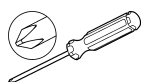
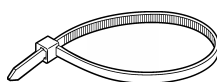


**Instructions For Use—CM130 stir motor replacement module (9747500)****⚠ CAUTION**

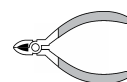
Chemical exposure hazard. Obey laboratory safety procedures and wear all of the personal protective equipment appropriate to the chemicals that are handled. Refer to the current safety data sheets (MSDS/SDS) for safety protocols.

**Items supplied by the user:**

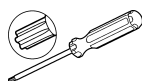
Cross-slotted (Phillips) screwdriver



Cable tie



Wire cutters

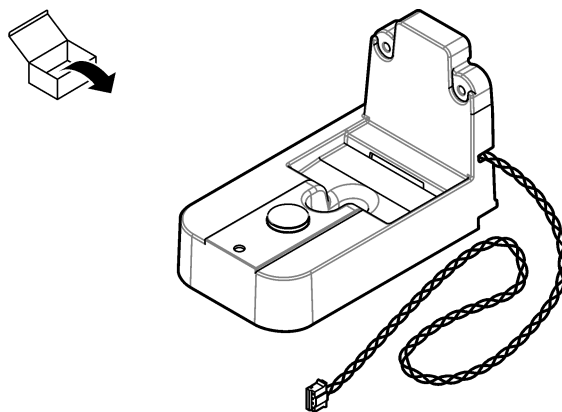
T-20 Torx<sup>®</sup> screwdriver<sup>1</sup>

Safety glasses



Gloves

Figure 1 shows the stir motor. The stir motor controls the movement of the magnetic stirrer in the colorimeter.

**Figure 1 Stir motor**

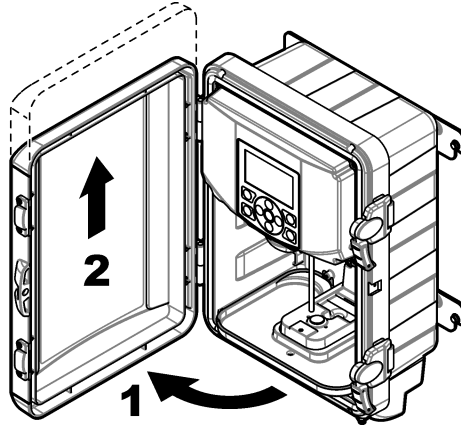
<sup>1</sup> Torx is a trademark of Camcar Corporation, which is a division of Textron Industries.

## 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

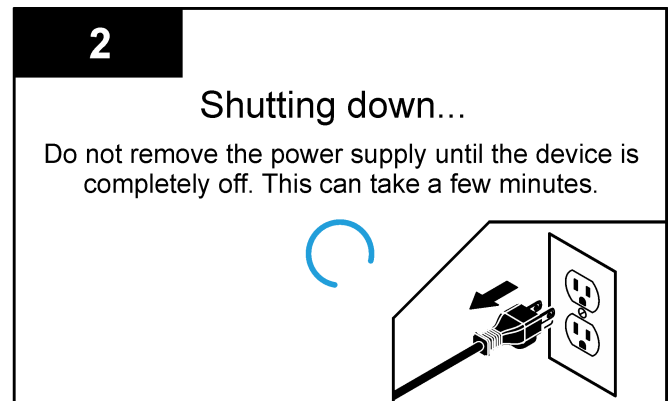
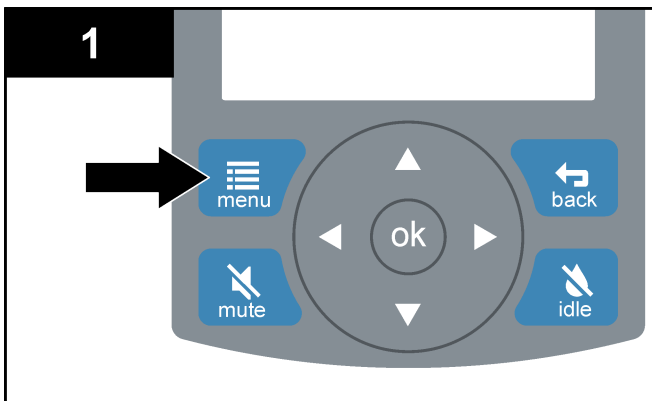


Electrocution hazard. Remove power from the instrument before this procedure is started.

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.

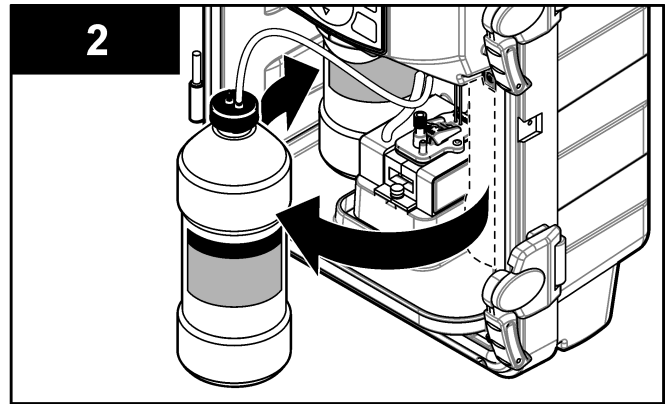
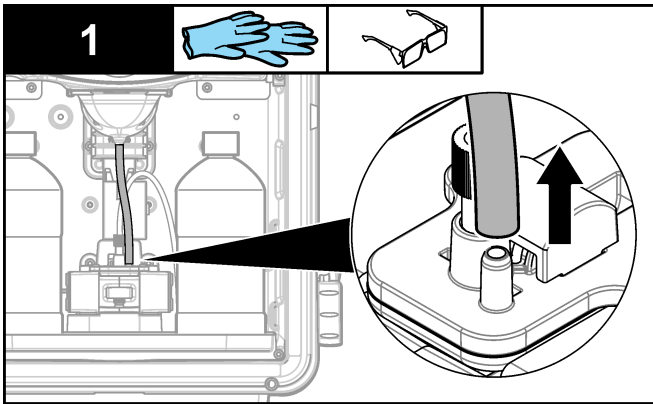
**Note:** For user safety, the analyzer will automatically go back to idle mode if the power cord is not disconnected in 5 minutes or less after the display goes off.

**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.

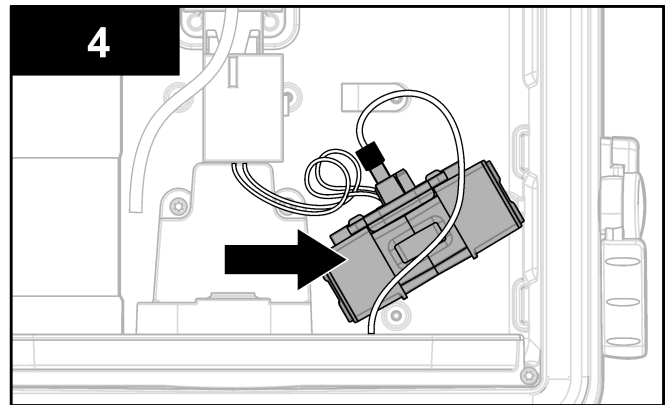
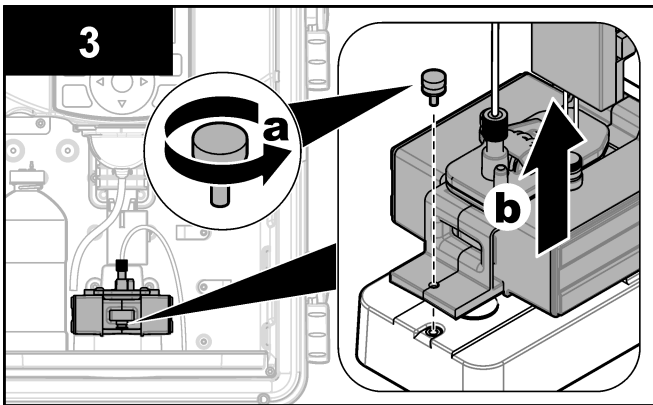


## Remove the stir motor

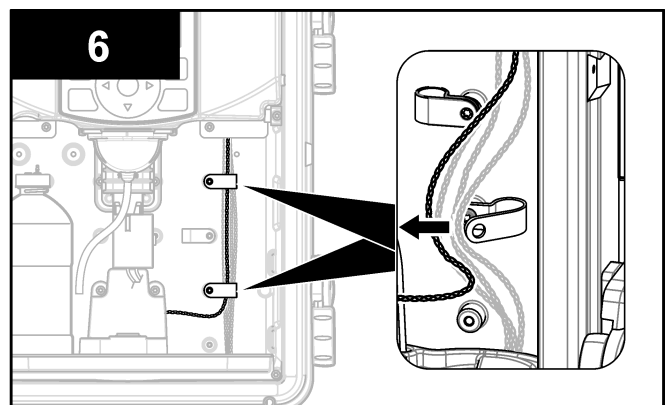
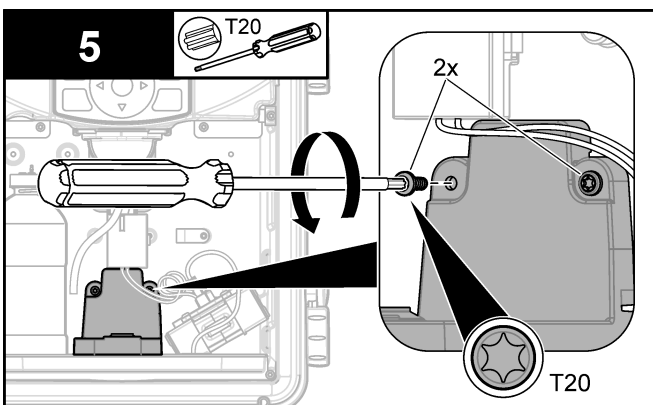
1. Disconnect the funnel tube from the colorimeter.
2. Move the bottle on the right side of the analyzer to the left side of the analyzer.



3. Remove the colorimeter from the stir motor as follows:
  - a. Remove the thumbscrew.
  - b. Lift the colorimeter from the stir motor.
4. Move the colorimeter to the right side of the analyzer.

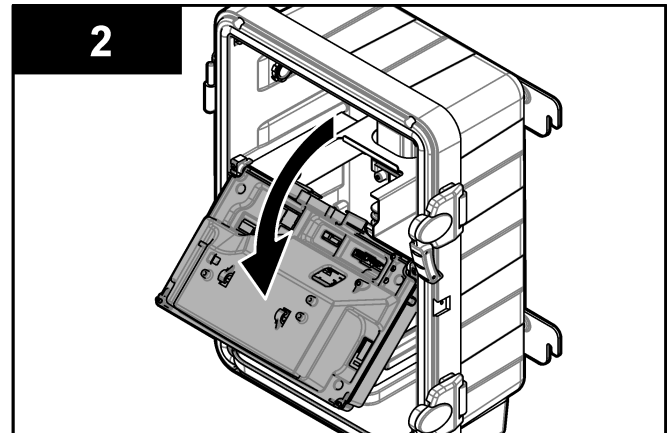
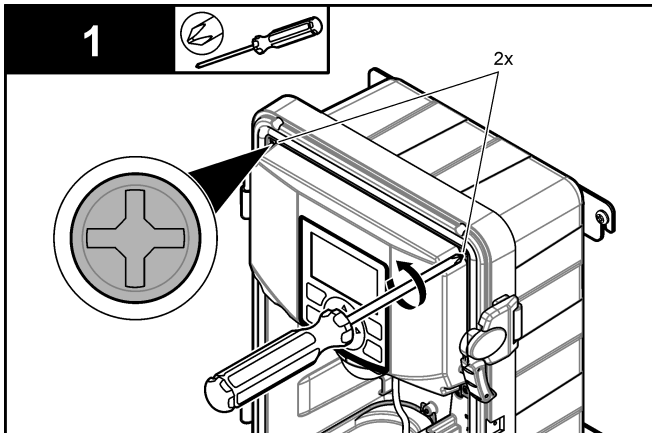


5. Use the T20 Torx screwdriver to remove the two screws that attach the stir motor to the back of the analyzer. Do not let the screws fall. Keep the screws for installation.
6. Remove all of the cables from the two cable clamps at the back of the analyzer. Lift the cable clamps to remove the cables.



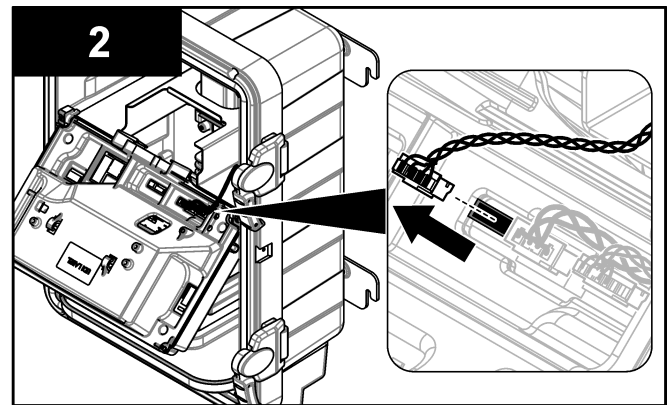
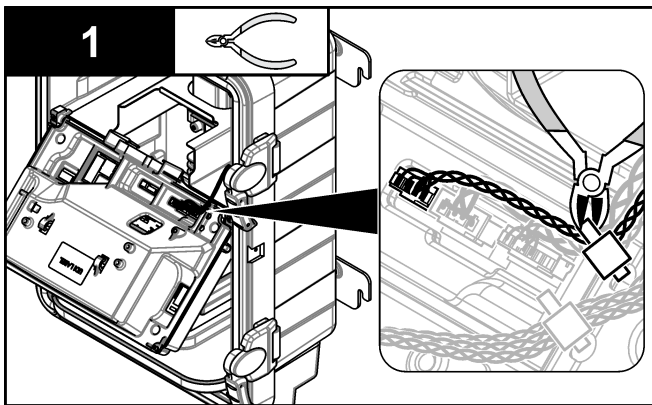
## Lower the front panel

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

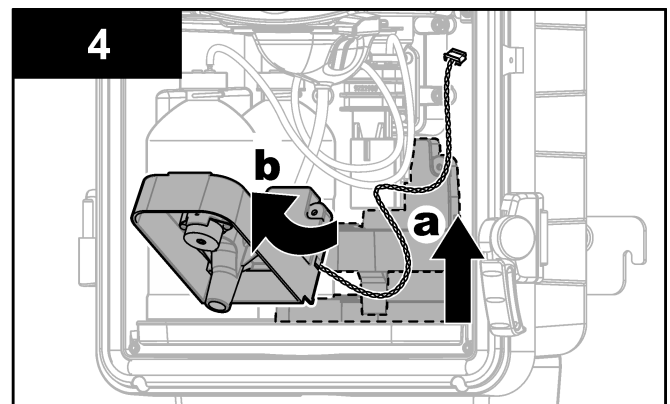
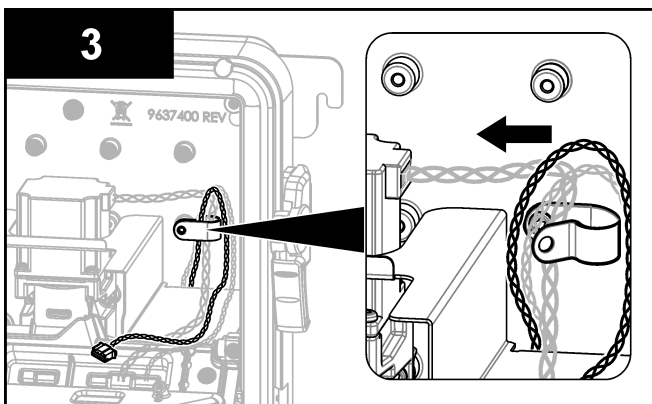


## Disconnect the stir motor

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

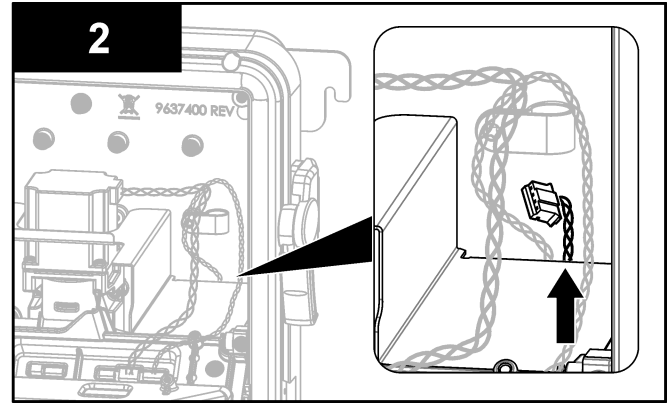
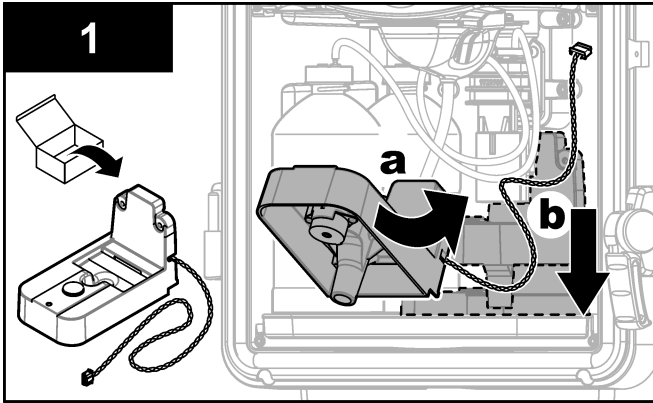


3. Remove all of the cables from the top cable clamp at the back of the analyzer. Lift the cable clamp to remove the cables.
4. Remove the stir motor from the analyzer as follows:
  - a. Lift the stir motor.
  - b. Tilt the front of the stir motor up. Remove the stir motor from the analyzer.

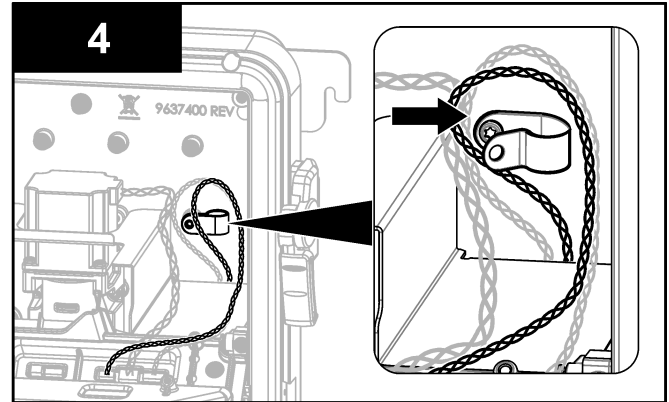
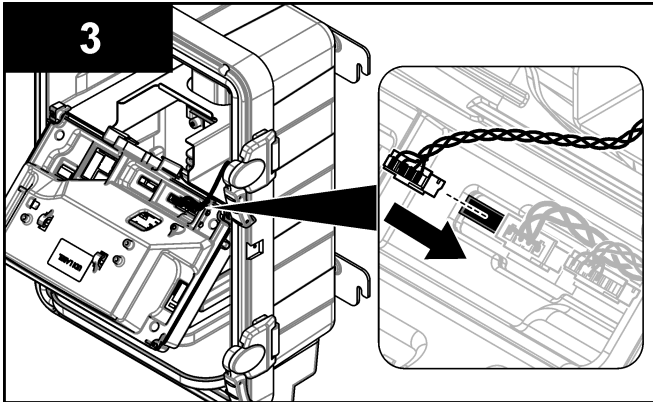


## Connect the new stir motor

1. Put the new stir motor in the analyzer as follows:
  - a. Tilt the back of stir motor down. Put the stir motor at the back of the analyzer.
  - b. Lower the stir motor.
2. Push the stir motor cable connector through the opening on the right side of the metal panel.

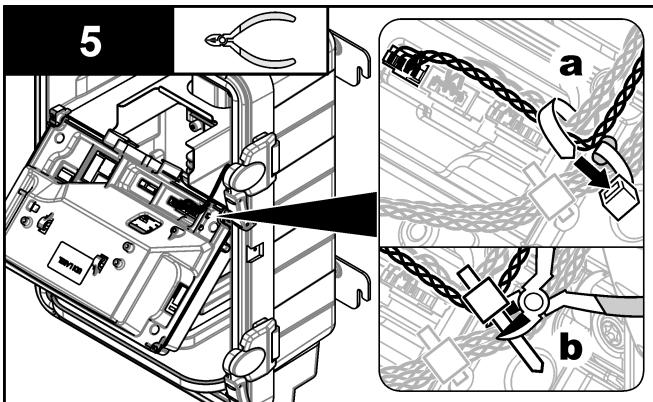


3. Connect the cable of the stir motor to the third connector from the right side of the front panel.
4. Put all of the loose cables and the stir motor cable in the top cable clamp at the back of the analyzer.



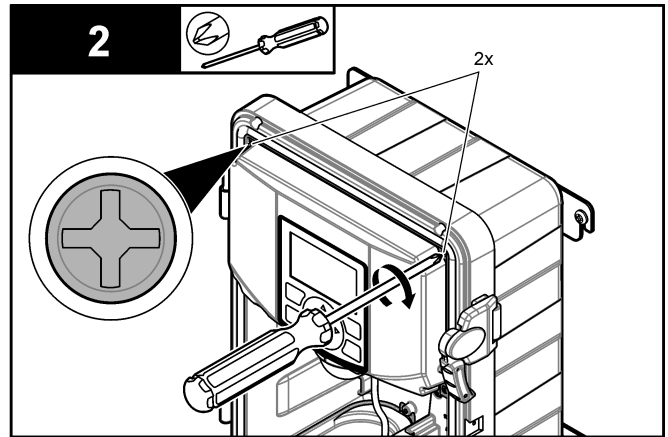
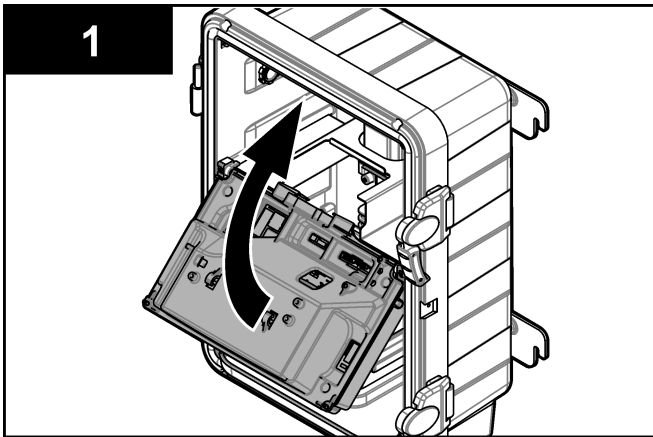
5. Attach the loose cables to the front panel as follows:
  - a. Put a cable tie through the cutout in the front panel. Put the loose cables that connect to the front panel in the cable tie.
  - b. Tighten the cable tie. Cut the cable tie to remove the unwanted length.

*Note: The cable tie keeps the cables connected.*



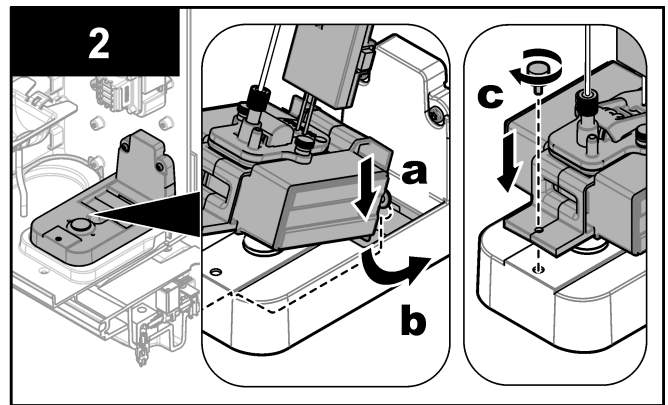
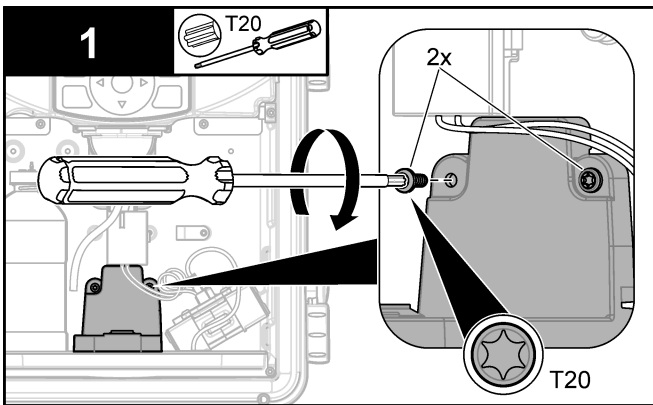
## Close the front panel

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

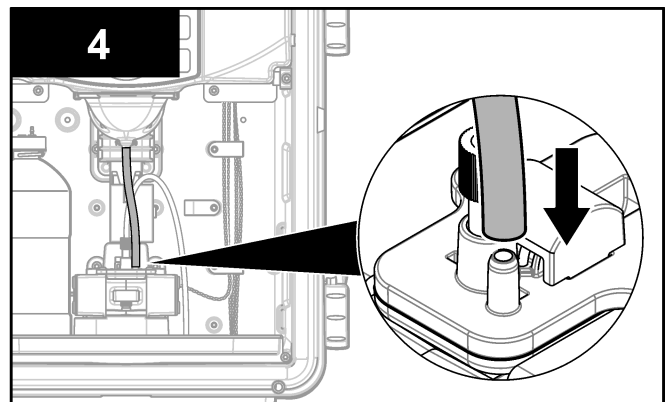
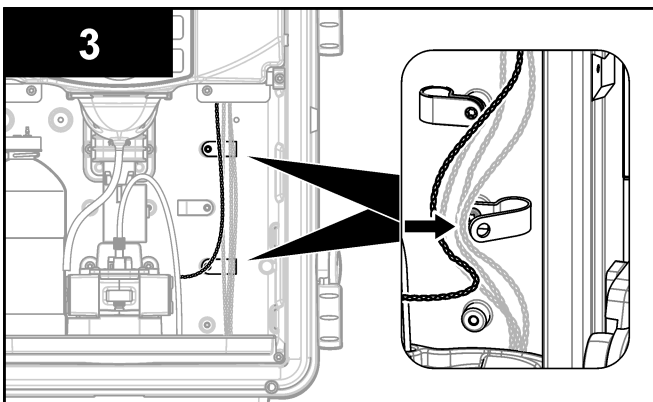


## Install the stir motor

1. Use a T20 Torx screwdriver to install the two screws that attach the stir motor to the back of the analyzer.
2. Install the colorimeter as follows:
  - a. Tilt the back of the colorimeter down. Put the colorimeter on the stir motor.
  - b. Push the colorimeter back until it stops and the thumbscrew hole and threaded hole in the stir motor are aligned.
  - c. Put the thumbscrew in the colorimeter. Turn the thumbscrew to tighten.

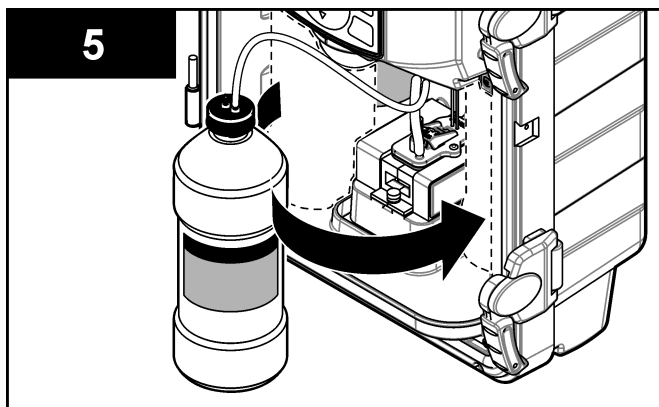


3. Put all of the loose cables and the stir motor cable in the two cable clamps at the back of the analyzer.
4. Connect the funnel tube to the colorimeter.



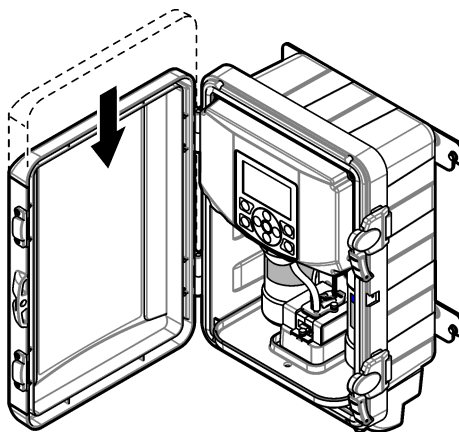


5. Move the bottle back to the right side of the analyzer.



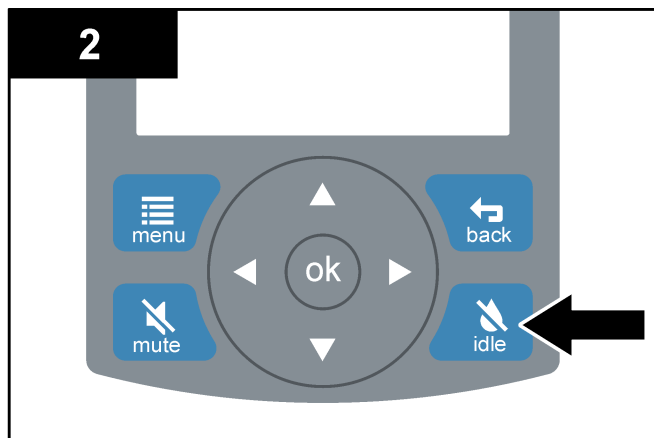
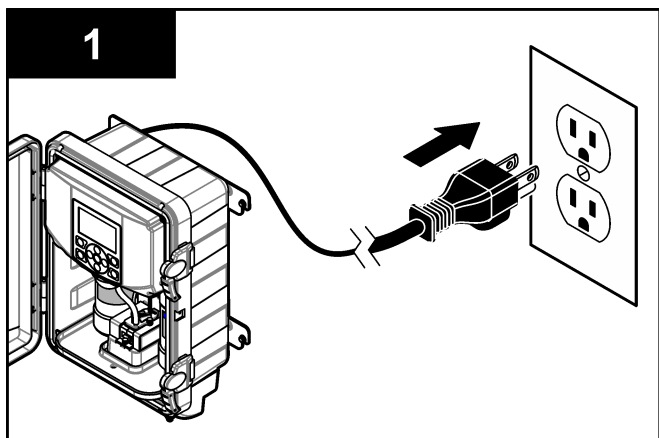
## Install the door

Install the door on the hinges.



## Start the analyzer

1. Connect the power cord to the electrical outlet. Wait for the home screen to show on the display (approximately 2 minutes). The home screen has the word "Idle".
2. When the home screen shows on the display, 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

