

Bayrol AS7

Bayrol AS7 Electrolysis Cell for Automatic Salt Electrolyzer Instruction Manual

Model: AS7 (Part No. 191034)

1. INTRODUCTION

This manual provides essential instructions for the installation, operation, and maintenance of the Bayrol AS7 Electrolysis Cell. The AS7 cell is specifically designed for use with the Bayrol Automatic Salt Electrolyzer system to ensure efficient and reliable water treatment for your pool. Please read this manual thoroughly before installation and operation to ensure proper function and safety.

2. SAFETY INSTRUCTIONS

- Always disconnect power to the Automatic Salt Electrolyzer system before performing any installation, maintenance, or troubleshooting on the electrolysis cell.
- Ensure proper ventilation when working with pool chemicals.
- Wear appropriate personal protective equipment (PPE), such as gloves and eye protection, when handling the cell or pool chemicals.
- The electrolysis cell contains electrodes that can be damaged by improper handling or cleaning.
- Keep out of reach of children and pets.
- Refer to the main Automatic Salt Electrolyzer manual for complete system safety guidelines.

3. PACKAGE CONTENTS

Upon opening the package, verify that all components are present and undamaged:

- Bayrol AS7 Electrolysis Cell (7 plates)
- Sealing O-rings (pre-installed or separate)
- Instruction Manual (this document)

If any parts are missing or damaged, contact your supplier immediately.

4. PRODUCT OVERVIEW AND COMPONENTS

The following diagram illustrates the components of the Bayrol Automatic Salt Electrolyzer system, including the AS7 electrolysis cell. The AS7 cell is specifically designed for optimal performance within this system.

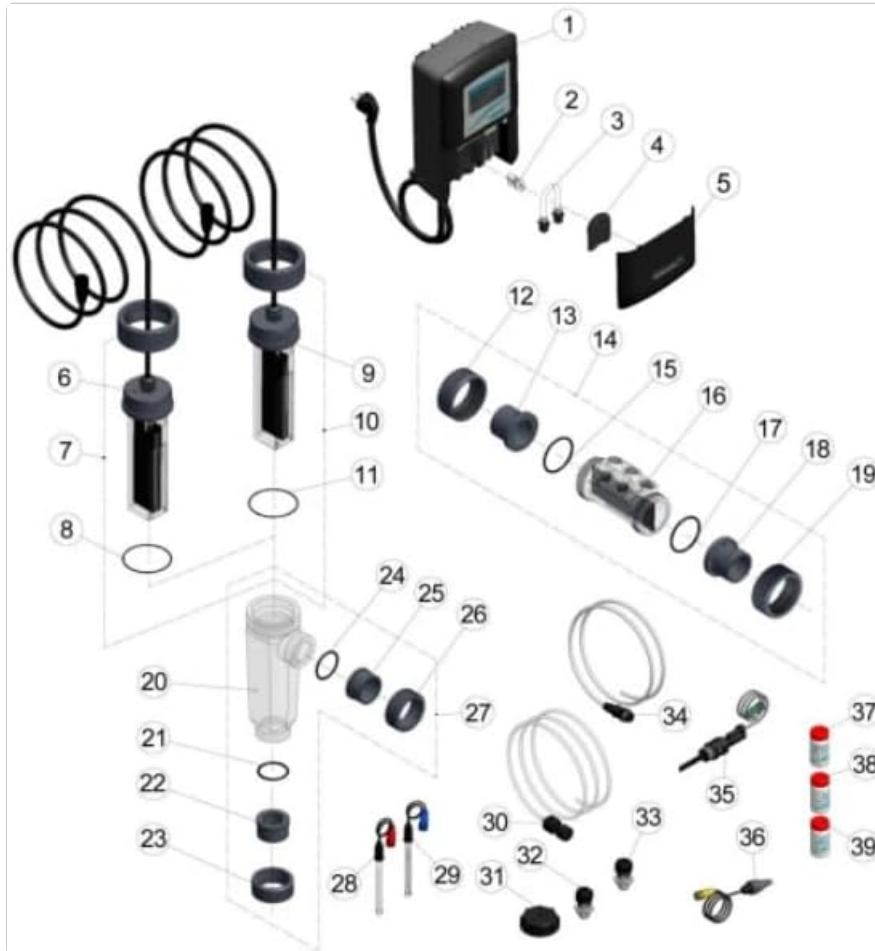


Figure 1: Exploded view of the Bayrol Automatic Salt Electrolyzer system components.

This diagram shows various parts of the Bayrol Automatic Salt Electrolyzer system. Key components related to the AS7 electrolysis cell are numbered 6, 7, 8, 9, 10, and 11, representing the cell body, electrode plates, and sealing O-rings. Other numbers indicate the main control unit, various sensors, housing components, and chemical dosing parts of the complete system.

Key Components (Refer to Figure 1):

- 1: Automatic Salt Electrolyzer Control Unit
- 6, 9: Electrolysis Cell Head/Connector
- 7, 10: Electrolysis Cell Electrode Plates (7 plates)
- 8, 11: Sealing O-rings for Electrolysis Cell
- 16: Transparent Cell Housing/Flow Chamber
- 6, 28, 29: Probes (e.g., pH, Redox)
- 7, 35: Chemical Injector
- 8, 37, 38, 39: Chemical Containers
9. *Other numbered components represent various fittings, sensors, and accessories for the complete Automatic Salt Electrolyzer system.*

5. SETUP AND INSTALLATION

The AS7 electrolysis cell is a replacement part or an integral component of a new Bayrol Automatic Salt Electrolyzer installation. Ensure the main system is powered off and depressurized before proceeding.

1. **Prepare the Installation Site:** Ensure the location for the cell housing (component 16 in Figure 1) is accessible and correctly plumbed into the pool's filtration return line, after the filter and heater.
2. **Install Cell Housing:** Securely install the transparent cell housing (16) into the plumbing using appropriate unions (12, 19) and seals (15, 17). Ensure a watertight connection.
3. **Insert Electrolysis Cell:** Carefully insert the AS7 electrolysis cell (components 6, 7, 8, 9, 10, 11) into the cell housing (16). Ensure the O-rings (8, 11) are correctly seated to prevent leaks.
4. **Secure Cell Connections:** Tighten the cell heads/connectors (6, 9) to secure the cell within the housing. Do not overtighten.
5. **Connect Electrical Cables:** Connect the electrical cables from the AS7 cell to the Bayrol Automatic Salt Electrolyzer Control Unit (1) according to the instructions provided in the main electrolyzer manual. Ensure connections are clean and dry.
6. **Leak Check:** Once all connections are made, restore water flow to the system and carefully check for any leaks around the cell housing and connections.
7. **Power On:** After confirming no leaks, restore power to the Automatic Salt Electrolyzer Control Unit (1) and proceed with system calibration as per the main electrolyzer manual.

6. OPERATING INSTRUCTIONS

The AS7 electrolysis cell operates under the control of the Bayrol Automatic Salt Electrolyzer system. Refer to the main electrolyzer manual for detailed operating procedures, including initial startup, setting chlorine production levels, and monitoring system status.

- **Salt Level:** Ensure the pool water maintains the recommended salt concentration as specified by Bayrol for the Automatic Salt Electrolyzer. Insufficient salt will reduce chlorine production and can damage the cell.
- **Flow Rate:** The system requires adequate water flow through the cell housing for proper operation and cooling of the electrodes. Ensure your pool pump is operating correctly.
- **Monitoring:** Regularly check the control unit display for any error messages or warnings related to cell operation.
- **Water Chemistry:** Maintain proper pH levels in the pool water. Incorrect pH can affect chlorine effectiveness and cell lifespan.

7. MAINTENANCE

Regular maintenance of the AS7 electrolysis cell is crucial for its longevity and efficient performance.

7.1. Cell Cleaning

Over time, calcium deposits (scaling) can build up on the electrode plates, reducing efficiency. The Bayrol Automatic Salt Electrolyzer system may have a self-cleaning function (reverse polarity). If manual cleaning is required:

1. **Disconnect Power:** Always turn off the main power to the electrolyzer system.
2. **Remove Cell:** Carefully remove the AS7 electrolysis cell from its housing.

3. **Inspect:** Visually inspect the electrode plates for scaling.
4. **Clean:** If scaling is present, immerse the cell in a diluted acid solution specifically designed for electrolysis cell cleaning (e.g., a 1:10 solution of muriatic acid and water, or a commercial cell cleaning solution). Follow the cleaning solution manufacturer's instructions carefully. **Do not use metal brushes or abrasive tools** as this can damage the electrode coating.
5. **Rinse:** After cleaning, thoroughly rinse the cell with fresh water.
6. **Reinstall:** Reinstall the clean cell, ensuring O-rings are properly seated, and check for leaks as described in the Setup section.

7.2. O-Ring Inspection

Periodically inspect the O-rings (8, 11) for cracks, wear, or deformation. Replace them if necessary to prevent leaks.

8. TROUBLESHOOTING

This section addresses common issues related to the AS7 electrolysis cell. For comprehensive system troubleshooting, refer to the Bayrol Automatic Salt Electrolyzer manual.

Problem	Possible Cause	Solution
Low/No Chlorine Production	Low salt level, dirty cell plates (scaling), insufficient water flow, faulty cell, incorrect settings on control unit.	Check and adjust salt level. Clean the cell (see Section 7.1). Verify pump operation and flow. Consult electrolyzer manual for settings. Inspect cell for damage.
Water Leaks from Cell Housing	Damaged or improperly seated O-rings, loose connections.	Disconnect power, depressurize system. Inspect and reseal/replace O-rings (8, 11). Tighten connections (6, 9, 12, 19).
"Check Cell" or "Clean Cell" Error	Excessive scaling on electrodes, cell nearing end of life, sensor issue.	Perform cell cleaning (Section 7.1). If error persists after cleaning, the cell may need replacement. Consult Bayrol support.

9. SPECIFICATIONS

Feature	Detail
Model:	AS7
Part Number:	191034
Number of Plates:	7
Compatibility:	Bayrol Automatic Salt Electrolyzer
Material:	Titanium electrodes with special coating
ASIN:	B0BZM4JC4B

10. WARRANTY AND SUPPORT

For information regarding the warranty of your Bayrol AS7 Electrolysis Cell, please refer to the warranty documentation included with your complete Bayrol Automatic Salt Electrolyzer system or contact Bayrol customer support directly. Keep your proof of purchase for warranty claims.

For technical support, spare parts, or further assistance, please contact your authorized Bayrol dealer or visit the official Bayrol website.