Water Supply Valve Maintenance (H4)

HCL

Service Procedure **004**

Revised: 07/29/2014

To service the Water Supply Valve (H4) Seat and Valve Body Seal in the ANKOM^{HCL}, follow the steps below.

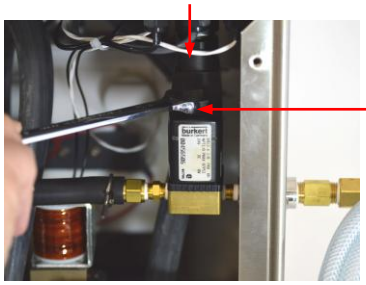
1. Remove the back panel of the instrument.

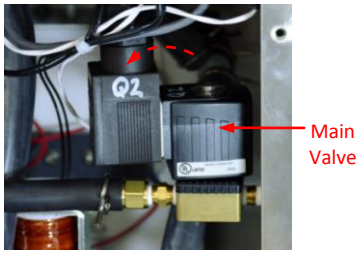
a. Using a 1/8" Allen Wrench, remove the six screws from the back of the instrument and set them aside with the back panel for later use.

2. Remove the Valve nut.

a. Using a 9/16" or adjustable wrench, remove the Valve nut and set it aside for later use.

b. Rotate the Valve Plug around to the left side of the Main Valve for easy accessibility.

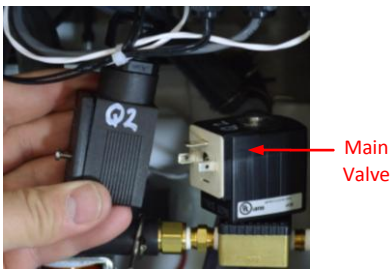




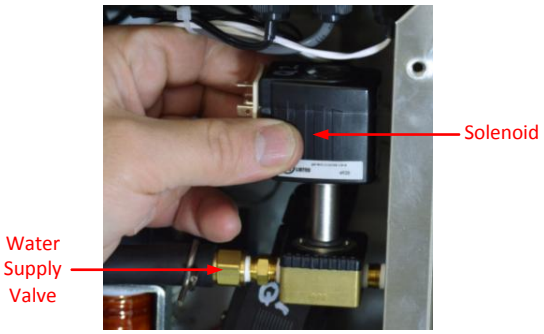
3. Loosen the screw on the Valve Plug.

a. Using a flathead screwdriver, loosen the Valve Plug screw and set the screw aside for later use.

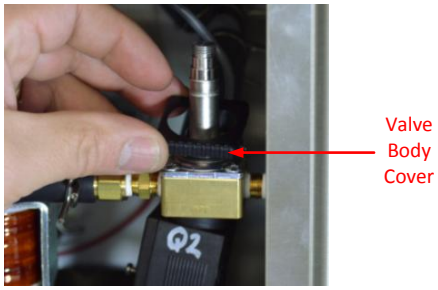
b. Disconnect the Valve Plug from the Main Valve.



4. Remove the Solenoid from the Water Supply Valve.

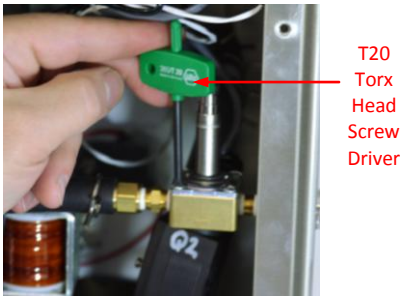


5. Remove the valve body cover from the valve guide tube and set the cover aside.



6. Remove the four screws on the valve guide tube.

Using the T20 torx head screw driver, ANKOM part #Z276, sent with the instrument, unscrew the four screws that hold the valve guide tube in place and set them aside for later. Hold the valve guide tube so that it does not fall once the screws have been removed.



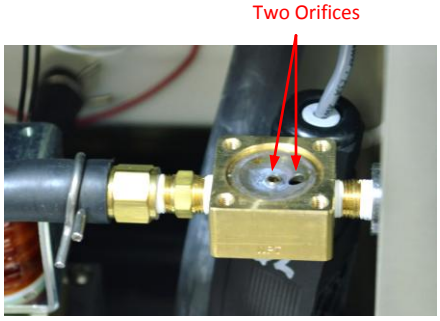
7. Carefully remove the valve guide tube.

8. Inspect the brass valve body.

a. Check the brass valve body for debris, corrosion, mineral deposits, etc. Ensure that nothing is blocking the two orifices and clean them with air.

If the valve appears clean, move on to step #10.

b. If there is debris or corrosion, use a Scotch-Brite™ (or equivalent) fine abrasive pad to scrub the corrosion off of the brass valve body and clean them with air.



9. Replace the necessary parts of the valve guide tube and valve plunger assembly.

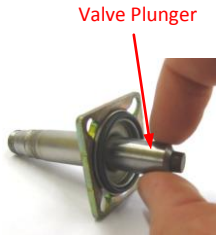
a. Carefully take the valve plunger, ANKOM part #Z315, out of the valve guide tube and remove the valve spring from inside the plunger. If the valve spring is corroded or becomes lost replace it with ANKOM part #Z135.

b. Peel off the valve seat which is attached to the plunger end.

c. Replace the new valve seat, ANKOM part #Z132, on the end of the valve plunger assembly.

d. Check the valve body seal, ANKOM part #Z133 - Viton O-ring, around the inside of the valve guide tube for swelling and tears.

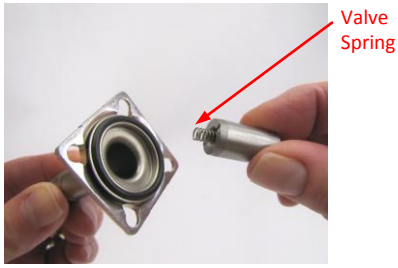
e. If needed, replace the valve body seal.



10. Reinsert the valve plunger assembly into the valve guide tube.

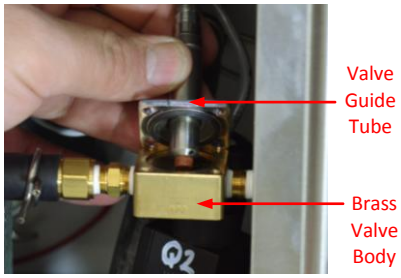
a. Place the valve spring back inside the valve plunger.

b. Insert the valve plunger, valve spring side first, into the valve guide tube.



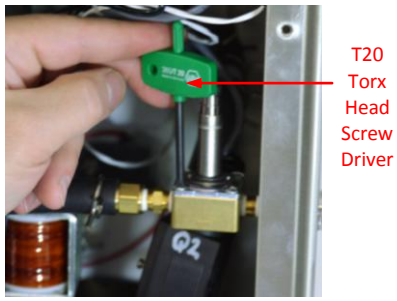
11. Reinstall the valve guide tube.

Carefully reinstall the valve guide tube in place against the brass valve body, so as not to drop any pieces from the valve plunger assembly inside, lining up the four holes for the screws.

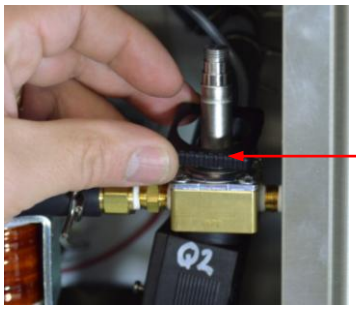


12. Tighten the four screws in place on the brass valve body.

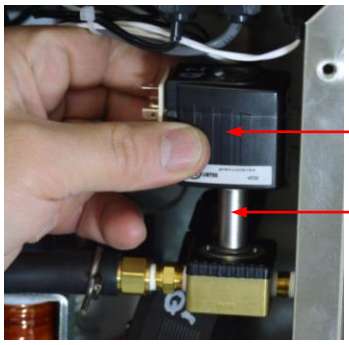
Use the T20 torx head screw driver, ANKOM part #Z276, to screw the four screws back on. Insert the screws diagonally across from each other to even and center the valve guide tube on the brass valve body.



13. Reinstall the valve body cover over the valve guide tube.



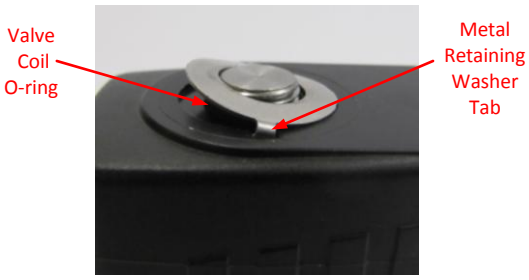
14. Reinstall the Solenoid over the valve guide tube.



15. Ensure the metal retaining washer on top of the Solenoid remains secure.

a. Ensure that the black valve coil o-ring beneath the metal retaining washer is securely in place on the solenoid (around the end of the valve guide tube).

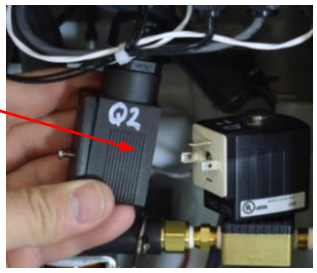
b. Line up and push the two tabs on the Metal Retaining Washer back into the two holes on the valve coil.

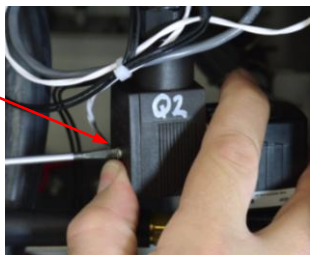


16. Reinstall the Valve Plug.

a. Reconnect the Valve Plug to the Main Valve.

b. Using a flathead screwdriver, tighten the Valve Plug screw.

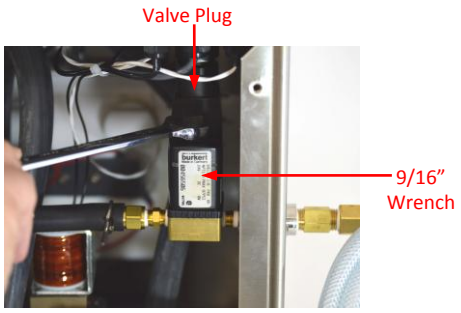




17. Secure the Valve nut.

a. Rotate the Valve Plug around to the back side of the Main Valve for easy accessibility.

b. Using a 9/16” or adjustable wrench, tighten the Valve nut.



18. Reinstall the back panel of the instrument.

Using a 1/8” Allen Wrench, secure the six screws to the back of the instrument.