

Syringe kit installation Instructions for the 900-Series LC.

Remove 100ul syringe and associated tubing

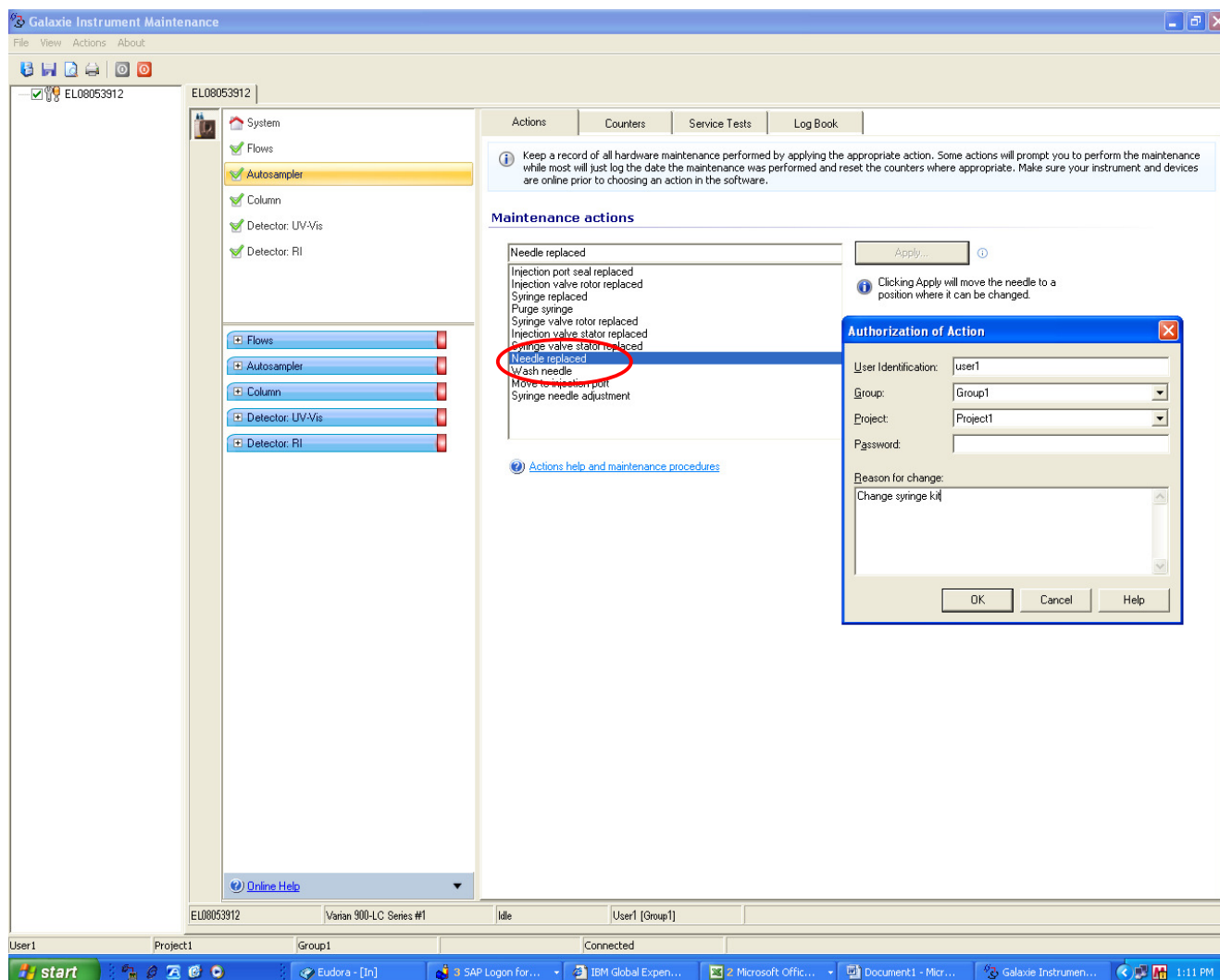


Figure 1: Needle Replace position in IMS

1. Open Galaxie software and move the needle to the 'needle replace' position (See Fig. 1). Then switch off the instrument.
2. Remove the right hand door, the top storage tray and the front panel covering the auto sampler. When fitted, the column oven will also need to be removed.
3. WARNING: A potential hazard exists when the needle is in the 'needle replace' position.



When safety covers are removed, there is easy access to the sharp tip. The needle tip may puncture fingers or hands. Keep fingers and hands clear of the needle tip.

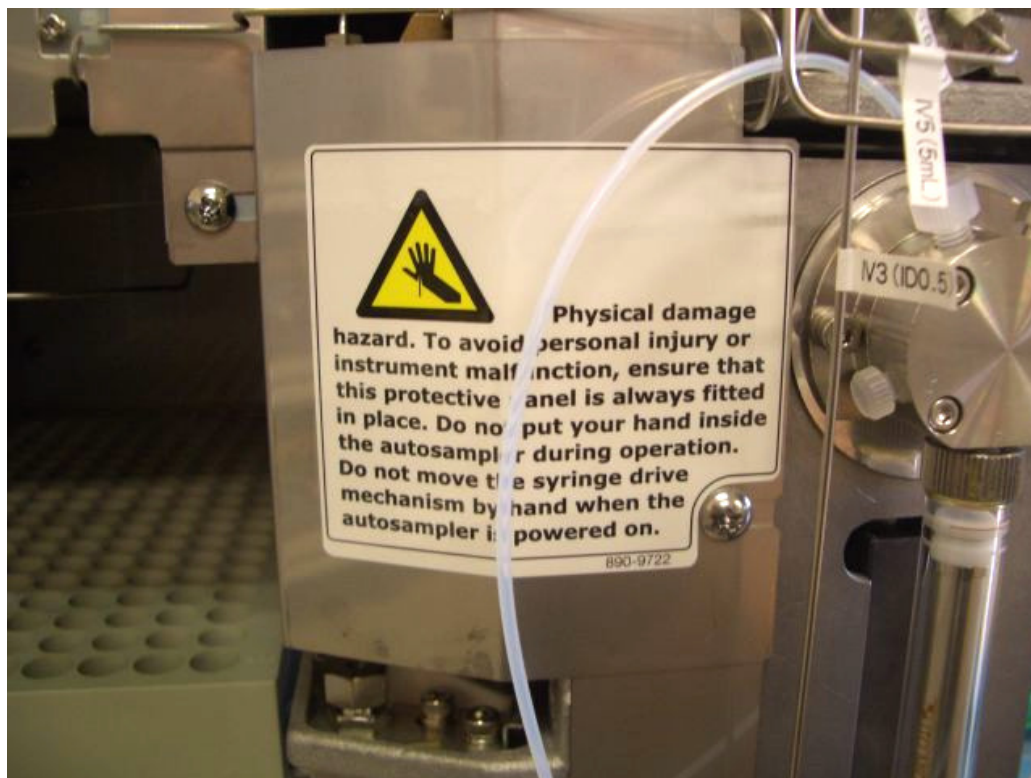


Figure 2: Autosampler Protective Cover

4. Loosen the screws and remove the protective cover from the front of the auto sampler (*Fig. 2*) by sliding the cover to the left.

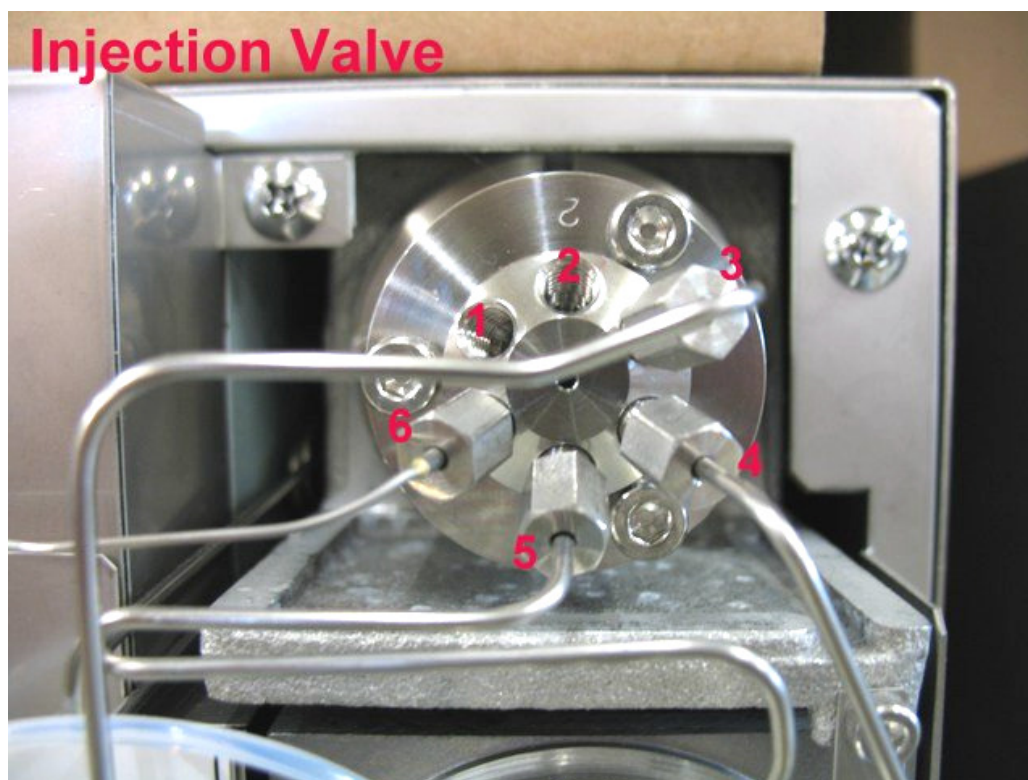


Figure 3: Injection Valve Positions on the Autosampler

5. Disconnect fitting from position numbers **3**, **5** and **6** on the injection valve (*Fig. 3*).



Figure 4: Loosening the Bottom Fittings on the injection port

6. Loosen fitting from beneath the injector port (*Fig. 4*). Once loose, remove the stainless steel plumbing from the assembly.

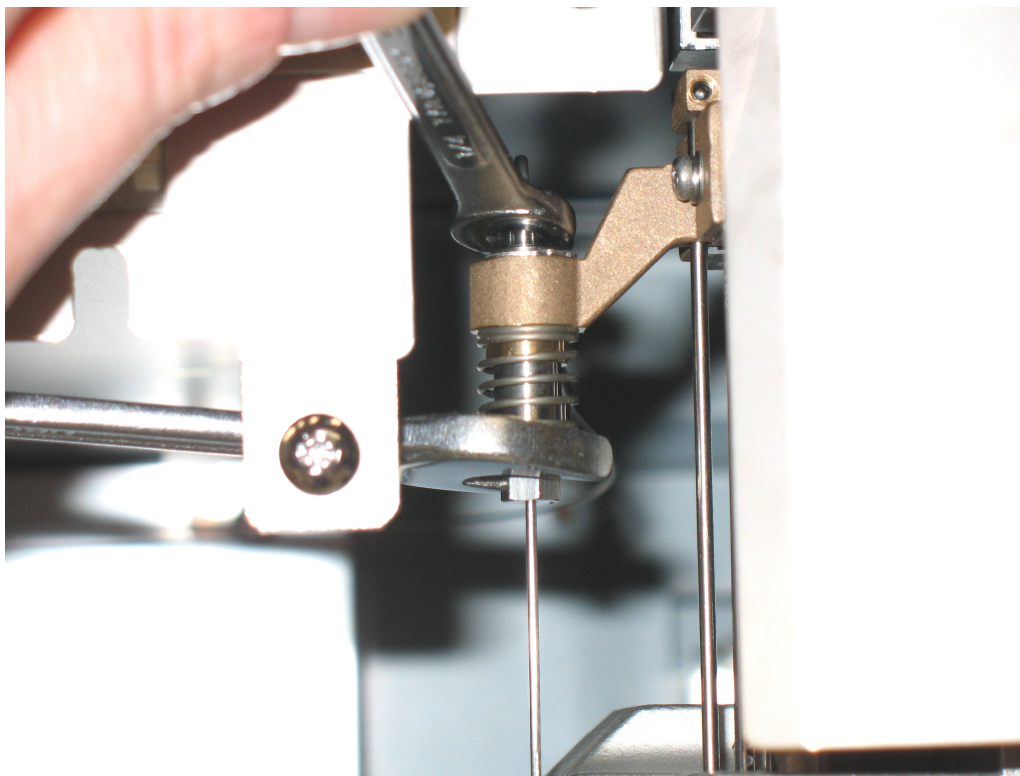


Figure 5: Loosening the Needle top fitting

7. Loosen the needle top fitting (*Fig. 5*) whilst using a 12mm spanner to hold the lower fitting. (Not the needle itself). Once the top fitting is loose, remove the stainless steel plumbing from the assembly.

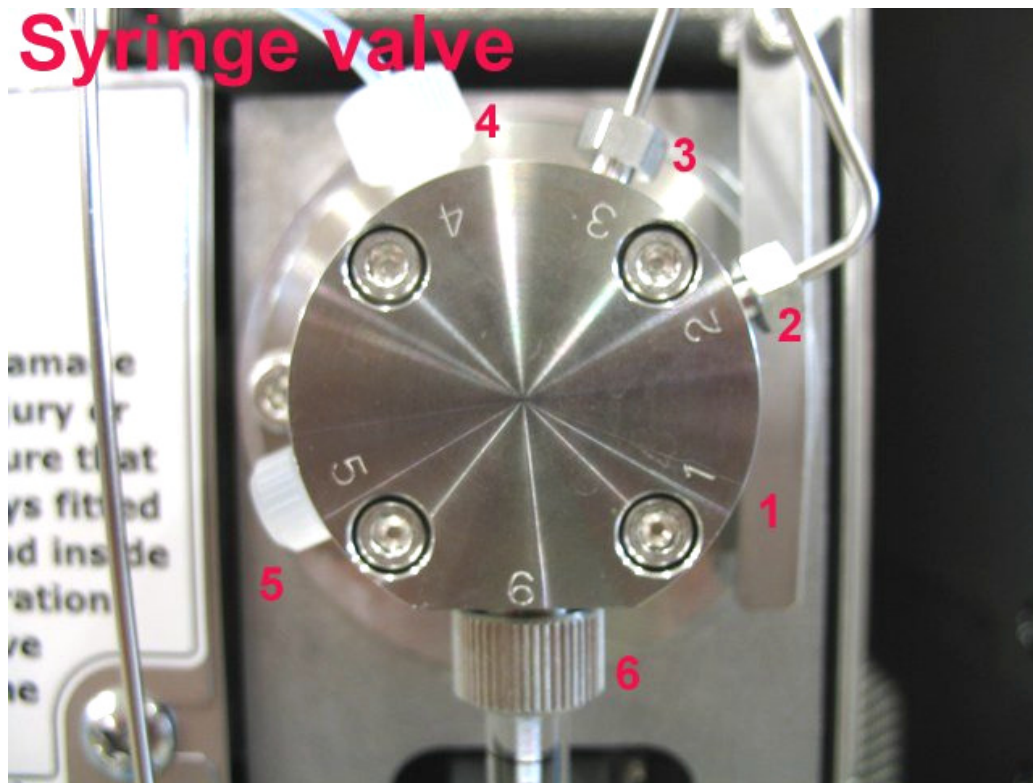


Figure 6: Fitting Positions on the Syringe Valve

8. Loosen the fitting from position **3** on the syringe valve (*Fig. 6*). Once loose, remove the stainless steel plumbing from the assembly.

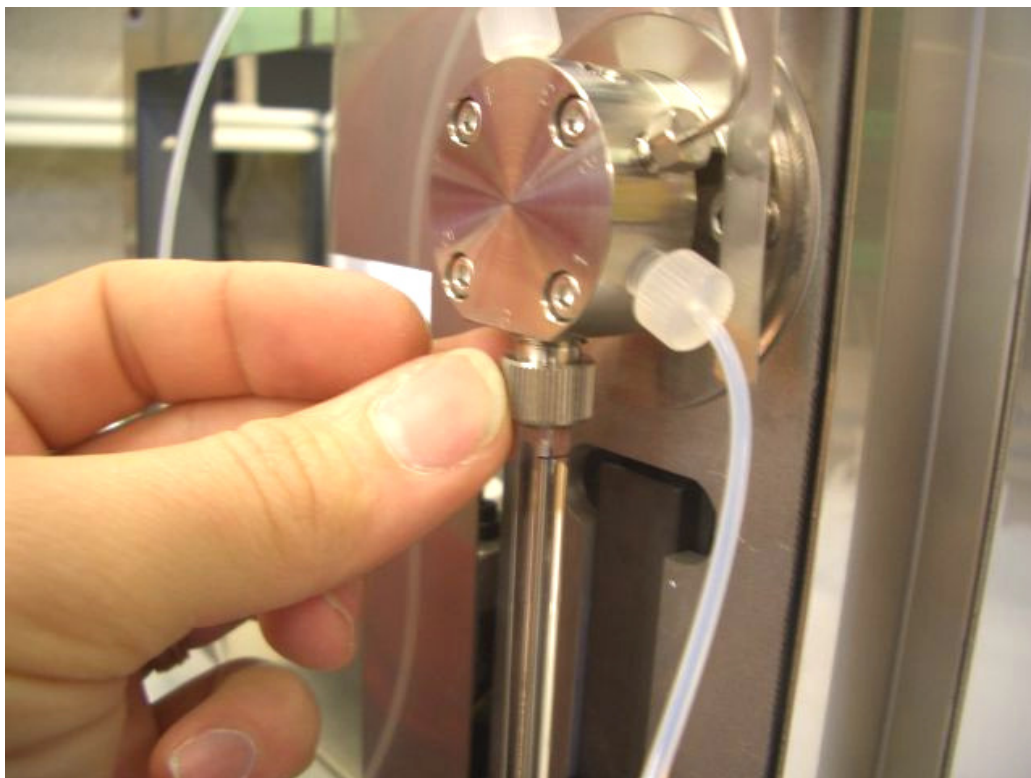


Figure 7: Top nut on the Syringe

9. Undo the nut at the top of the 100uL syringe (*Fig. 7*). To remove the syringe, slide the carriage down and pull the syringe forward to release. Try to keep the syringe vertical when removing.
10. Unpack the 5mL syringe and use the reverse procedure to install.

Prepare the replacement plumbing and fit to the Auto sampler

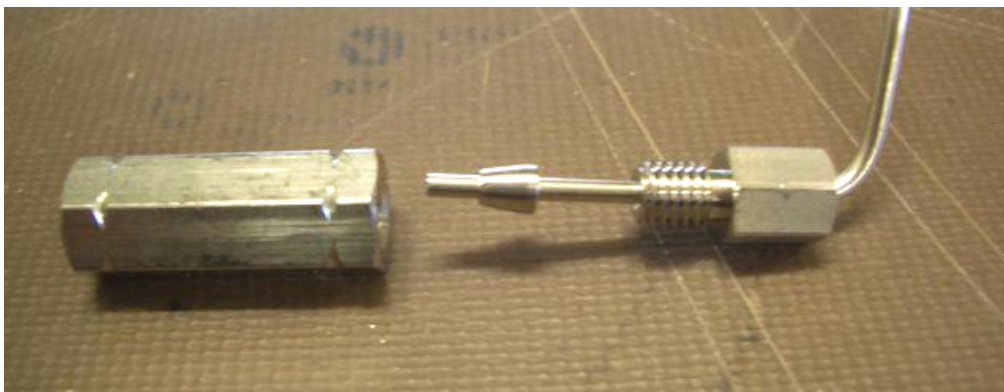


Figure 8: Ferrule Seating Tool (union)

1. Use the pictured Ferrule Seating tool (*Fig. 8*) for crimping the ferrule's to the tubing. Make sure that the tubing is held firmly all the way into the tool before tightening **3/4** of a turn from finger-tight.

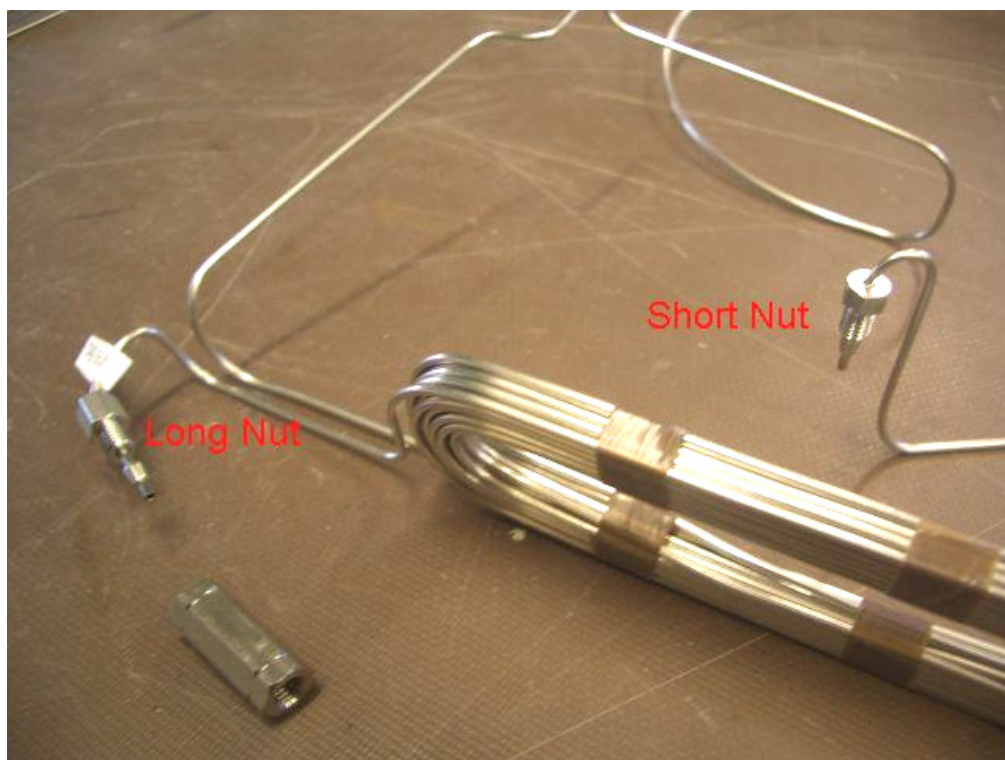


Figure 9: Different nuts on the Sample Coil and Connecting Coil

2. Note that two different nuts (*Fig. 9*) are supplied with the Sample Coil and the Connecting Coil. The longer nut is fitted to the Injector Valve (top fitting) end of the tubing and the short nut is fitted to the back of the injector needle.

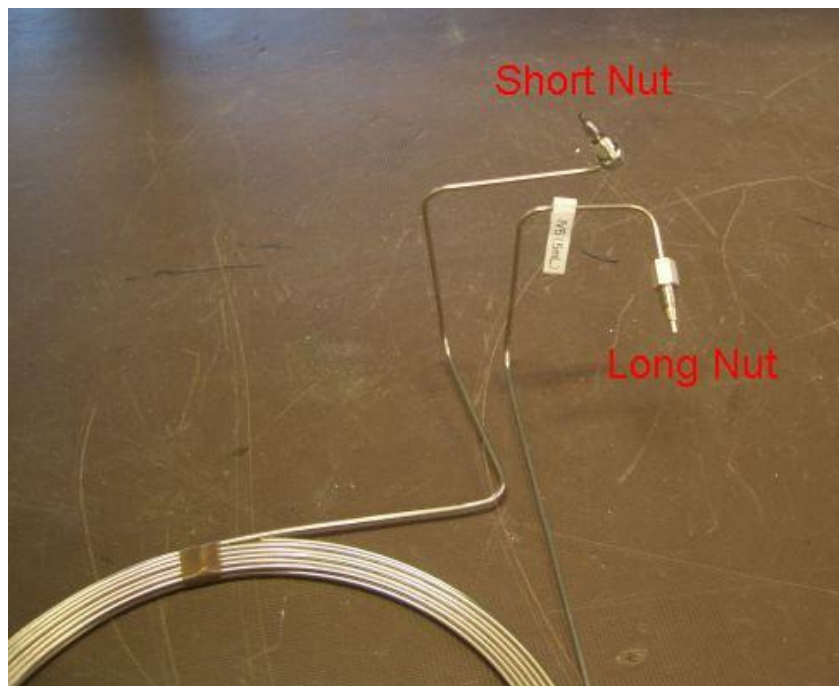
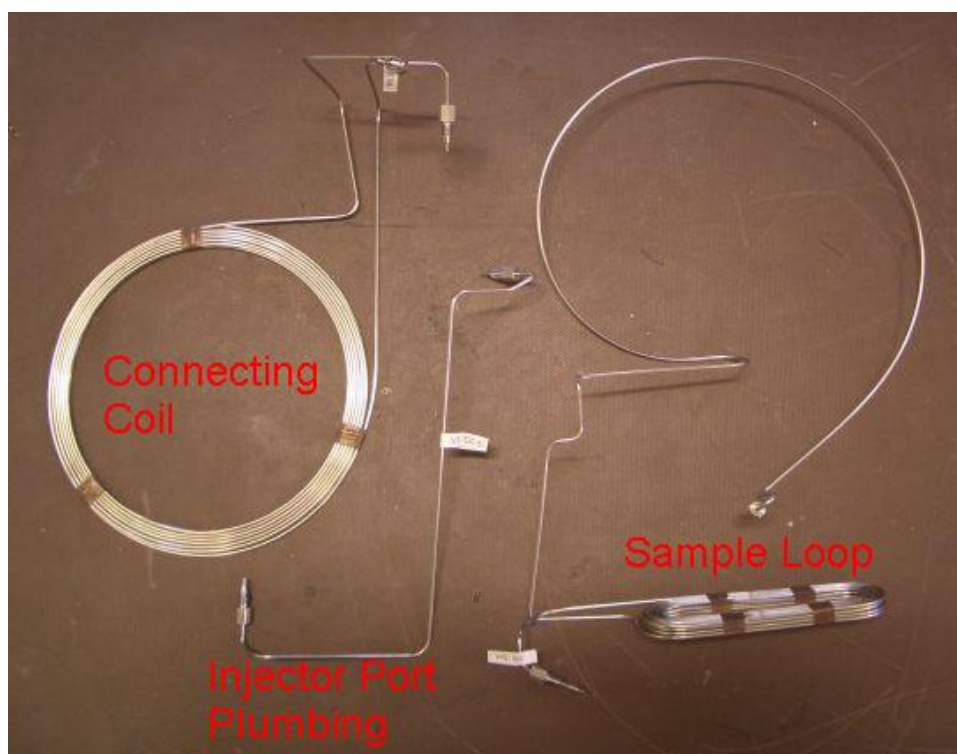


Figure 10: Orientation of the Different Sized Nuts

3. Note again the different Nuts and their orientation (*Fig.10*) on the Connecting Coil.



4. The tubing is now ready to be fitted to the auto sampler.

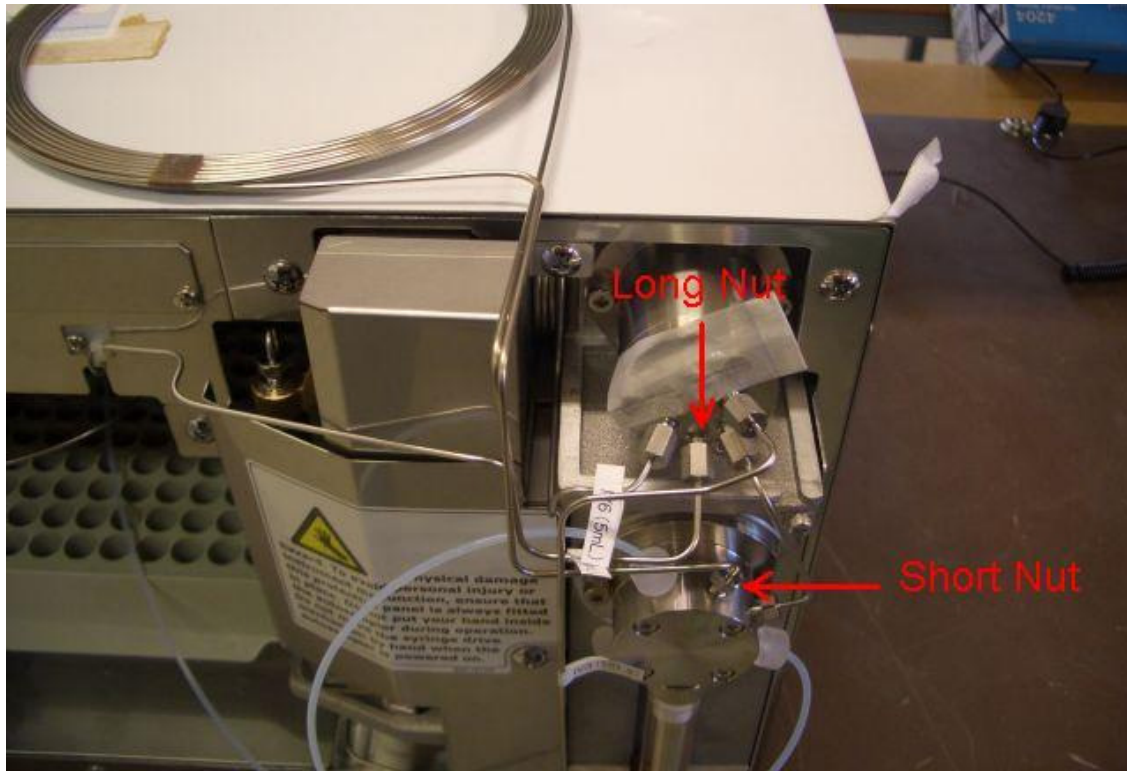


Figure 11: Long Nut and Short Nut Connection to the Injector top

5. Fit the Connecting Coil in place making sure to fit the Long Nut to position **5** on the Injector (top) Valve. Fit the Shorter Nut to position **3** on the Syringe (bottom) Valve (*Fig. 11*).

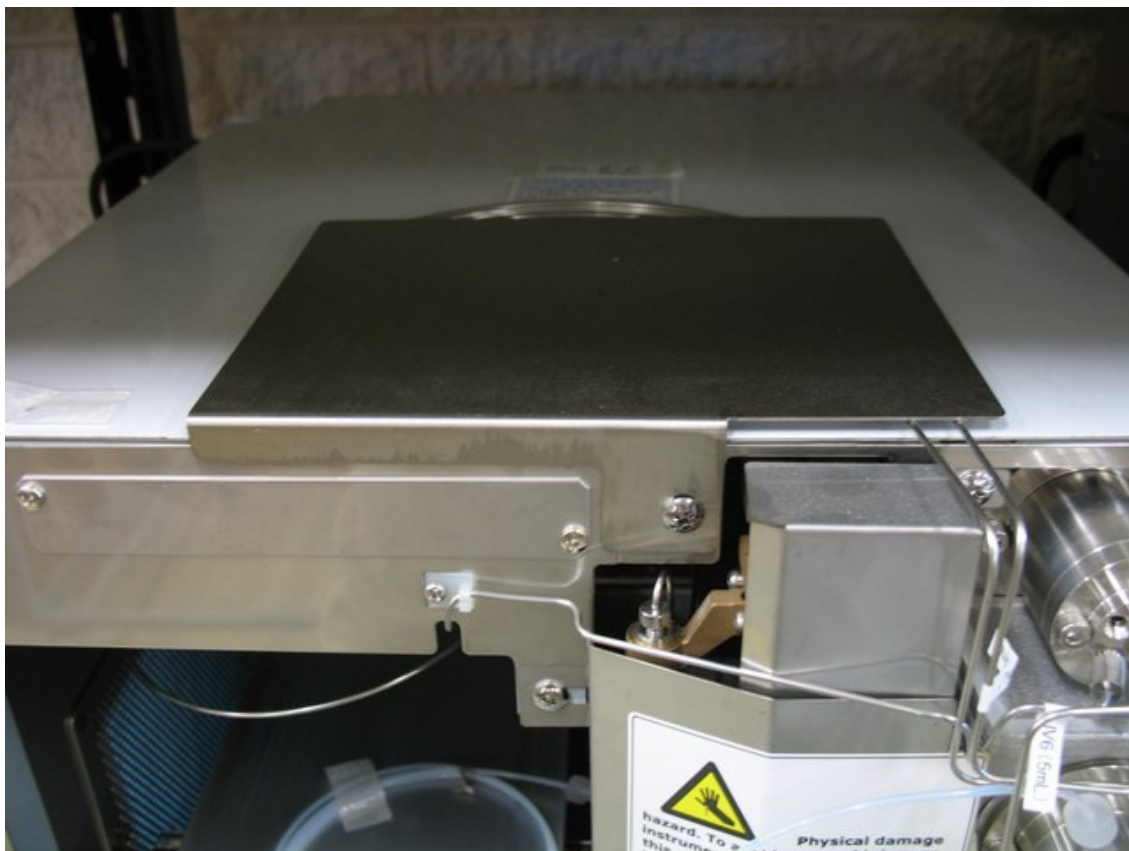


Figure 12: Metal Cover Plate

6. Fit metal cover plate over coil as shown in *Fig. 12*.

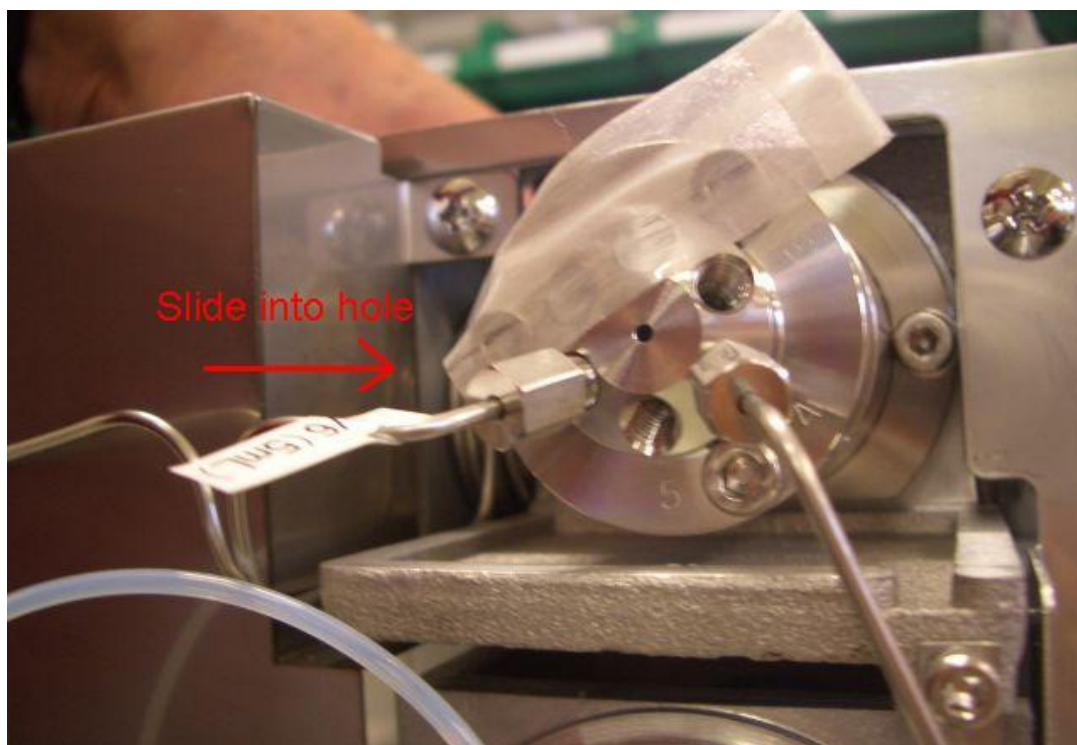


Figure 13: Position of the Sample Loop Next to the Injection Valve.

7. Fit the Sample loop into position firstly by sliding the coiled plumbing into the hole beside the Injector Valve (*Fig. 13*). Then tighten the Nut into position number **6** on the Injector Valve. Fit the other end of the plumbing with the Short Nut to the top of the Injection Needle.

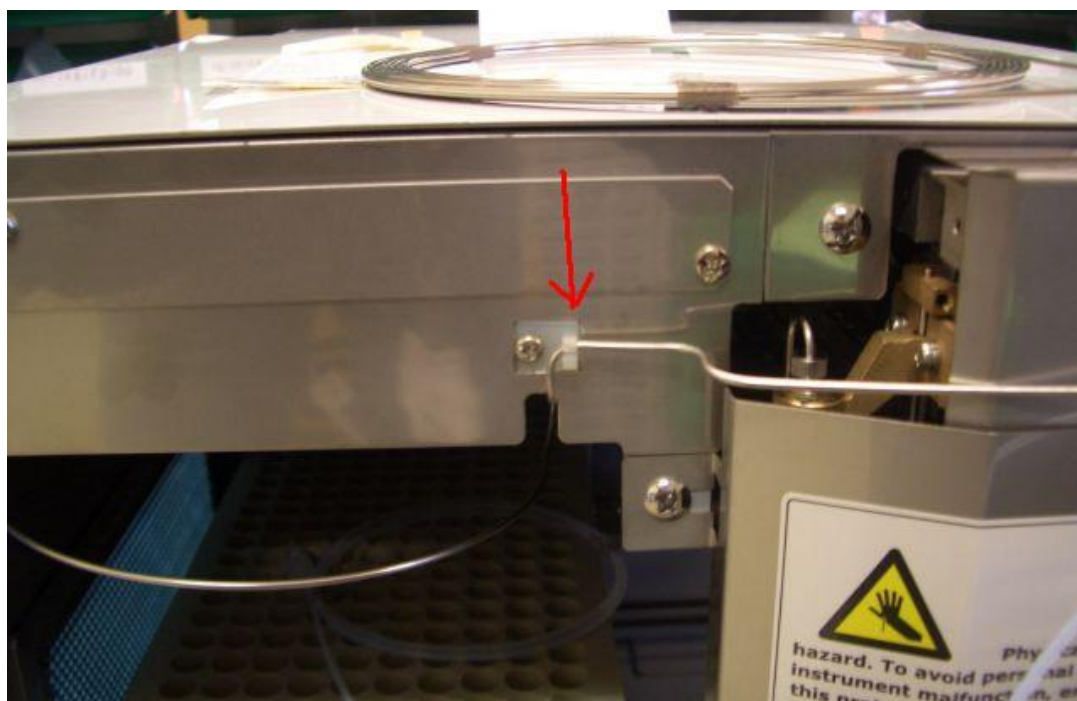


Figure 14: Tubing Retaining Clip

8. Route the plumbing through the clip (*Fig. 14*) at the front of the Auto sampler.

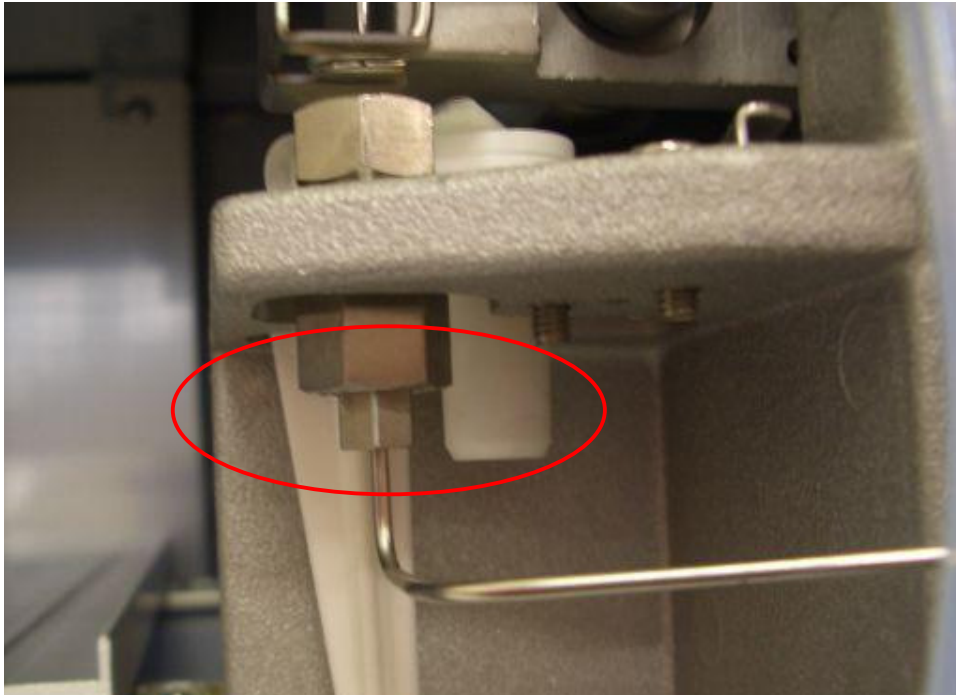
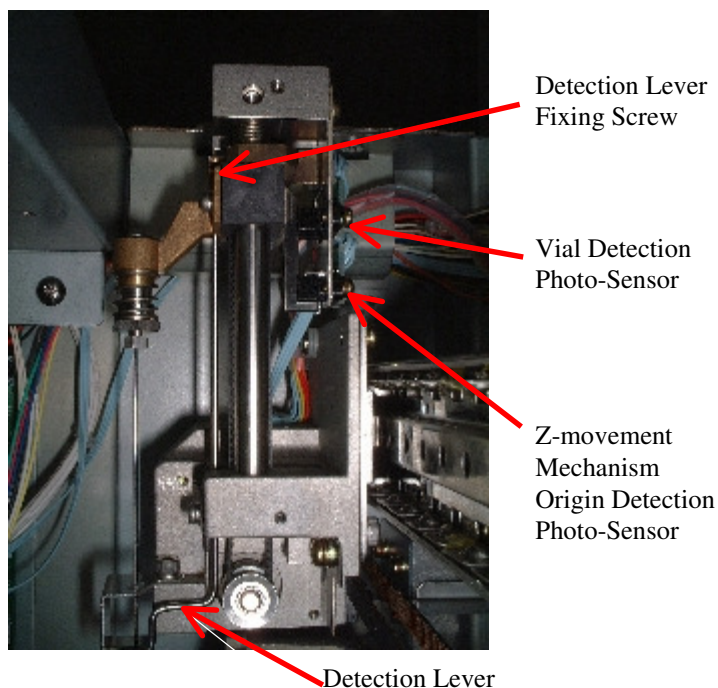


Figure 15: Fitting the Injector Port Plumbing into Place.

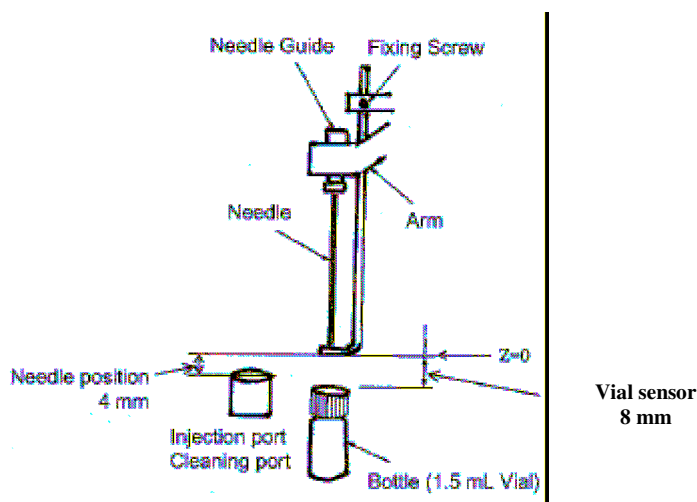
9. Fit the Injector Port plumbing tube in place (*Fig. 15*) firstly by securing to the bottom of the Injector Port. Then by securing the top fitting to position number **3** on the Injector Valve (refer to picture in step 16 above).

Adjustment of the needle and vial sensor height

1. Make the lower end of Detection Lever the same height as the tip of Needle, and fix the Detection Lever temporarily.
2. Make sure Needle is at Home (Upper end-point detection) position. This can be accomplished in the Actions tab of the Autosampler by pressing the Syringe Needle adjustment Button
3. Position and fix the lower end of Detection Lever at 8 mm above Vial.



4. The needle should be positioned 4 mm above the injection port. For more details refer to the Service Manual "Adjusting the Vial Detection Photo-Sensor" section



5. Refit the protective guard onto the front of the Auto sampler.
6. Refit front panel, storage tray, door and the column oven (if fitted).

Configuring a syringe volume in Galaxie

1. Open Galaxie configuration manager. The page default opens up at the group page. Click on the Systems icon on the left hand side (*Fig. 16*). Select the system that requires the syringe volume to be changed (in this example the Analytical). Double click on the system.

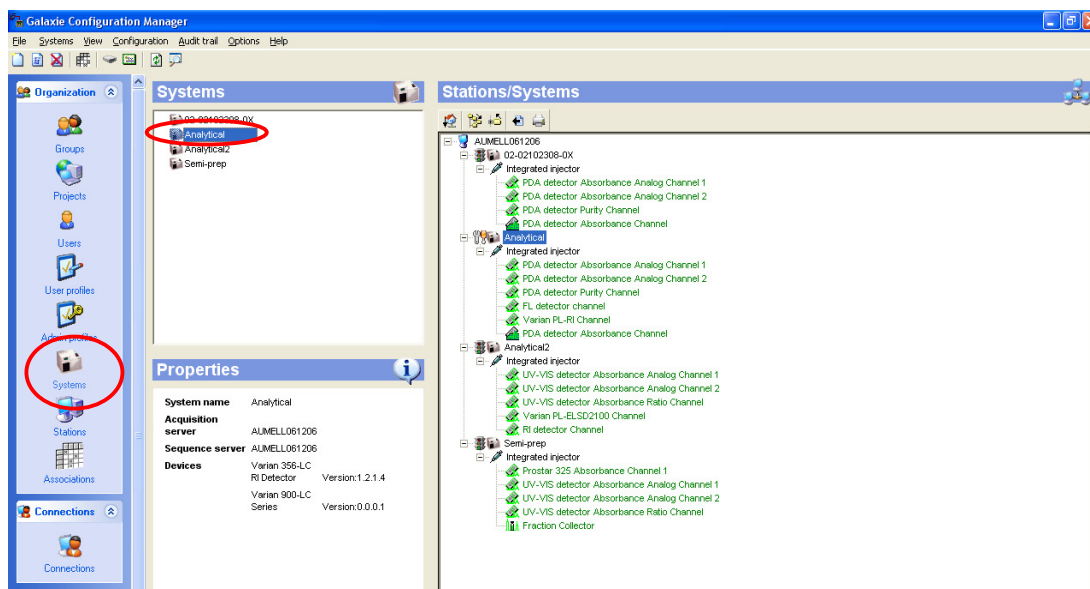


Figure 16: Select the system to be edited

2. After double clicking on the system the following page appears (*Fig. 17*). Click OK.

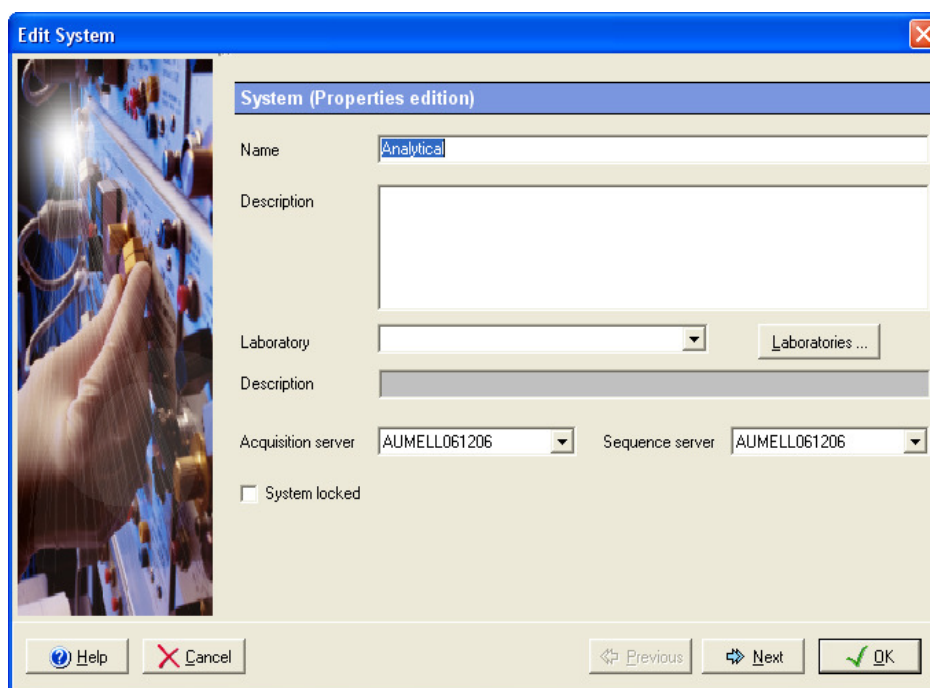


Figure 17: Editing the system starts the Hardware

3. You get the following window. Click yes and wait for about 30sec to 1 minute for the driver to start (*Fig. 18*).

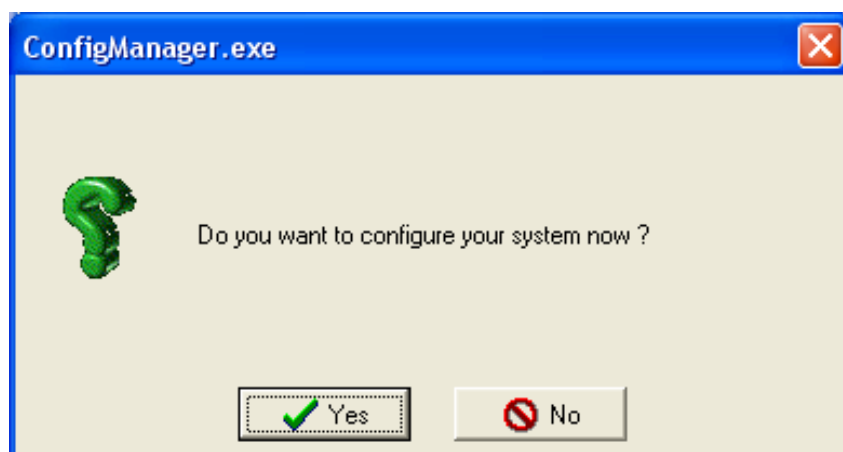


Figure 18 Configuring the system now will start the driver

4. The driver window appears after approximately 0.5-1.0minutes showing the various aspects of the configuration (*Fig. 19*). Click on the instrument icon on the left hand side.

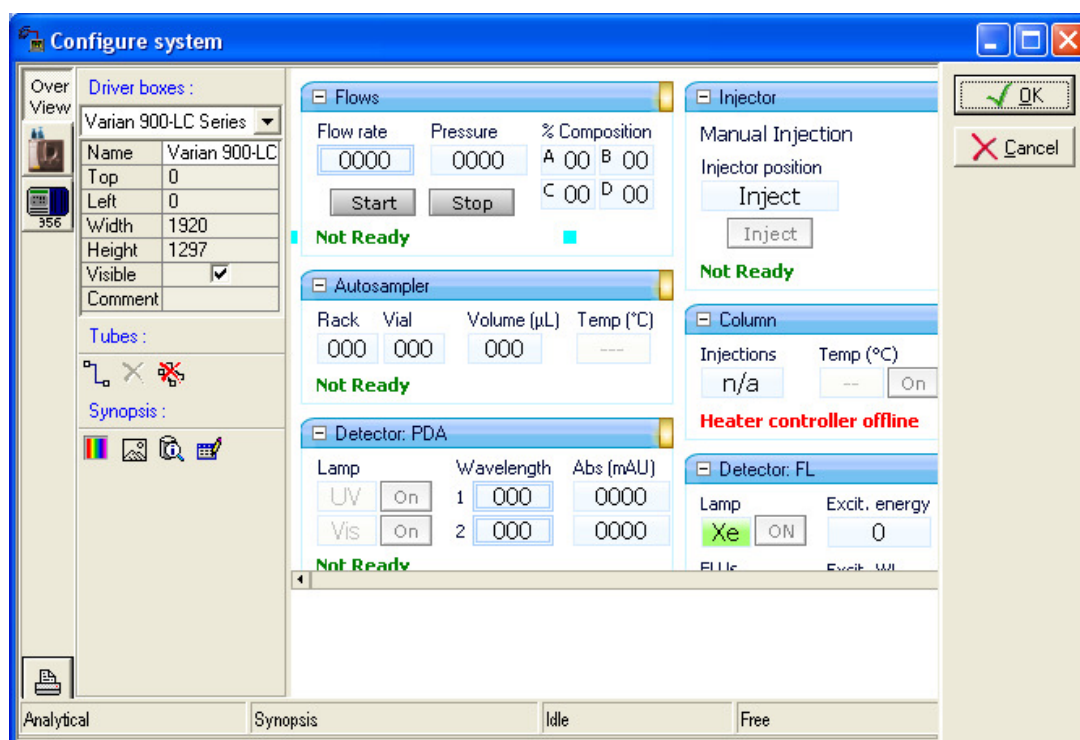


Figure 19 The driver has been started and the various tiles showing the configuration appear.

5. Below is the window that shows the syringe volume (ml). Click on the pull down window and choose the syringe volume that is required and click OK (*Fig. 20*).

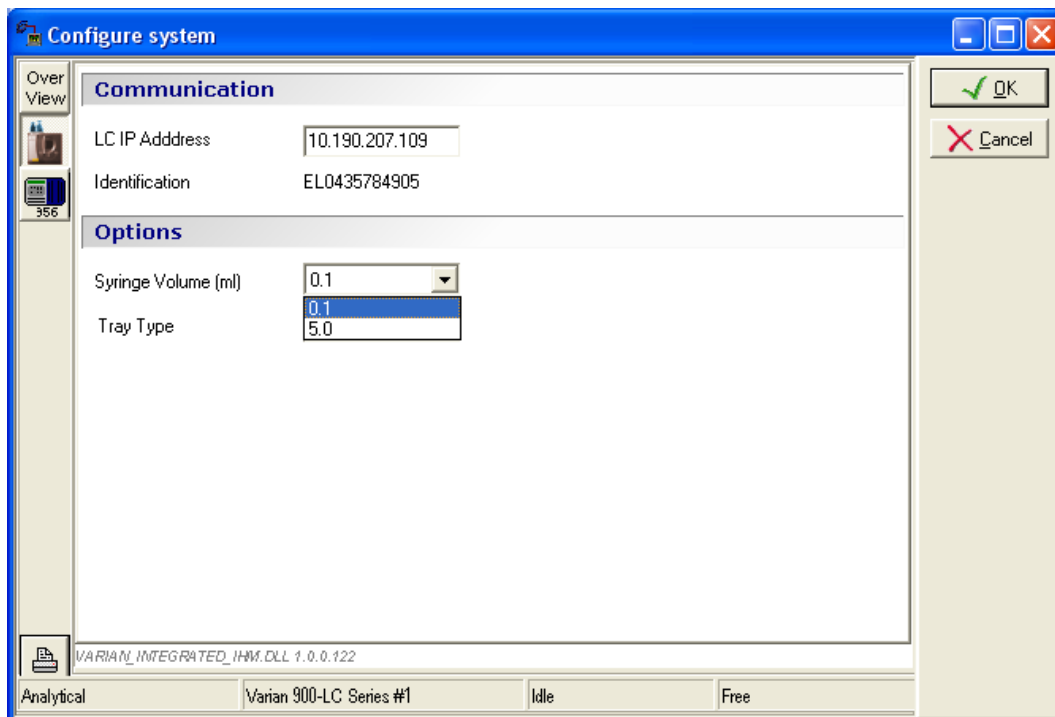
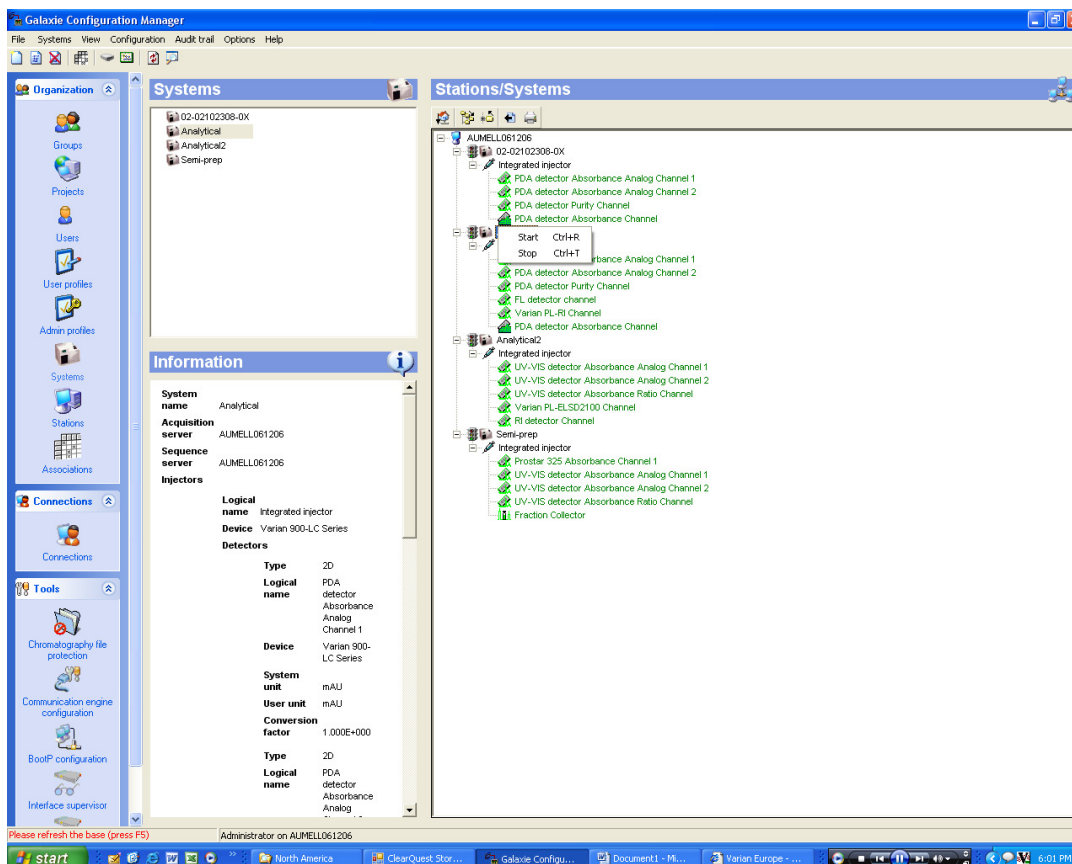


Figure 20 Syringe volume allows the user to select the syringe type they wish to use

- After clicking OK the Systems page appears. Right click on the system that has had the syringe volume changed and select Stop (Ctrl+T). This will stop the driver. The system can now be started in Galaxie and the syringe volume will be changed*.



* Should there be any problems with the syringe volume change after following these instructions reboot the PC and the changes will be applied.