

Glass Cell Colorimeter Assembly Replacement Instructions

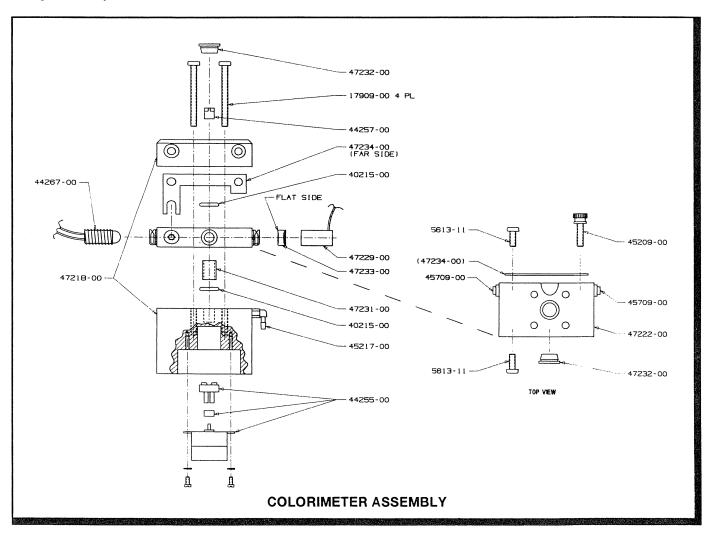
For the Model CL17 Chlorine Analyzer

Replacement parts:

Description	Cat. No.
Colorimeter Assembly	. 47235-00
Standoff 10-32x2.75	
Fitting, Elbow, barb	. 45217-00
Screws, 10-32x1.875	.17909-00

- 1. Turn off sample flow to the instrument, and set the external POWER switch to off.
- 2. Remove the plastic wire guide that covers the external wires from the chassis on the Model CL17 46780-01 or 46780-02 (skip this step on the Model CL17 44180-00). Remove the colorimeter cover.
- 3. Open the keyboard.

- 4. Remove the cover from the interconnect circuit board on the Model CL17 44180-01 or 44180-02.
- 5. Remove the lamp holder assembly from the colorimeter block by turning the lamp holder counterclockwise until completely removed. Remove the lamp from the lamp holder, and trace the lamp leads back to the board connector. Disconnect the lamp plug from the board. Discard the lamp holder. Reconnect the lamp cable to the circuit board.
- 6. Trace the blue photocell cable from the side of the colorimeter block to the microprocessor board, and disconnect it from the connector and wire clips.



- 7. Remove the two or three screws on the front of the colorimeter block in the instrument case. Disconnect the sample and reagent tubes. Remove the drain tube from the back of the colorimeter block. Remove the color filter assembly and interference filter, and discard. (The color filter [#44305-00] and interference filter [#44256-00] cannot be used in the new glass cell colorimeter assembly [#47235-00].)
- 8. Remove the stirring motor from the bottom of the colorimeter assembly by removing the two (2) screws that are visible from the bottom of the block. Leave the cable connected.
- 9. Tip the colorimeter assembly upside down to retrieve the stirring magnet, or use the stirring magnet removal tool. Save the stirring magnet for use in the replacement assembly.
- 10. Install the motor that was removed in Step 8 into the new block assembly [#47235-00]. Use the same screws that secured the motor to the bottom of the old colorimeter assembly (see *Figure 1*)
- 11. Standoffs used to mount the colorimeter must be 2.75 inches (7 cm) long. Replace old standoffs if they are shorter than 2.75 inches (7 cm).
- 12. Reconnect the sample tube to the fitting on the side of the colorimeter block. If your CL17 Chlorine Analyzer has the small bore tubing for sample inlet, change the barbed elbow fitting to the spare fitting that is included in the retrofit kit (part number 44252-00). Reconnect the drain tube.

NOTE

Use the large bore tubing kit (part number 47341-00) for higher flow rates.

- 13. Mount the colorimeter assembly into the instrument case using the screws supplied in the retrofit kit. Make sure the ground plate is in place between the standoffs and the colorimeter.
- 14. Reinstall the lamp that was removed in Step 5. Place the lamp wires under the wire clip on the side of the optical assembly. Tighten the set screw on the lamp until snug. Connect the new photocell wire to the circuit board, and attach the wire to the two plastic clips located behind the metal lip on the partition below the electronics housing.
- 15. With the fins of the stirring magnet oriented up, replace the magnet into the colorimeter sample cell.
- 16. Replace the plugs on the colorimeter.
- 17. Re-route the external wires through the wire guide on Model CL17 46780-01 or 46780-02 instruments, and screw the guide down. Replace any circuit board covers that were removed earlier.
- 18. Close the keyboard.
- 19. Turn on the sample flow, and set the external power switch to on.

NOTE

Make sure wires are not crimped when fastening the wire guide.

NOTE

If a higher rate flow to the colorimeter is desired, install the large bore tubing kit #47341-00.

In the United States, call 800-227-4224 toll-free for current prices or technical assistance. Outside the United States, contact the Hach office or distributor serving you.

HACH Systems for Analysis

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