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› Balboa G6405-01 BP7 Retrofit Kit System User Manual

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Balboa G6405-01 BP7 Retrofit Kit System User Manual

Model: G6405-01 | Brand: Balboa Water Group

INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of the Balboa G6405-01 BP7 Retrofit Kit System. This system is designed to upgrade or replace existing spa control systems, offering advanced features and reliable performance for your hot tub. Please read this manual thoroughly before beginning installation or operation to ensure proper function and safety.

SAFETY INFORMATION

Important Safety Instructions:

- Installation must be performed by a qualified electrician in accordance with all local and national electrical codes.
- Always disconnect power to the spa at the main breaker before performing any installation, maintenance, or service.
- The control system must be connected to a circuit protected by a Class A Ground Fault Circuit Interrupter (GFCI).
- Do not operate the spa if any component of the control system is damaged or malfunctioning.
- Keep all electrical connections dry and free from moisture.
- Ensure proper grounding of all electrical components.

Failure to follow these safety instructions could result in electric shock, fire, or serious injury.

COMPONENTS OVERVIEW

The Balboa G6405-01 BP7 Retrofit Kit includes the following main components:

- **BP7 Spa Control System:** The main control unit housing the heater, circuit board, and electrical connections.
- **TP500 Control Panel:** The user interface for operating the spa functions.

- **Control Panel Cable:** Connects the TP500 panel to the BP7 control system.
- **Panel Adapter Plate:** Used to cover the existing opening when installing the new control panel.



Figure 1: Overview of the Balboa G6405-01 BP7 Retrofit Kit components.



Figure 2: Balboa TP500 Control Panel and Adapter Plate.

SETUP AND INSTALLATION

Before You Begin:

- Ensure the spa is completely drained and disconnected from all power sources.
- Remove the old control system and control panel.
- Inspect the spa plumbing and wiring for any damage or wear.

1. Mounting the BP7 Control System

Mount the new BP7 control system in a dry, accessible location, ensuring adequate ventilation. Use appropriate fasteners to secure the unit firmly to a stable surface.



Figure 3: Balboa BP7 Spa Control System, ready for mounting.



Figure 4: Rear view of the BP7 Control System, highlighting connection points.

2. Plumbing Connections

Connect the spa plumbing to the heater unions on the BP7 control system. Ensure all connections are watertight and secured properly. Use appropriate sealants if necessary.

3. Electrical Wiring

All electrical wiring must be performed by a qualified professional. Refer to the wiring diagram provided on the control system's cover for correct connections of pumps, blowers, ozonators, and other accessories. Ensure the main power supply is correctly wired to the system, adhering to the 240V, 60Hz, 48A specifications.



Figure 5: Internal wiring and components of the BP7 Control System.



Figure 6: Balboa BP7 Control System Wiring Diagram (PN G4361).

4. Control Panel Installation

Install the TP500 control panel in the desired location on the spa shell. Use the provided adapter plate to cover any larger existing cutouts. Connect the control panel cable to the designated port on the BP7 control system. Ensure the cable is routed safely and securely.

5. Initial Power-Up and Configuration

Once all connections are secure and the spa is filled with water, restore power to the system. The BP7 system will typically enter a configuration mode. Refer to the Balboa website for detailed instructions on setting the spa configuration, including pump assignments and filtration cycles. Be aware that some configuration steps may have a time limit for completion.

OPERATING INSTRUCTIONS

The TP500 control panel provides intuitive control over your spa's functions.

- **Temperature Adjustment:** Use the "Warm" and "Cool" buttons to set the desired water temperature.
- **Jets:** Press the "Jets" button to activate the primary pump. Subsequent presses may cycle through different speeds or activate additional pumps, depending on your spa's configuration.
- **Light:** Press the "Light" button to turn the spa light on or off.
- **Menu:** Access advanced settings and programming options through the "Menu" button. Consult the full Balboa TP500 manual for detailed menu navigation and programming instructions.
- **Auxiliary Functions:** If your spa has an auxiliary pump or other features, these may be controlled via dedicated buttons or through the menu. Note that an auxiliary button for a secondary pump may need to be attached to the auxiliary port on the panel, not directly to pump 2 on the board.

MAINTENANCE

Regular maintenance is crucial for the longevity and optimal performance of your spa and its control system.

- **Water Chemistry:** Maintain proper water chemistry (pH, alkalinity, sanitizer levels) as recommended by your spa manufacturer. Imbalanced water can damage spa components, including the heater.
- **Filter Cleaning:** Regularly clean or replace your spa filters to ensure proper water flow and filtration.
- **System Inspection:** Periodically inspect all visible wiring and plumbing connections for signs of wear, leaks, or corrosion.
- **Winterization:** If you live in a cold climate and plan to shut down your spa for the winter, follow proper winterization procedures to prevent freezing damage to the plumbing and control system.

TROUBLESHOOTING

This section addresses common issues you might encounter. For more complex problems, consult a qualified spa technician.

Problem	Possible Cause	Solution
System has no power.	Main breaker tripped; GFCI tripped; Loose wiring connection.	Check main breaker and GFCI. Reset if tripped. Inspect wiring connections (with power off).
Pump not operating.	Pump not connected; Air lock; Faulty pump.	Verify pump connections. Bleed air from pump. Consult technician if pump is faulty.

Problem	Possible Cause	Solution
Heater not working.	Low water flow; Heater element failure; Sensor issue.	Ensure filters are clean and water level is adequate. Check for flow restrictions. Contact technician for heater or sensor issues.
Control panel unresponsive.	Loose cable connection; Panel malfunction.	Check control panel cable connection to the BP7 system. If issue persists, panel may need replacement.

For specific error codes displayed on the TP500 panel, refer to the detailed Balboa TP500 manual or the Balboa Water Group website for explanations and solutions.

SPECIFICATIONS

Attribute	Detail
Model Number	G6405-01
Part Number (BP7)	G4361
Agency Model	BP20-BP7-AS
Brand	Balboa Water Group
Product Dimensions	21 x 18 x 10 inches
Item Weight	12.67 pounds
Material	Plastic
Electrical Rating	240V, 60Hz, 48A
UPC	682470425905



Figure 7: Balboa BP7 Control System Product Label. Serial Number: [G4361***2007060046](#)

WARRANTY AND SUPPORT

For detailed warranty information regarding your Balboa G6405-01 BP7 Retrofit Kit System, please refer to the warranty documentation included with your purchase or visit the official Balboa Water Group website.

For technical support, troubleshooting assistance beyond this manual, or to inquire about replacement parts, please contact Balboa Water Group customer service or visit their official support channels. Online resources, including additional manuals and FAQs, are often available on the manufacturer's website.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question