Seal AQ2 Instrument

Unique ID: Seal AQ2

Manufacture's name: Seal Analytical

Serial #:

Software: AQ2 Version 1.4

Current Location: C315

Manufacturer's Instructions Location: Manual located in C315

Date Received:

Compliance: See analytical files for documentation.

Technical Support and Parts:

Phone: (262) 241-5772 (Support)
(262) 241-7900 (Parts)

Logbook Serial Number:_____

Start Date:_____

End Date:_____

HOW TO: Daily Maintenance Instructions

1. Locate the wash container on the side of the AQ2. Remove top and place on clean paper towels or in a clean beaker. Empty out the old DI water. Then refill with fresh DI water to the line. Then replace top.

2. If running LLTP or Color, see SOP (NU-090 and NU-094), otherwise just run extra wash. Open Maintenance under settings. Make sure that you have clean reaction wedges before you continue. Chose “Cuvette Functions” then after the window opens, click extra wash. Then run auto wash 3 to 5 times.

3. Then on the same screen run “Test Aspiration”. Click the Test Aspiration” icon and note the end point. Do this four times to check the inner and outer wells of the reaction segment. If the last three stop approximately in the same place then continue to the next step. If not adjust the number and repeat until they are approximately the same.

4. Using the cotton tipped applicator clean the aspiration bath. If this is extremely dirty use a transfer pipet to remove all the water and wipe out with alcohol on a cotton tipped applicator and then rinse five times with auto wash. In the same window run auto wash twice. Watch the aspiration bath to make sure it is filling.

5. Run daily start up under Settings.

6. While the daily start up is running, observe and inspect the probe cleaner. (looking for leaks)

7. While the daily start up is running, observe and inspect the sample probe. (looking for leaks)

8. While the daily startup is running, observe and inspect the syringe piston and glass body. (looking for leaks) It is located in the back with a blue light.

9. Compare and record the highest baseline and its corresponding wavelength.

10. Complete the Daily Maintenance checklist, including the date and initials. Record any additional comments on the back of the page. Be sure to indicate any part replacement.

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HOW TO: Monthly Maintenance

1. Locate the wash container on the side the AQ2. Remove top and place on clean paper towels or in a clean beaker. Empty out the old DI water. Add ~100 mL Clorox bleach to the reservoir, fill halfway to the mark with water, and cover with parafilm. Swish around the container for ~30 seconds. Remove the parafilm and rinse out with DI water three times. Then refill with fresh DI water to the line and replace top.
2. The filter is located behind the aspiration pump under the panel to the left sample tray. Pull out the metal frame housing the filter (it pulls straight up). You can wash the filter in the frame or out of the frame. Use only DI water. Dry filter completely by placing it between several paper towels. Repeat this until the filter is dry. Then put it back in the instrument.
3. Wash or replace all reagents containers and caps.
4. Remove all aspiration tubing (3 total). Alcohol is used to clean platens that the pump tubing runs through. With a pad swab soaked in alcohol, clean each roller and the outer part.
5. Place a drop of oil at the top and bottom of one roller and move roller up and down 6 times. Repeat this for each individual roller (12 rollers total).
6. Remove the top of the AQ2. The syringe screw drive is located behind the glass body syringe. Using the cleaning swab with alcohol, clean around the screw (trying to remove the dirt). Then add 2-4 drops of oil using the oil pen. Replace the top to the AQ2.
7. Replace all the pump tubing (3 pieces). Then close the clamp tightly and hold, while tightening the screw. Do this for both clamps.
8. In the maintenance window under “Cuvette Function”, run “Test Aspiration”. Click the “Test Aspiration” icon and note the end point. Do this four times to check the inner and outer wells of the reaction segment. If the last three stop approximately in the same place then continue to the next step. If not, adjust the number and repeat until they are approximately the same.
9. Run daily start up under Settings.
10. Run Measuring Diagnostic. Create a schedule with reagent set 1. Highlight lines 1 – 30, then select “MD”, Auto Fill, and Save. Then run that tray.
11. Then go to Report Generation, choose the run, select your regular report, and check “Include Statistics”. In the first window choose absorbance data, then OK. In the second window, choose cup 1 to cup 30. Record the “Std. Dev” number.
12. Record Annual Preventative Maintenance (PM) in the Comments (back of page) and staple PM or other service reports to this book.

INITIAL and DATE		Clean Wash container with Bleach	Clean fan filter	Clean or replace Reagents containers	Clean Platens (2 each)	Lubricate pump rollers (2 each)	Clean/Lubricate syringe screw drive	Replace All Pump tubing (3 each)	Check aspiration	Run daily start up	Run Measuring Diagnostic	Record the Std. Dev	Comments: Use back of page for more space
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Feb													
Mar													
Apr													
May													
June													
July													
Aug													
Sept													
Oct													
Nov													
Dec													

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