MODULE 6 TRAINING







Replacing components

Front Line Spares

Front line spares description	Part Code
Grundfos UPM3 Pump - Head and Block inc automatic airvent	HI29337005
Honeywell VC series DIVERTER ACTUATOR	HI29314005
Honeywell DIVERTER CARTRIDGE M35X1,5	HI29313005
Frese PICV Stepper ACTUATOR	HI29330005
Frese compact OEM cartridge	HI29329005
Pressure switch 0.7bar	HI29308005
Shock arrester (mechanical assembly, prevents water hammer)	HI29325003
Heating Plate Heat Exchanger x 18	HI28559005
DHWS Plate Heat Exchanger x 42	HI29342005
Filling group	HI2FL12041510
Flow meter switch	HI29338005
Pressure gauge	HI29339005
Zilmet Expansion Vessel	HI29340005



Replace Pump

 To remove the pump, first disconnect the power cable using a small flat face screwdriver to release the clip.





- Using a suitably sized spanner, loosen the two nuts holding the pump in place
- The pump may then be removed





Replace Diverter Actuator

 To remove the diverter actuator, first remove the power cable using the clip on the side as shown





- To loosen the diverter actuator from the brass block, push in the metal clip shown
- The diverter will then twist and pull away from the brass block revealing the diverter cartridge









Replace Diverter Cartridge

*Special tool required to remove the diverter actuator cartridge

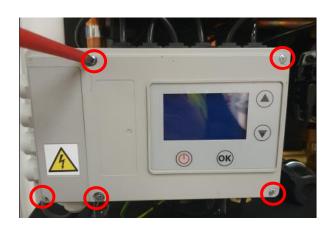
Replace PICV Actuator



- Isolate the power supply to the HIU
- Remove the actuator head by unscrewing the brass nut (pictured)



- Once the PICV Actuator is removed the cable will need to be disconnected, remove the front cover to the HIU PID using the 5 screws as shown
- Locate the PICV Actuator connection plug (Top Right) and release this from the PCB





Replace PICV Frese cartridge

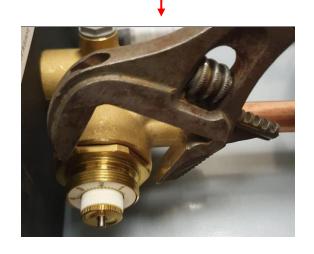




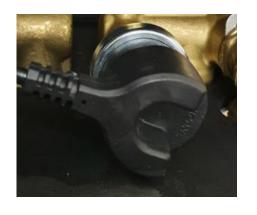
 To remove the PICV actuator cartridge, first remove the actuator head by unscrewing the brass nut.

- Use a suitably sized spanner to loosen the cartridge from the brass block
- Once this has been loosened the cartridge can be pulled from the brass body.
- Reverse the process for installation.





Replace Pressure Switch



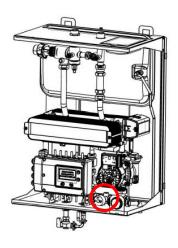


- Locate the pressure switch (Bottom of the HIU next to the SRV)
- Remove the retaining clip on the righthand side as shown
- Once the retaining clip is removed the pressure switch can be pulled away from the brass body as shown below





- Once the clip has been removed, the pressure switch pulls away from the brass block
- The pressure switch may also be unplugged from the cable by pulling the socket away from the component



Replace Shock Arrester



- Remove the screws from the bottom of the controller PID bracket to allow access to the shock arrester.
- The PID can be pulled across to the left-hand side

- Once there is access, use a suitably sized spanner to loosen both nuts holding the shock arrester in place.
- The shock arrester can now be removed
- Reverse the process for re installation.





Replace DHWS Plate Heat Exchanger

- Pull back insulation to access x2 bolts securing the PHE bracket as shown
- Once the bracket is removed the DHW PHE can be removed

NOTE: The PHE will still have water inside, turn upside down ASAP to avoid water damage to PCB







Replace Heating Plate Heat Exchanger

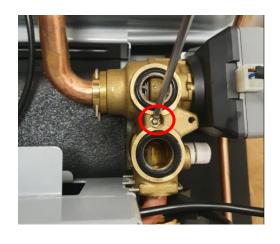
- Pull back insulation to access x2 bolts securing the PHE bracket as shown. (an allen Key is required to loosen these bolts)
- Lift the bracket and remove the DHW PHE, once the bolts are removed, this is lifted away from the HIU





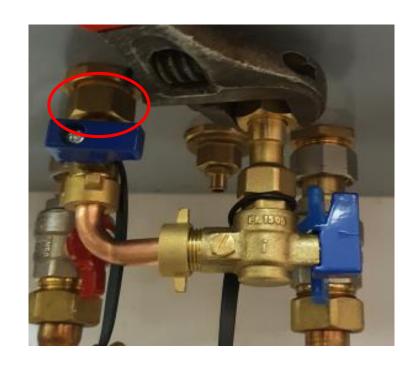
NOTE: The PHE will still have water inside, turn upside down ASAP

- To access the Heating PHE, note the securing bolts pictured which are hidden until DHW PHE is removed.
- There is one bolt either side on both brass blocks.
- Once these are both removed, it is possible to slide the Heating PHE out from the left-hand side of the HIU
- Reverse this process for re installation





Replace Filling Group





- To remove the filling group, ensure the cold main and secondary heating are both drained down and isolated.
- Once isolated loosen both nuts as shown, the filling group may then be removed from the HIU

Replace Flow Meter Switch



- Remove the screws from the bottom of the controller PID bracket to allow access to the flow sensor.
- The PID can be pulled across to the left-hand side

 Disconnect the power supply to the flow sensor

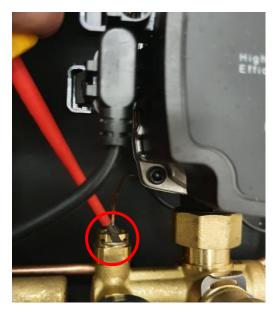






- Once there is access, use a suitably sized spanner to loosen both nuts holding the flow sensor in place.
- The flow sensor can now be removed
- Reverse the process for re-installation.

Replace Pressure Gauge



 To remove the pressure gauge, first remove the retaining clip holding in the pressure gauge piping.



- Once the pipe is removed from the brass block press in the two clips either side of the pressure gauge face as shown
- Once the gauge is no longer held into the HIU, the gauge and the pipe can be pulled through the gauge bracket

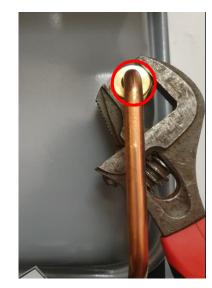


Replace Zilmet Expansion Vessel

- Isolate and drain down the primary flow and return (Within the HIU)
- Drain down the secondary flow and return (Within the HIU)
- Loosen the two nuts pictured and the expansion vessel connection which is located at the top of the HIU









- Remove the screws holding the expansion vessel support bracket in position (x4, this is located directly above the PHE's fixed to the back of the unit)
- Once the bracket is loose/removed pull forward the primary flow and return pipes (these are on swivels)
- Now this is all complete the vessel can be pulled out from the side as shown.
- Reverse this process for re-installation.

