

Replacing the Aperture

This procedure outlines the steps necessary to replace the aperture assembly in the ACQUITY PDA^a.

The Acquity PDA detector aperture slit is replaceable only as a complete assembly. It is located on the underside of the optics bench.

NOTE: Except where noted, the term “ACQUITY PDA Detector” refers to two detectors:

- ACQUITY UPLC Photodiode Array (PDA) Detector
- ACQUITY UPLC PDA Extended Wavelength (e λ , or eLambda) Detector

Parts Required

Table 1: Parts Required

Part Number	Description	Quantity
700002780	Aperture Holder Assy (PDA) (100 μ m)	1
700003770	Aperture Holder Assy (PDA e λ) (50 μ m)	1

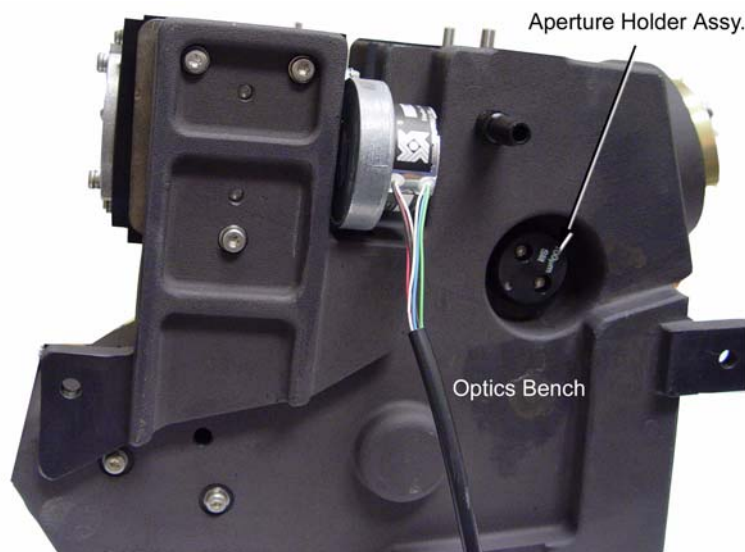


Figure 1 - Location of Aperture Holder Assy.

NOTE: Some of the illustrations show only one type of PDA detector. However, the physical differences between the PDA detector and PDA e λ detector are insignificant for this procedure.

a. To be certain you have the latest version of this procedure, please visit the Waters Support Center at Waters.com.

Tools/Materials Required

- T10 Torx screwdriver
- T20 Torx screwdriver
- *Replacing the Lamp* procedure
- *Replacing the Flow Cell* procedure
- *Replacing the Optics Bench* procedure

Removing the Aperture

1. Power off the detector, and then unplug the power connector.
2. Remove the two T20 Torx screws that secure the filler panel bracket to the rear of the chassis. Then, slide the filler panel off the two pin guides at the front of the unit.
3. Remove the detector's cover by removing two T20 Torx screws on each side of the unit.
4. Remove the lamp following the *Replacing the Lamp* procedure and place it in a safe place.
5. Remove the flow cell following the *Replacing the Flow Cell* procedure and place it in a safe place.
6. Remove the plenum after loosening the captive screw that secures it to the chassis (Figure 2).

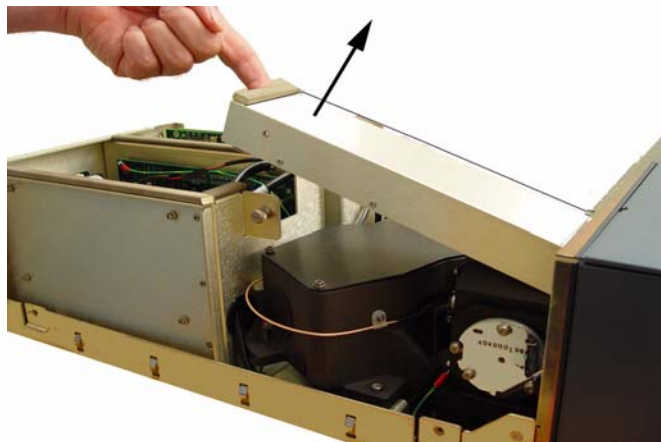


Figure 2 - Removing Plenum

7. Remove the four T20 Torx screws (two on each side) that secure the front panel/bezel assembly to the chassis (Figure 3).

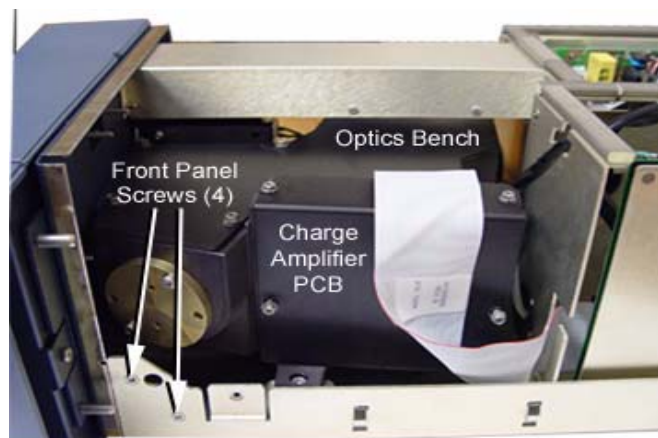


Figure 3 - Front Panel Screws

8. Carefully move the front panel/bezel assembly aside to gain access to the optics bench.
9. Remove the optics bench assembly following the steps in the *Replacing the Optics Bench* procedure.
10. Using a T10 Torx screwdriver, remove the two screws that secure the aperture to the underside of the optics bench (Figure 4).
11. Pull the aperture assembly from the optics bench.

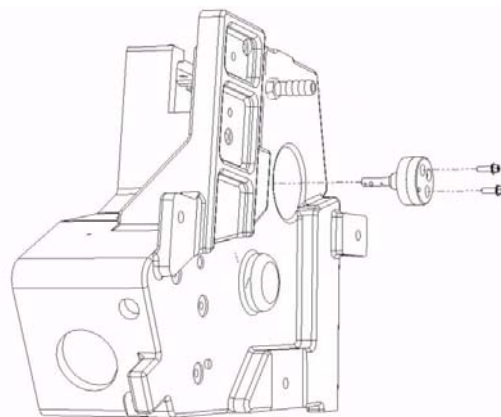


Figure 4 - Removing the Aperture Holder Assembly

Installing the Aperture

1. Orient the new aperture assembly onto the alignment pin and secure it with the two T10 Torx screws.
2. Reinstall the optics bench assembly.
3. Slide the front panel/bezel assembly into the chassis and secure it with four T20 Torx screws (two screws on each side).
4. Replace the plenum.
5. Replace the flow cell.
6. Replace the lamp.
7. Replace the top cover and secure it with the four T20 Torx screws (two screws on each side).
8. Replace the filler panel by sliding the panel over the two pin guides at the front of the chassis. Secure the filler panel bracket to the rear of the chassis using the two T20 Torx screws.
9. Plug in and then power on the detector.
10. Check the status of the LEDs. The power and lamp LEDs will show steady green indicating a successful power-up.
11. Verify calibration.