

Instructions For Use—CM130 reagent delivery module replacement (9747400)

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.

Refer to the instructions that follow to replace the reagent delivery module. Refer to [Figure 1](#).

Items supplied by the user:



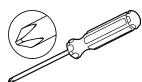
Performance check kit



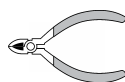
Cable tie



Gloves



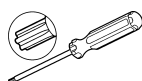
Cross-slotted (Phillips) screwdriver



Wire cutters

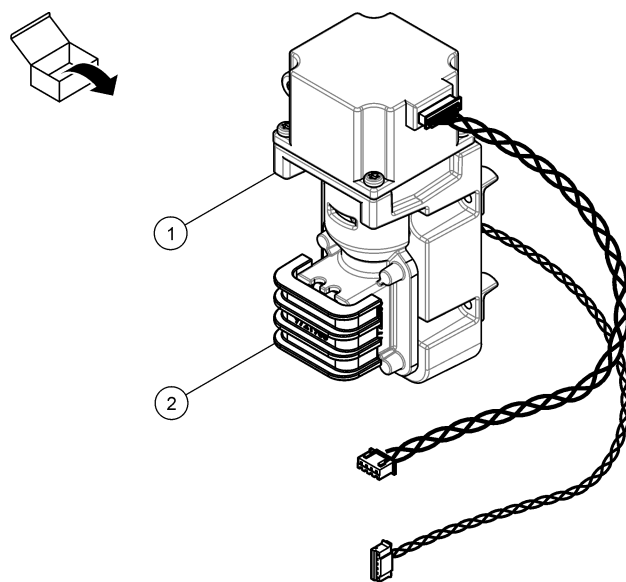


Safety glasses



T-20 Torx® screwdriver¹

Figure 1 Reagent delivery module



1 Reagent delivery module

2 Pump clamp

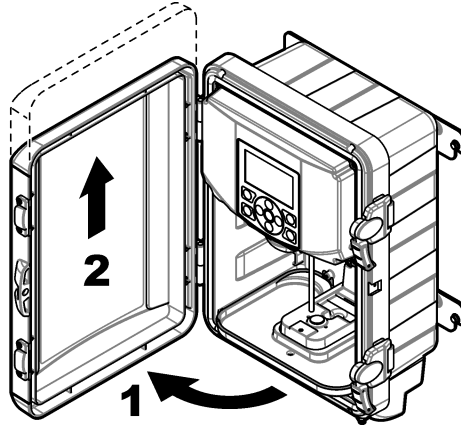
¹ Torx is a trademark of Camcar Corporation, which is a division of Textron Industries.

Remove the door (optional)

NOTICE

To keep the enclosure environmental rating, make sure to reinstall the door when this procedure is complete.

1. Open the door.
2. Lift the door to remove it from the hinges.



Remove power

⚠ DANGER



Multiple hazards. Only qualified personnel must conduct the tasks described in this section of the document.

⚠ DANGER

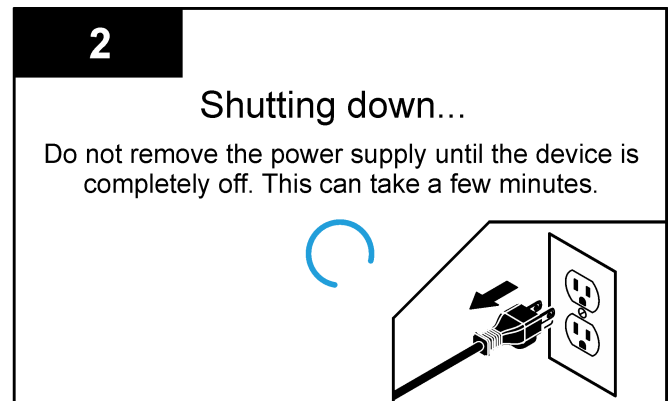
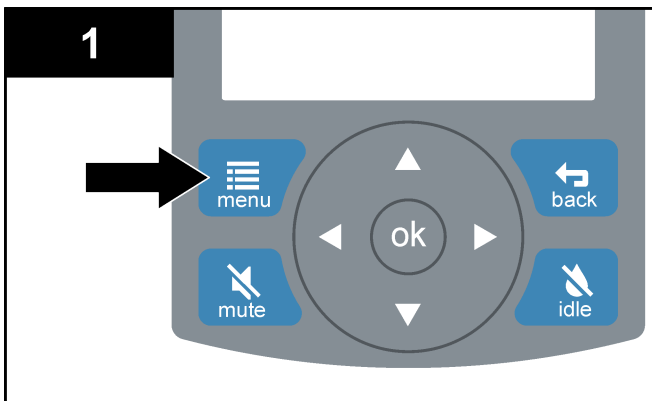


Electrocution hazard. Remove power from the instrument before this procedure is started.

1. Remove power from the analyzer as follows:
 - a. Push **menu**.
 - b. Select Power>shut down.
2. Wait for the analyzer to shut down. When the display is off, disconnect the power cord from the electrical outlet.

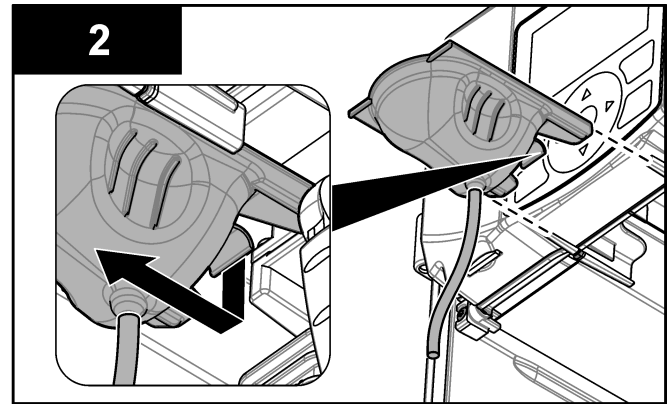
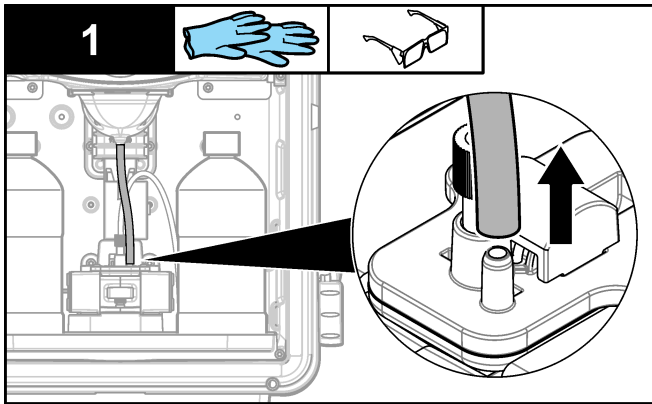
Note: For user safety, the analyzer will automatically go back to idle mode if the power cord is not disconnected in 5 minutes or less after the display goes off.

Note: When power is removed from the analyzer for more than 10 minutes, the hardware alarm is heard at the remote indicator for approximately 5 minutes.

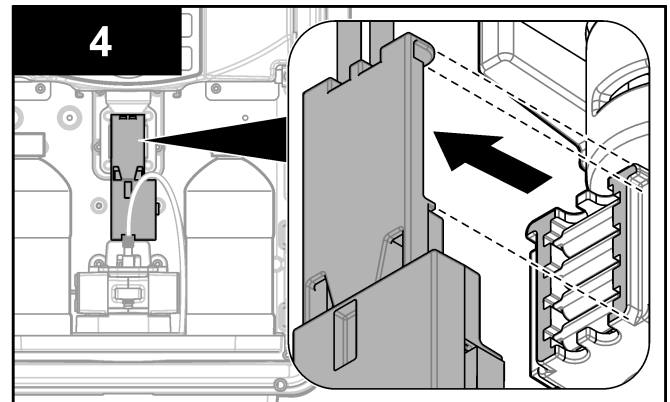
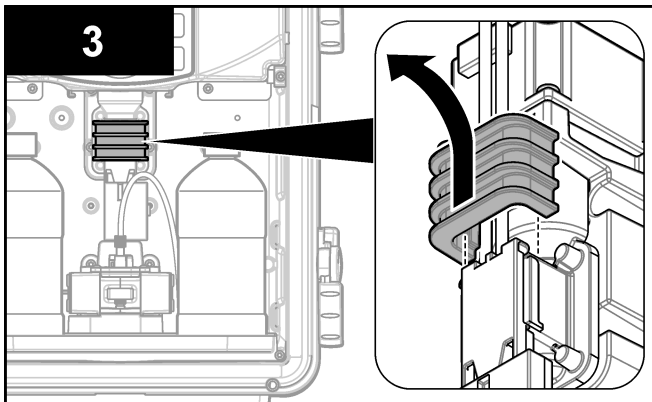


Remove the reagent delivery module

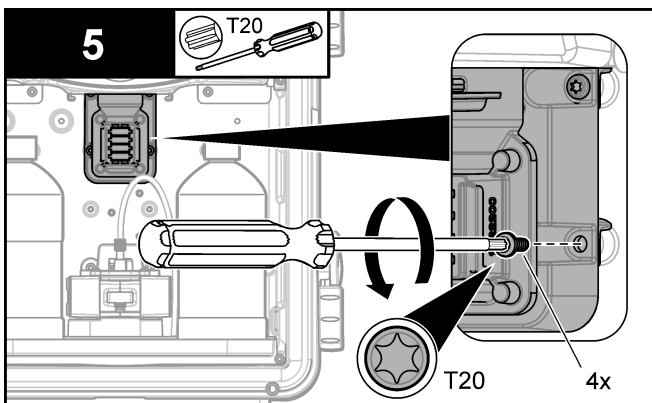
1. Disconnect the funnel tube from the colorimeter.
2. Remove the funnel. Pull down the tab that is on the back of the funnel to remove the funnel.



3. Remove the pump clamp from the reagent delivery board.
4. Remove the reagent delivery board from the reagent delivery module.

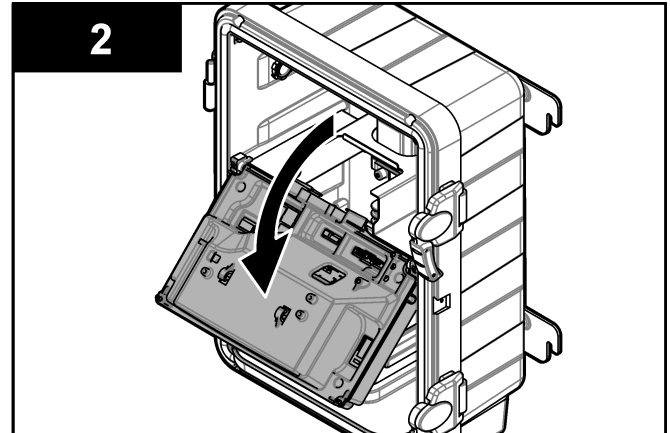
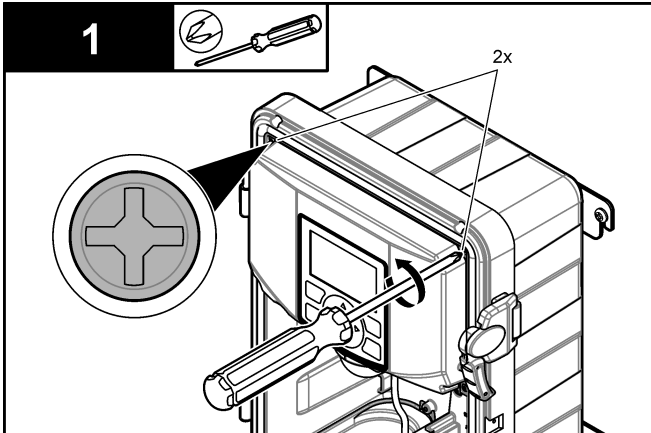


5. Use a T-20 Torx screwdriver to remove the four screws that attach the reagent delivery module to the back of the analyzer. Do not let the screws fall. Keep the screws for installation.



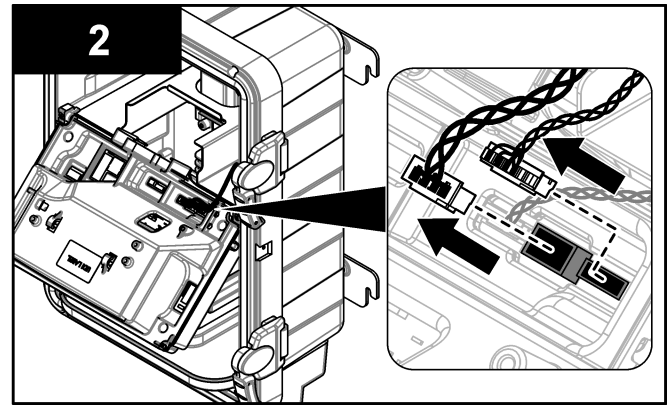
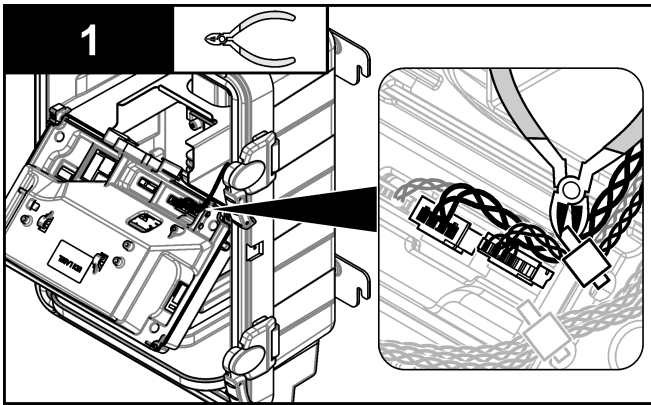
Lower the front panel

1. Loosen the two captive screws on the top corners of the front panel. Do not remove the screws.
2. Lower the front panel.

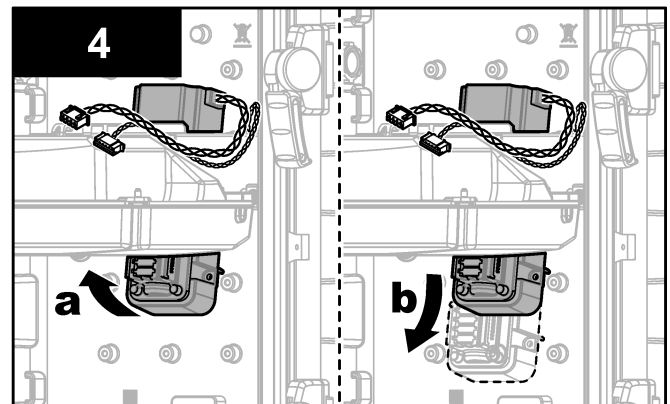
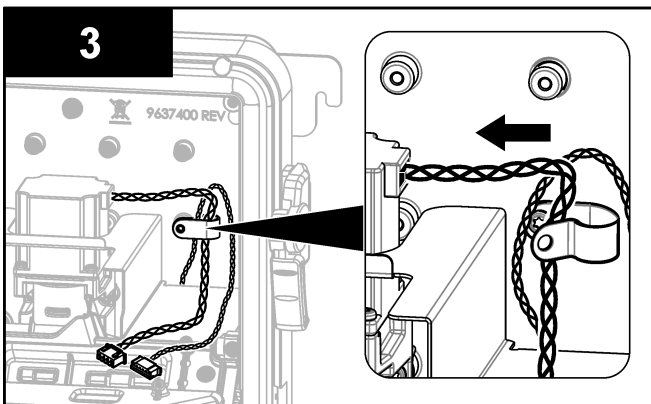


Disconnect the reagent delivery module

1. Use wire cutters to cut and remove the top cable tie on the front panel.
2. Disconnect the two cables from the two connectors on the right side of the front panel.

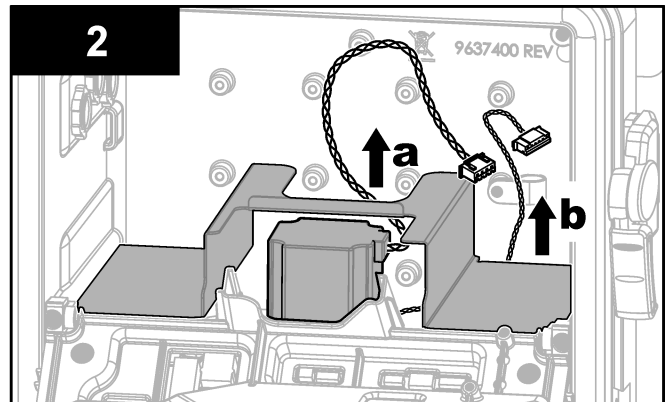
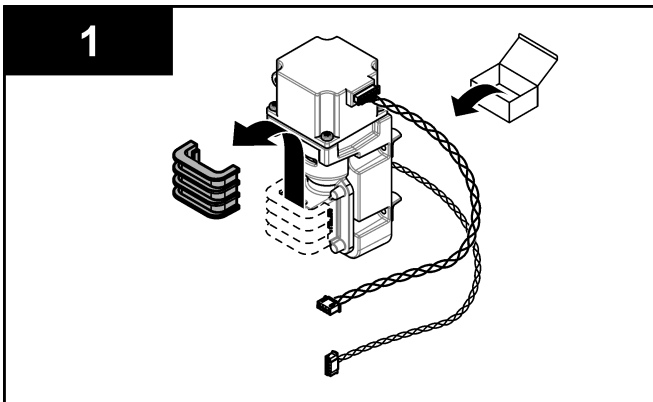


3. Remove all of the cables from the top cable clamp at the back of the analyzer. Lift the cable clamp to remove the cables.
4. Remove the reagent delivery module from the analyzer as follows:
 - a. Pull the bottom of the reagent delivery module forward.
 - b. Lower the reagent delivery module to remove it fully from the analyzer.

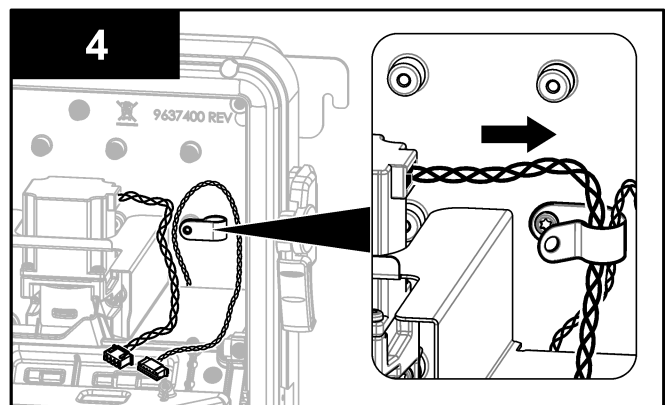
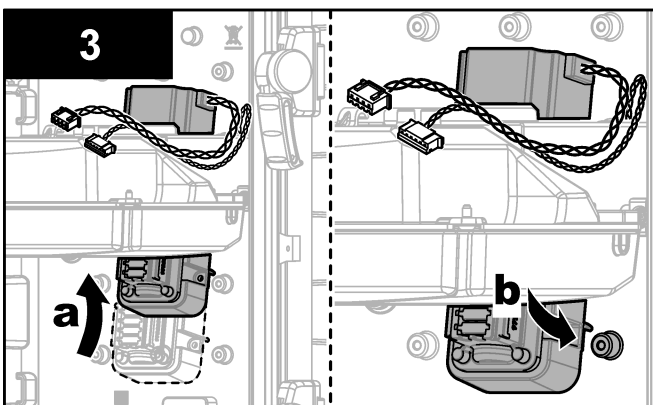


Connect the new reagent delivery module

1. Remove the pump clamp from the new reagent delivery module.
2. Put the cables of the reagent delivery module through the bulkhead panel as follows:
 - a. Put the top cable of the reagent delivery module through the opening for the reagent delivery module that is in the bulkhead panel.
 - b. Put the bottom cable of the reagent delivery module through the space between the bulkhead panel and the back of the analyzer.

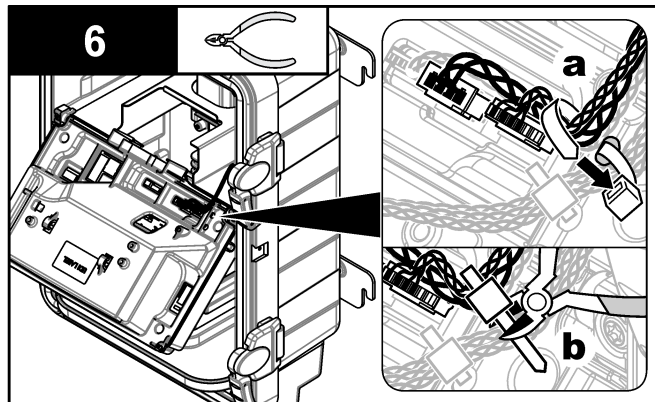
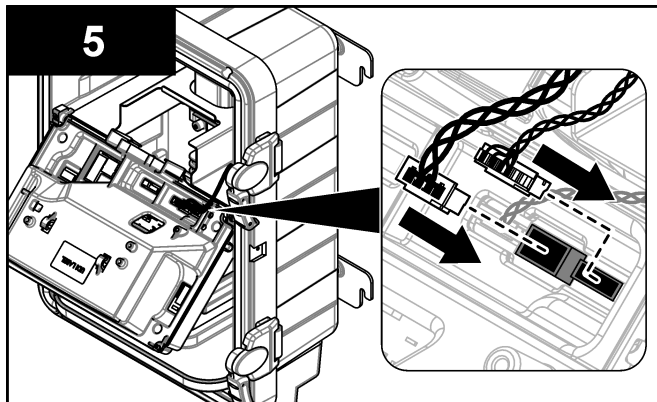


3. Hang the reagent delivery module on the back of the analyzer as follows:
 - a. Put the top of the reagent delivery module through the opening for the reagent delivery module.
 - b. Hang the reagent delivery module on the round, mounting protrusions on the back of the analyzer.
4. Put the two cables of the reagent delivery module and the other loose cables back into the top cable clamp on the back of the analyzer.



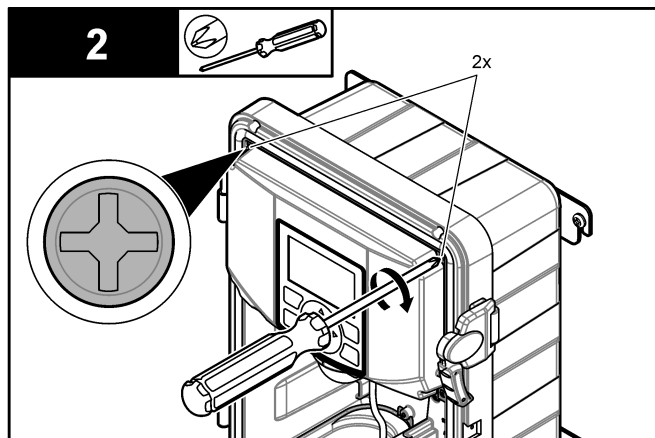
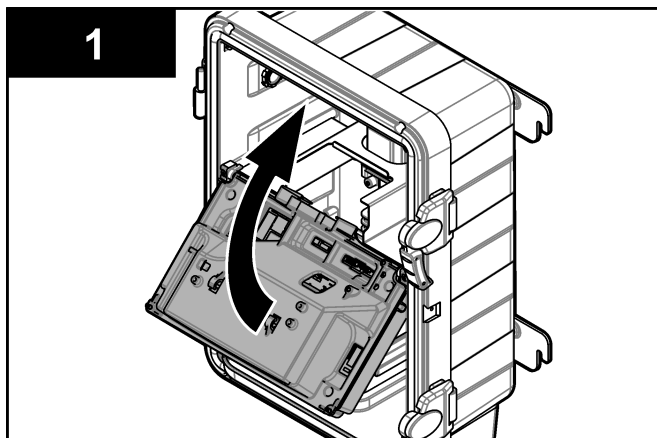
5. Connect the two cables of the reagent delivery module to the two connectors on the right side of the front panel.
6. Attach the loose cables to the front panel as follows:
 - a. Put a cable tie through the cutout in the front panel. Put the loose cables that connect to the front panel in the cable tie.
 - b. Tighten the cable tie. Cut the cable tie to remove the unwanted length.

Note: The cable tie keeps the cables connected.



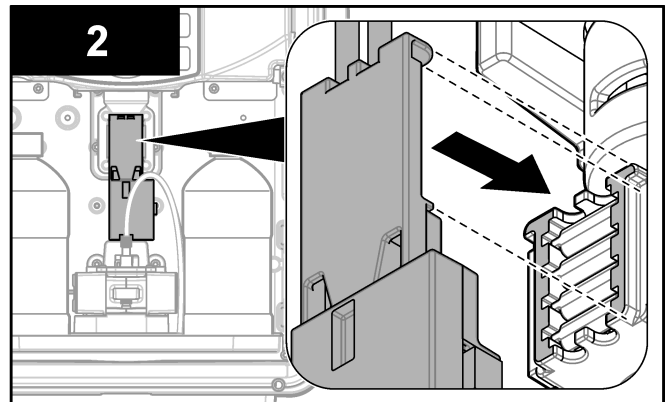
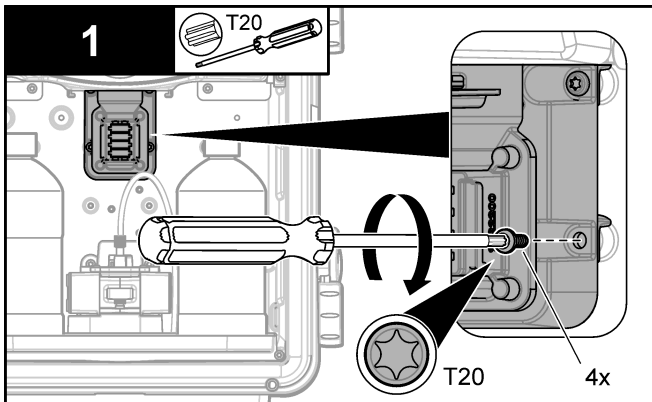
Close the front panel

1. Lift the front panel.
2. Tighten the screws to keep the front panel up.

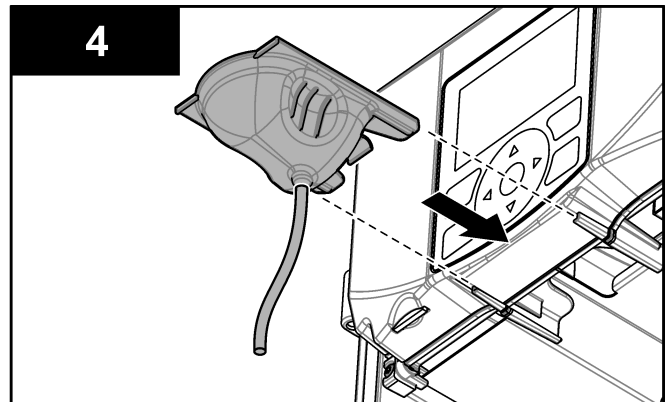
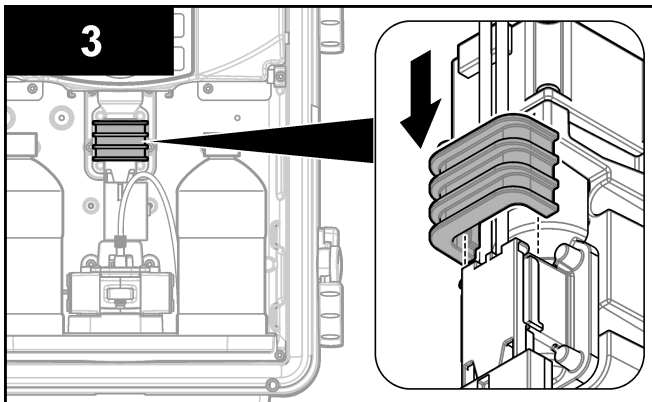


Install the new reagent delivery module

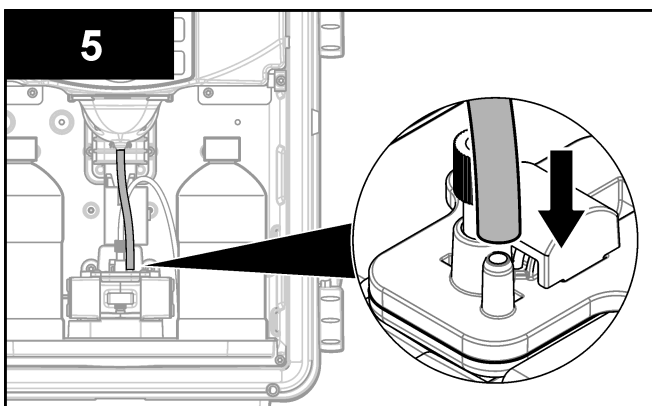
1. Use a T-20 Torx screwdriver to install the four screws that attach the reagent delivery module to the back of the analyzer.
2. Install the reagent delivery board on the reagent delivery module.



3. Install the pump clamp on the reagent delivery board.
4. Install the funnel.

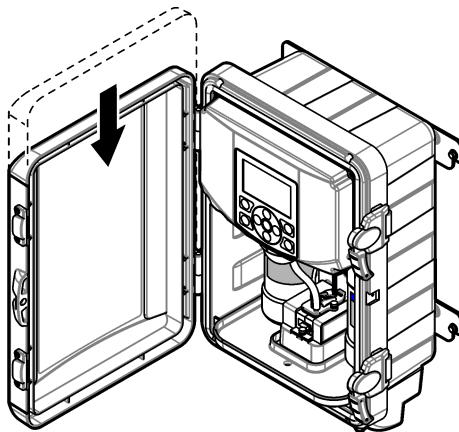


5. Connect the funnel tube to the colorimeter.



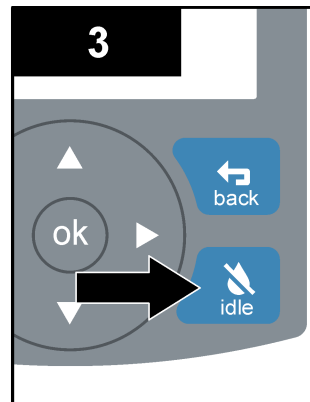
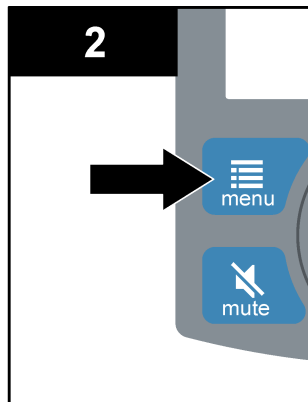
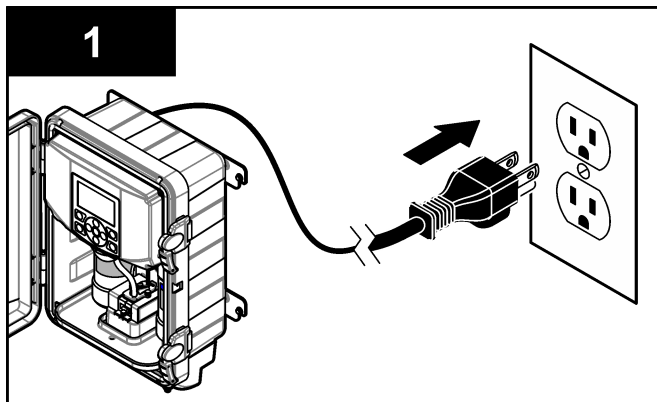
Install the door

Install the door on the hinges.



Start the analyzer

1. Connect the power cord to the electrical outlet.
2. Do a performance test as follows:
 - a. Wait for the home screen to show on the display (approximately 2 minutes). The home screen has the word "Idle".
 - b. Push **menu**. Select Maintenance>Performance test.
 - c. Complete the steps that show on the display.
3. Push **idle** and select continue to set the analyzer to measurement mode. Close the door.



HACH COMPANY
100 Dayton Ave, Ames, IA 50010 U.S.A.
Tel. (970) 669-3050
(800) 227-4224 (U.S.A. only)
Fax (970) 669-2932
orders@hach.com
www.hach.com

