Hot Spring 1044101

Hot Spring Spas Ozone Check Valve 1044101 Instruction Manual

Model: 1044101

1. Introduction

This manual provides essential information for the installation, operation, and maintenance of your Hot Spring Spas Ozone Check Valve, model 1044101. Please read these instructions carefully before proceeding with installation or use to ensure proper function and longevity of the product.

2. Product Overview

The Hot Spring Spas Ozone Check Valve 1044101 is a critical component in your hot tub's ozone sanitation system. Its primary function is to allow ozone gas to flow into the spa water while preventing water from flowing back into the ozonator. Over time, check valves can degrade, leading to inefficient ozone injection or potential damage to the ozonator from water backflow. This valve replaces part number 34658 and is designed for 3/16" tubing connections.

Figure 1: Hot Spring Spas Ozone Check Valve 1044101. This image displays the compact, cylindrical check valve with two barbed ends for hose connections. The valve is typically white or clear plastic.

3. Compatibility

The 1044101 Ozone Check Valve is compatible with the following Hot Spring, Tiger River, Hot Spot, and Caldera spa models:

- **Hot Spring:** Grandee (1995-Current), Vista (2004-2013), Envoy (2004-Current), Vanguard (2001-Current), Grandee NXT (2014-Current), Envoy NXT (2014-Current), Jetsetter NXT (2014-Current), Jetsetter (2014-Current), Prodigy (1995-Current), Sovereign (1995-Current), Alccolade (2005-2006), Landmark (1996-2003), Aria (2007-Current)
- **Tiger River:** Bengal (1997-2010), Siberian (1997-2004), Caspian (2003-2010), Summatran (1997-2010), Bengal Model MM (2005-2010)
- **Hot Spot:** RLX (1998-2002), SLX (1998-2002), SX (2011-Current), TX (2011-Current), Round (1995-1997), SLXtra (2001-2002), RE (1998-2002), SE (1998-2000)
- **Caldera:** Tahitian (2001-Current), Niagara (2001-Current), Geneva (2001-Current), Cantabria (2009-Current), Hawaiian (2002-2010), Kauai (2013-2015), Moorea (2006-2010), Salina (2011-2015), Makena (2013-2015), Martinique (2013-2015), Aspire (2004-2008), Elation (2003-2010)

4. Setup and Installation

Safety First: Before beginning any work on your hot tub, ensure the power to the spa is completely disconnected at the circuit breaker to prevent electrical shock.

1. **Locate the Existing Check Valve:** The ozone check valve is typically located in the ozone line, which is a small diameter tube connecting the ozonator to the spa's plumbing system. It is usually positioned near the ozonator or where the ozone line connects to the injector.
2. **Prepare for Removal:** Have a towel ready to catch any residual water in the line. Note the direction of flow indicated on the old valve (if present) or the orientation of the existing valve. The new valve must be installed in the same direction to ensure proper function. Ozone flows from the ozonator towards the spa water.

3. **Remove the Old Valve:** Carefully cut the ozone tubing on either side of the old check valve. If the tubing is brittle or damaged, consider replacing a short section of it.
4. **Install the New Valve:** Insert the barbed ends of the new 1044101 check valve into the ozone tubing. Ensure the valve is oriented correctly, allowing ozone to flow from the ozonator to the spa. Apply gentle pressure and twist the tubing onto the barbs for a secure fit. If the tubing is stiff, briefly warming the ends with a hairdryer (on a low setting) can make it more pliable. Do not use excessive heat.
5. **Secure Connections:** Verify that both connections are tight and leak-free.
6. **Restore Power:** Once installation is complete and all connections are secure, restore power to the hot tub.

Note: *If you are unsure about any step of the installation process, it is recommended to consult a qualified spa technician.*

5. Operation

Once installed, the Hot Spring Spas Ozone Check Valve 1044101 operates automatically as part of your hot tub's ozone system. When the ozonator is active, it produces ozone gas which is then drawn through the check valve and injected into the spa water. The check valve's internal mechanism opens to allow this one-way flow of gas. When the ozonator is off, or if there is any back pressure from the water, the valve closes to prevent water from entering the ozonator, protecting it from damage.
Proper operation is indicated by the presence of small bubbles in the spa water at the ozone injection point when the ozonator is running. The absence of these bubbles may suggest an issue with the ozone system, potentially including the check valve.

6. Maintenance

The ozone check valve is a wear-and-tear component and does not require regular user maintenance beyond periodic inspection and eventual replacement. Ozone gas is corrosive and can degrade the internal components of the valve over time.

- **Periodic Inspection:** Visually inspect the check valve and the surrounding tubing during routine spa maintenance. Look for signs of cracking, discoloration, or water accumulation within the ozone line on the ozonator side of the valve.
- **Replacement Schedule:** It is generally recommended to replace the ozone check valve every 1-2 years, or whenever the ozonator is replaced, to ensure optimal performance of your ozone system and prevent potential damage to the ozonator.
- **Addressing Issues:** If you notice a lack of ozone bubbles, water in the ozone line, or a decrease in ozone effectiveness, the check valve should be one of the first components to inspect and potentially replace.

7. Troubleshooting

Problem	Possible Cause	Solution

Problem	Possible Cause	Solution
No ozone bubbles in spa water.	• Clogged or failed check valve. • Ozonator not functioning. • Air intake blockage.	• Inspect and replace check valve (1044101). • Check ozonator power and function. • Clear any obstructions in the ozone line or air intake.
Water in the ozone line (on the ozonator side of the valve).	• Failed check valve, allowing backflow.	• Immediately replace the check valve (1044101) to prevent damage to the ozonator.
Difficulty connecting tubing to the valve barbs.	• Tubing is cold or stiff. • Incorrect tubing size (valve is for 3/16" tubing).	• Gently warm the end of the tubing with a hairdryer (low setting) to make it more pliable. • Ensure you are using 3/16" inner diameter tubing.

8. Specifications

- **Model:** 1044101
- **Replaces Part Number:** 34658
- **Tubing Compatibility:** 3/16" inner diameter
- **Function:** One-way ozone gas flow, prevents water backflow
- **Manufacturer:** Watkins
- **Item Weight:** 0.352 ounces
- **Package Dimensions:** 4.49 x 3.94 x 0.71 inches

9. Warranty and Support

For warranty information or technical support regarding your Hot Spring Spas Ozone Check Valve 1044101, please refer to the original purchase documentation or contact your authorized Hot Spring Spas dealer. Keep your proof of purchase for warranty claims.