an edgeless stick.



Correct



Wrong

3. Check orientation of cell carrier, as guide cell assembly and cell carrier are marked



4. Press cell carrier gently down, using thumb and index finger, alternating forces left and right



5. Place two M3 screws (length 5 mm)



6. Tighten screws with the allen wrench size 2.5 mm (supply box).

