

Dosatron 709010

Dosatron Nutrient Delivery System - Mixing Chamber Kit Instruction Manual

Model: 709010

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Dosatron Nutrient Delivery System Mixing Chamber Kit. This kit is designed to ensure a homogenized blend of nutrient solutions within your dosing system, which is crucial for effective plant feeding.

Please read these instructions thoroughly before attempting to install or operate the system to ensure safe and efficient use.

2. SAFETY INFORMATION

- Always wear appropriate personal protective equipment (PPE) when handling nutrient solutions or working with plumbing.
- Ensure all connections are secure and leak-free before operating the system under pressure.
- Do not exceed the maximum pressure ratings of any component in your irrigation system.
- Keep the mixing chamber and associated plumbing clean to prevent the growth of algae or mold, which can affect system performance and solution quality.
- Store nutrient solutions and chemicals according to their manufacturer's guidelines.

3. PACKAGE CONTENTS

The Dosatron Nutrient Delivery System Mixing Chamber Kit includes the following components:

- Mixing Chamber Unit
- All necessary plumbing connections for installation

Note: No assembly is required for the mixing chamber itself; however, installation into your existing system will require plumbing connections.

4. SETUP AND INSTALLATION

The mixing chamber should be installed downstream from your Dosatron injector(s) and before the final distribution to ensure proper blending of the concentrated nutrient solution with the water flow.

4.1. Recommended Placement

Install the mixing chamber in a location that allows for easy access for inspection and maintenance. Ensure it is securely mounted and supported to prevent stress on plumbing connections.

4.2. Installation Steps

1. **Turn off Water Supply:** Before beginning installation, shut off the main water supply to your irrigation system to prevent leaks and ensure safety.
2. **Identify Installation Point:** Determine the optimal location for the mixing chamber in your system, typically after the Dosatron injector(s) and before the final output.
3. **Cut Pipe:** Carefully cut the existing pipe at the chosen installation point to accommodate the length of the mixing chamber and its connections. Ensure clean, straight cuts.
4. **Connect Plumbing:** Use the provided plumbing connections (e.g., unions, reducers, clamps) to securely attach the mixing chamber into the cut section of the pipe. Ensure all connections are tightened appropriately to prevent leaks.
5. **Inspect Connections:** Visually inspect all connections to confirm they are properly seated and tightened.
6. **Restore Water Supply:** Slowly turn the main water supply back on. Carefully check for any leaks at the connection points. Tighten connections further if leaks are observed.



Image 1: The Dosatron Mixing Chamber Kit, demonstrating its integration into a typical nutrient delivery system. The clear chamber allows for visual confirmation of solution blending.

5. OPERATING INSTRUCTIONS

Once installed, the Dosatron Mixing Chamber operates passively as water flows through it. Its design promotes turbulence and mixing, ensuring that the concentrated nutrient solution injected by your Dosatron unit is thoroughly blended with the water before reaching your plants.

- **System Activation:** After installation and leak checks, activate your Dosatron injector and water supply as per their respective manuals.
- **Visual Confirmation:** If your mixing chamber is clear, you may visually observe the blending process. Ensure the solution appears uniform as it exits the chamber.
- **Monitoring:** Regularly monitor the pH and EC/PPM of your final nutrient solution downstream from the mixing chamber to confirm consistent and accurate blending.

6. MAINTENANCE

Regular maintenance is essential to ensure the longevity and optimal performance of your mixing chamber and the entire nutrient delivery system.

- **Routine Inspection:** Periodically inspect the mixing chamber and all plumbing connections for any signs of leaks, cracks, or wear.
- **Cleaning:** Over time, nutrient salts or organic matter may accumulate inside the mixing chamber.
 - a. Shut off the water supply to the system.
 - b. Carefully disconnect the mixing chamber from the plumbing.
 - c. Rinse the interior of the chamber with clean water. For stubborn deposits, a mild, non-abrasive cleaning solution suitable for irrigation components can be used.
 - d. Ensure all cleaning solution residue is thoroughly rinsed out before reinstallation.
 - e. Reinstall the chamber, ensuring all connections are secure, and check for leaks upon restoring water flow.
- **Winterization (if applicable):** In cold climates, drain the mixing chamber and entire system to prevent freezing and potential damage during winter months.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Leaks at connections	Loose connections, damaged seals/gaskets, incorrect pipe threading.	Tighten connections. Inspect and replace seals/gaskets if damaged. Ensure proper thread sealant (e.g., PTFE tape) is used if applicable.
Poor nutrient blending (inconsistent EC/pH)	Insufficient flow rate, blockages within the chamber, issues with the Dosatron injector itself.	Verify adequate water flow through the system. Clean the mixing chamber for blockages. Check the Dosatron injector's operation according to its manual.
Algae or mold growth inside chamber	Exposure to light, stagnant water, organic nutrient buildup.	Clean the chamber thoroughly (refer to Section 6). Consider shading the chamber if exposed to direct light. Ensure regular water flow.

8. SPECIFICATIONS

- **Model Number:** 709010
- **Product Dimensions:** 9 x 23 x 9 inches
- **Item Weight:** 4.1 pounds
- **Manufacturer:** Dosatron
- **ASIN:** B010DWF4C

9. WARRANTY AND SUPPORT

For warranty information or technical support regarding your Dosatron Nutrient Delivery System Mixing Chamber Kit, please refer to the official Dosatron website or contact their customer service directly. Keep your purchase receipt as proof of purchase.

Dosatron Contact Information: Please visit www.dosatronusa.com for the most current support and contact details.

