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› Hayward Goldline AQL-CHEM2 Sense and Dispense PH and CO2 Dispensing Kit Instruction Manual

Hayward AQL-CHEM2

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INTRODUCTION

The Hayward Goldline AQL-CHEM2 Sense and Dispense PH and CO2 Dispensing Kit is designed to provide automated pH control for swimming pools when integrated with a Goldline Aqua Rite Pro chlorinator or Pro Logic pool control system. This kit facilitates the injection of CO2 into the pool water to slowly lower pH levels, offering a safer alternative to handling harsh acids for pH adjustment.



Image of the Hayward Goldline AQL-CHEM2 Sense and Dispense PH and CO2 Dispensing Kit components.

SAFETY INFORMATION

Always read and understand all instructions before installing or operating this equipment. Improper installation or operation can result in serious injury or property damage. Ensure all electrical connections are made by a qualified professional and comply with local codes. Handle CO2 tanks with care and ensure proper ventilation. Keep children away from pool chemicals and equipment.

KIT COMPONENTS

The AQL-CHEM2 kit includes the following items:

- Pressure reducing regulator, pre-set at 50-PSI output.
- 110-VAC solenoid valve with a 6-foot power cord.
- Nylon washer and spare.
- 15-feet of black UV resistant flexible tubing.
- PVC check valve injector.

SETUP AND INSTALLATION

This kit is designed for integration with a Goldline Aqua Rite Pro chlorinator or Pro Logic pool control system and requires a standard CO2 tank (not included).

1. **Mounting the Regulator and Solenoid:** Securely attach the pressure reducing regulator to your standard CO2 tank. Ensure a tight seal using the provided nylon washer.
2. **Connecting the Solenoid Valve:** Connect the 110-VAC solenoid valve to the regulator. The solenoid valve will control the flow of CO2.
3. **Tubing Installation:** Connect one end of the 15-foot UV resistant flexible tubing to the outlet of the solenoid valve. Route the tubing to the pool's circulation system where the PVC check valve injector will be installed.
4. **Injector Installation:** Install the PVC check valve injector into the pool's return line or a suitable location in the plumbing system, ensuring it is downstream of the filter and heater. The check valve prevents water from flowing back into the CO2 line.
5. **Electrical Wiring:** Wire the 110-VAC solenoid valve directly to your Aqua Rite Pro or Pro Logic control system. Refer to your Aqua Rite Pro or Pro Logic manual for specific wiring instructions for the AQL-CHEM2 sensing kit. This connection allows the control system to activate the CO2 injection based on pH readings.
6. **System Integration:** Ensure the AQL-CHEM sensing kit (sold separately) is properly installed and connected to your Aqua Rite Pro or Pro Logic system to enable pH level sensing.
7. **Leak Check:** After all connections are made, slowly open the CO2 tank valve and check all connections for leaks using a soapy water solution.

OPERATING INSTRUCTIONS

Once installed and configured with your Aqua Rite Pro or Pro Logic system and AQL-CHEM sensing kit, the AQL-CHEM2 operates automatically:

- The AQL-CHEM sensing kit continuously monitors the pool's pH level.
- If the pH level rises above the set point configured in your Aqua Rite Pro or Pro Logic system, the control system will activate the AQL-CHEM2 solenoid valve.
- Upon activation, the solenoid valve opens, allowing CO2 to flow from the tank, through the regulator and tubing, and into the pool water via the injector.
- CO2 dissolves in the water, forming carbonic acid, which gently lowers the pool's pH.
- Once the pH reaches the desired level, the control system deactivates the solenoid valve, stopping the CO2 injection.

Regularly monitor your pool's pH levels using a separate test kit to verify the system's accuracy and make any necessary adjustments to your control system's settings.

MAINTENANCE

Proper maintenance ensures the longevity and efficient operation of your AQL-CHEM2 kit:

- **CO2 Tank Replacement:** Monitor your CO2 tank pressure and replace the tank when it is empty. Always ensure the main CO2 tank valve is closed before disconnecting and reconnecting tanks.
- **Tubing Inspection:** Periodically inspect the flexible tubing for any signs of wear, cracks, or damage. Replace if necessary to prevent leaks.
- **Solenoid Valve Check:** Ensure the solenoid valve is operating correctly. Listen for a distinct click when the system activates or deactivates CO2 injection. If the valve buzzes continuously without opening or closing, it may require inspection or replacement.
- **Injector Cleaning:** Occasionally check the PVC check valve injector for blockages or mineral buildup. Clean as needed to ensure unrestricted CO2 flow.
- **System Calibration:** Refer to your Aqua Rite Pro or Pro Logic manual for instructions on calibrating the pH sensor (AQL-CHEM kit) to ensure accurate readings.

TROUBLESHOOTING

Problem	Possible Cause	Solution
pH not lowering	Empty CO2 tank. Solenoid valve not opening. Tubing kinked or blocked. Injector clogged. pH sensor (AQL-CHEM) malfunction or miscalibration. Control system not activating CO2.	Replace CO2 tank. Check electrical connection to solenoid. Inspect solenoid for damage; replace if faulty. Inspect and clear tubing. Clean injector. Calibrate or replace pH sensor. Verify settings in Aqua Rite Pro/Pro Logic system.
Solenoid valve buzzing but not activating	Internal mechanical failure of solenoid. Insufficient power.	The solenoid may be faulty and require replacement. Contact Hayward support. Verify 110-VAC power supply.
CO2 leaks detected	Loose connections. Damaged tubing or seals.	Tighten all connections, especially at the CO2 tank, regulator, and solenoid. Inspect tubing and seals; replace any damaged components.

SPECIFICATIONS

- **Model:** AQL-CHEM2
- **Brand:** Hayward
- **Power Requirement:** 110-VAC (for solenoid valve)
- **Regulator Output Pressure:** Pre-set 50-PSI
- **Tubing Length:** 15 feet (UV resistant)
- **Compatibility:** Goldline Aqua Rite Pro chlorinator or Pro Logic pool control systems (requires AQL-CHEM sensing kit)
- **Product Benefits:** Lowers pH, Prevents Skin Irritation (indirectly, by avoiding harsh acids)

- **Item Weight:** Approximately 1 Pound (kit components)

WARRANTY INFORMATION

The Hayward Goldline AQL-CHEM2 Sense and Dispense PH and CO2 Dispensing Kit comes with a **1-Year Manufacturer's Warranty**. This warranty covers defects in materials and workmanship under normal use. For specific terms, conditions, and to initiate a warranty claim, please refer to the official Hayward warranty documentation or contact Hayward customer support.

SUPPORT

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact Hayward customer support. You can typically find contact information on the official Hayward website or in the documentation provided with your product.

Hayward Official Website: www.hayward-pool.com