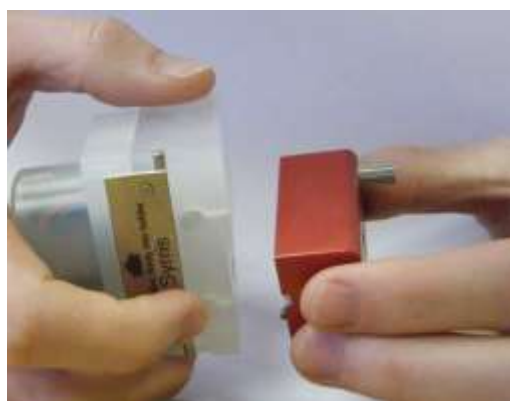


Asia Pump Technical Note – Removing/Replacing Valves and Syringes

1 Removing Pressure Sensors and Valves

These can be removed and added/replaced quickly and easily*. The Pressure Sensor and Valve Modules should be removed together. Pull Pressure Sensor and Valve Module together. Both will come away from the Asia Pump with a firm ‘pull’ (see image below left).



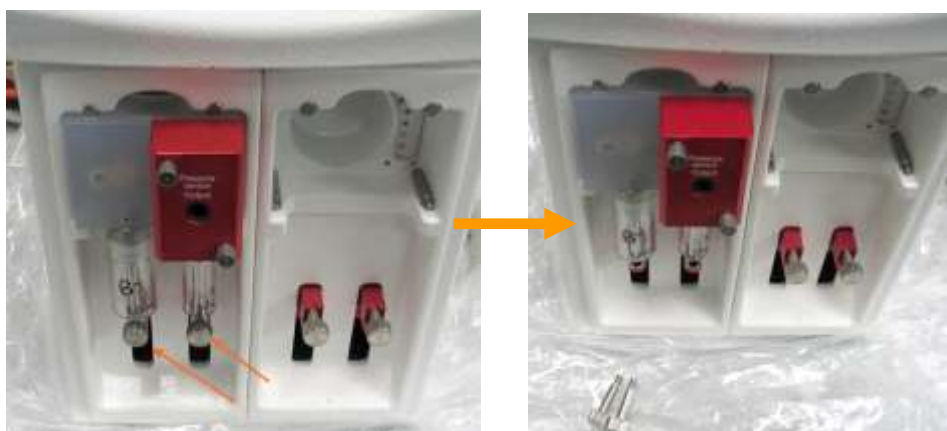
To remove the Pressure Sensor Module from the Valve, unscrew the two connectors on the Pressure Sensor and when loose, pull away from Valve (see above right).

*Please note that components should only be removed when the Asia Pump is switched OFF.

2 Removing/Replacing Syringes

To remove the syringe(s) from the Asia Pump, select (P1) Pump 1 or (P2) Pump 2 from the menu, then select FILL. This will drive both syringes down to the bottom.

Loosen and remove the thumbscrews holding the syringe plunger at the bottom of the syringes (shown below).



Switch off the Asia Pump and then pull away the entire ‘valve assembly, pressure sensor and syringes’ block from the pump.



Unscrew and remove the pressure sensor. Take note of the grub screws which lock the syringe thread in place.



Use a metric 1.5mm Allen/Hex key to remove/loosen the grub screws. Under no circumstances, do not try to screw/unscrew syringes with the small grub screw in place. With the grub screws removed, the syringes should unscrew easily and can be removed. When inserting new syringes, please ensure to take care when screwing the syringe into the PCTFE valve to avoid cross-threading the valve. If any resistance is felt, remove the syringe and re-thread carefully.

Please also ensure not to over tighten the syringes. These should be finger tight. To maintain maximum chemical compatibility, the seal that the syringe makes with the PCTFE valve block is with the PTFE spacer which is situated at the top of the syringe. An example of a syringe which has been over tightened is shown below (syringe A). A correctly used syringe is shown as syringe B.



If the syringe has been worn (syringe A), a small PTFE washer may be inserted into the valve port, although it is recommended to purchase a replacement syringe at this point.