

7.1 Maintenance schedule

Table 6 shows the recommended schedule of maintenance tasks. Facility requirements and operating conditions may increase the frequency of some tasks.

Table 6 Maintenance schedule

Task	1 month	6 months	As necessary
Clean the cell on page 20	X ²		
Replace the reagent bottles on page 21	X		
Replace the stir bar and tubing harness ³		X	
Clean the screen in the Y-strainer on page 22			X

7.2 Clean the cell

▲ CAUTION



Chemical exposure hazard. Obey laboratory safety procedures and wear all of the personal protective equipment appropriate to the chemicals that are handled. Refer to the current safety data sheets (MSDS/SDS) for safety protocols.

Clean the cell at 1-month intervals or more frequently if necessary.

Items to collect:



Cotton swabs⁴



5.25 N Sulfuric Acid Solution⁵

- Put on the personal protective equipment identified in the safety data sheets (MSDS/SDS).
- Push **menu**, then select SENSOR SETUP > [select analyzer] > TASKS > CLEAN CELL.
Note: To stop a selected task, push home.
- Push **enter** to stop measurements.
- Select an option.

Option	Description
HOLD	The controller outputs are held at the last measured value.
TRANSFER	The controller outputs change to the transfer value.

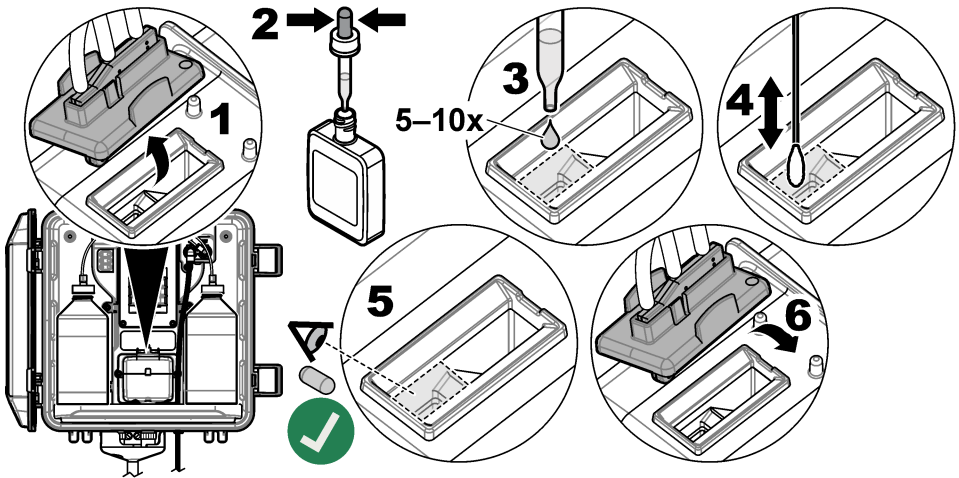
- When the status light flashes, do the illustrated steps that follow. Make sure that there is no unwanted material in the cell. When done, push **enter**.

² Clean the cell more or less frequently as necessary.

³ Refer to the instructions supplied with the Tubing Kit.

⁴ Refer to [Replacement parts and accessories](#) on page 27.

⁵ Do not use other cleaning solutions. Refer to [Replacement parts and accessories](#) on page 27.



6. When "TASK COMPLETE" shows on the display, push **enter**.
The analyzer starts a measurement cycle in approximately 30 seconds.

7.3 Replace the reagent bottles

▲ CAUTION	
	Chemical exposure hazard. Obey laboratory safety procedures and wear all of the personal protective equipment appropriate to the chemicals that are handled. Refer to the current safety data sheets (MSDS/SDS) for safety protocols.
▲ CAUTION	
	Chemical exposure hazard. Dispose of chemicals and wastes in accordance with local, regional and national regulations.

Replace the reagents bottles at 1-month intervals.

- Put on the personal protective equipment identified in the safety data sheets (MSDS/SDS).
- Push **menu**, then select SENSOR SETUP > [select analyzer] > TASKS > CHANGE REAGENTS.
Note: To stop a selected task, push home.
- Push **enter** to stop measurements.
- Select an option.

Option	Description
HOLD	The controller outputs are held at the last measured value.
TRANSFER	The controller outputs change to the transfer value.

- Wait for the status light to flash.
- Replace the buffer bottle as follows:
Note: (Optional) Use the top of the analyzer as a shelf.
 - Remove the cap and seal from the new buffer bottle.
 - Remove the used buffer bottle from the analyzer.
 - Put the buffer tubing in the new buffer bottle on the right side of the analyzer. Tighten the cap.

7. Replace the indicator bottle as follows:

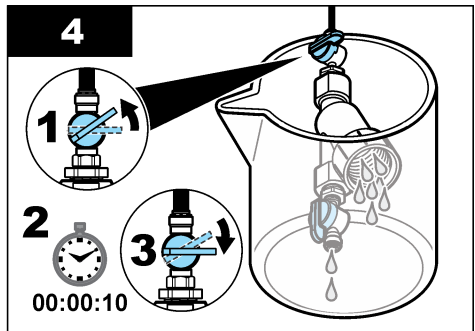
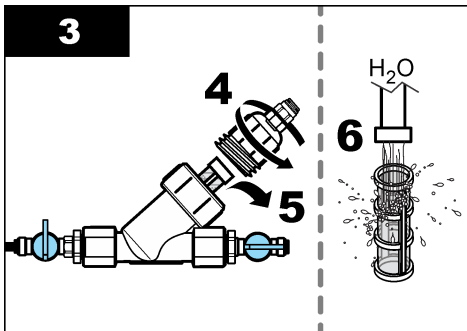
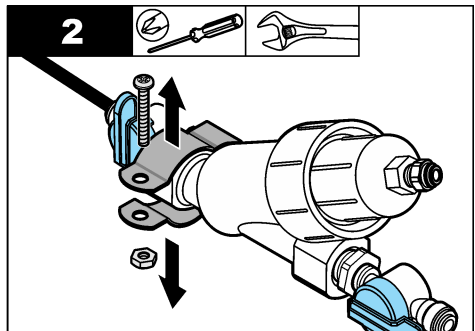
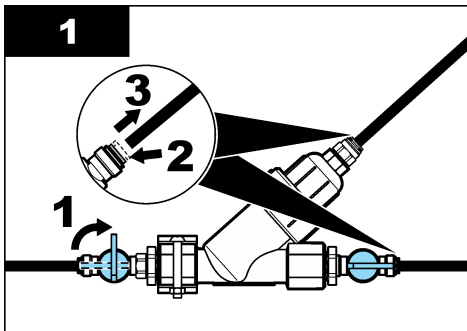
- a. Remove the cap and seal from the indicator bottle and the brown DPD bottle.
- b. Fill the brown DPD bottle approximately $\frac{1}{4}$ full with indicator solution.
- c. Swirl the DPD bottle to mix.
- d. Put the contents of the DPD bottle into the indicator bottle.
- e. Invert the indicator bottle until all of the powder is dissolved (2 minutes).
- f. Remove the used indicator bottle from the analyzer.
- g. Put the indicator tubing in the new indicator bottle on the left side of the analyzer. Tighten the cap.

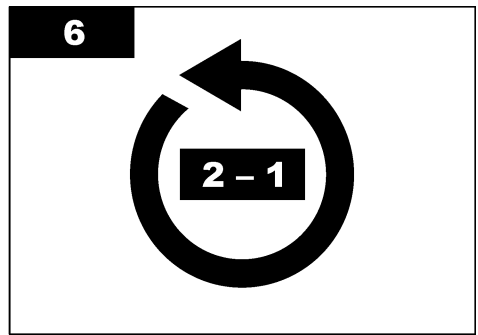
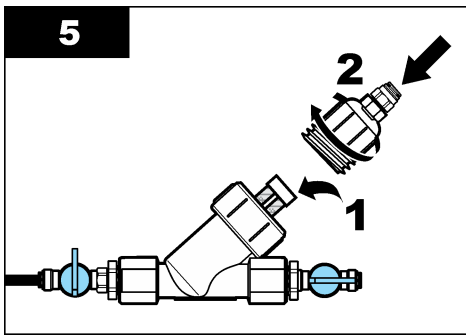
8. Push **enter**.

9. When "TASK COMPLETE" shows on the display, push **enter**. The analyzer starts a measurement cycle in approximately 30 seconds.

7.4 Clean the screen in the Y-strainer

Clean the screen in the Y-strainer when there is a blockage, which is identified with a LOW SAMPLE FLOW warning. Complete the illustrated steps that follow.





7.5 Prepare for storage

▲ CAUTION



Chemical exposure hazard. Obey laboratory safety procedures and wear all of the personal protective equipment appropriate to the chemicals that are handled. Refer to the current safety data sheets (MSDS/SDS) for safety protocols.

If power to the analyzer will be removed for more than 3 days or the analyzer will not be used for more than 3 days, prepare the analyzer for storage.

Items to collect:



Beaker with deionized water (2x)



Disposable dropper or no-lint cloth

1. Remove the reagents from the reagent lines as follows:
 - a. Remove the indicator bottle and buffer bottle from the analyzer.
 - b. Put two beakers (or containers) that contain deionized water in the analyzer.
 - c. Put the indicator bottle tubing and the buffer bottle tubing in the beakers.
 - d. Push **menu**, then select **SENSOR SETUP** > [select analyzer] > **PRIME**.
The analyzer removes the reagents from the reagent lines.
2. Remove the deionized water from the reagent lines as follows:
 - a. Remove the indicator bottle tubing and the buffer bottle tubing from the beakers.
 - b. Remove the two beakers from the analyzer.
 - c. Push **menu**, then select **SENSOR SETUP** > [select analyzer] > **PRIME**.
The analyzer removes all of the liquid from the reagent lines.
3. Disconnect the analyzer cable from the controller (or remove power to the controller).
4. Turn the shut-off valve to the closed position to stop sample flow to the Y-strainer.
5. Remove the pump clamp. Refer to [Figure 6](#). Keep the pump clamp for later use.
6. Remove the water from the cell as follows:
 - a. Remove the lid from the cell.
 - b. Remove the water from the cell with a disposable dropper or a no-lint cloth.
 - c. Install the lid on the cell.
7. To start the analyzer after storage, do the steps that follow:
 - a. Install the pump clamp. Refer to [Figure 6](#).
 - b. Install reagent bottles. Refer to [Step 4: Install the reagent bottles](#) on page 13.