

Ving M022253

Ving Mimaki JV150 / JV300 Damper - M022253 User Manual

Official Product Guide

1. INTRODUCTION

This user manual provides essential information for the proper installation, operation, and maintenance of the Ving Mimaki JV150 / JV300 Damper, part number M022253. This component is crucial for the optimal performance of compatible Mimaki inkjet printers, ensuring consistent ink flow and print quality. Please read this manual thoroughly before installation or use.



Figure 1.1: The Ving Mimaki JV150 / JV300 Damper (M022253) in its packaging. This image shows the main view of the damper, highlighting its design and the transparent protective wrapping.

2. PRODUCT OVERVIEW

The Mimaki JV150 / JV300 Damper (M022253) is a vital part of the ink delivery system in specific Mimaki wide-

format inkjet printers. Its primary function is to regulate ink pressure and filter out impurities, preventing air bubbles from entering the printhead and ensuring smooth, consistent ink supply for high-quality printing.

2.1 Key Features

- Designed for Mimaki JV150 and JV300 series printers.
- Ensures stable ink flow to the printhead.
- Filters ink to prevent printhead clogging.
- Contributes to long printhead lifespan.
- Easy to install and replace.

2.2 Compatible Printer Models

This damper is compatible with the following Mimaki printer models:

- Mimaki CJV150-107 / CJV150-107BS
- Mimaki CJV150-130 / CJV150-130BS
- Mimaki CJV150-160 / CJV150-160BS
- Mimaki CJV150-75 / CJV150-75BS
- Mimaki CJV300-130 / CJV300-130BS
- Mimaki CJV300-160 / CJV300-160BS
- Mimaki JV150-130 / JV150-130BS
- Mimaki JV150-160 / JV150-160BS
- Mimaki JV300-130 / JV300-130BS
- Mimaki JV300-160 / JV300-160BS



Figure 2.1: A stack of new Ving Mimaki JV150 / JV300 Dampers, each sealed for protection. This image illustrates how the product might be received when purchased in multiples.

3. SETUP AND INSTALLATION

Replacing a damper requires careful handling and adherence to safety procedures to avoid ink spills and damage to the printer. It is recommended to consult your printer's specific service manual for detailed instructions, as procedures may vary slightly between models.

3.1 Safety Precautions

- Always power off and unplug the printer before beginning any maintenance.
- Wear appropriate personal protective equipment (PPE), such as gloves and eye protection, to prevent contact with ink.
- Have absorbent materials ready to clean up any ink spills.
- Work in a well-ventilated area.

3.2 General Installation Steps

1. **Access the Damper Area:** Depending on your printer model, you may need to open specific covers or move the printhead carriage to access the dampers. Refer to your printer's service manual.
2. **Identify the Damper:** Locate the damper(s) that need replacement. They are typically small, clear or white plastic components connected to ink tubes and the printhead.
3. **Remove Old Damper:** Carefully disconnect the ink tube(s) from the old damper. Be prepared for minor ink leakage. Then, unclip or unscrew the old damper from its housing. Dispose of the old damper and any ink-soaked materials responsibly.
4. **Install New Damper:** Remove the new Ving Mimaki Damper (M022253) from its packaging. Connect the ink tube(s) securely to the new damper, ensuring correct orientation if applicable. Mount the new damper into its designated position.
5. **Prime the Ink System:** After installation, it is crucial to prime the ink system to remove any air from the lines and fill the new damper with ink. Follow your printer's specific priming procedure, which often involves performing a head cleaning cycle or a manual ink charge.
6. **Test Print:** Once priming is complete, perform a nozzle check and a test print to verify proper ink flow and print quality.



Figure 3.1: Detailed view of the Ving Mimaki JV150 / JV300 Damper's internal components through its clear packaging. This image helps visualize the design before installation.

4. OPERATING PRINCIPLES

The damper acts as a buffer between the ink supply system (ink cartridges/bottles and tubes) and the printhead. It maintains a consistent, slightly negative pressure at the printhead, which is essential for precise ink droplet ejection. The internal filter within the damper traps microscopic particles and air bubbles, preventing them from reaching and potentially clogging the delicate nozzles of the printhead. This continuous filtration and pressure regulation ensure stable and high-quality printing.



Figure 4.1: End view of the Ving Mimaki JV150 / JV300 Damper, highlighting the ink connection ports. This view is important for understanding how the damper connects to the ink lines.

5. MAINTENANCE

Regular maintenance of your printer's ink system, including the dampers, is crucial for extending the life of your printheads and ensuring consistent print quality. Dampers are consumable parts and will eventually require replacement.

5.1 Inspection

- Periodically inspect the dampers for signs of wear, discoloration (due to ink saturation), or physical damage.
- Check the ink tubes connected to the dampers for kinks, leaks, or air bubbles.

5.2 Replacement Schedule

The lifespan of a damper varies depending on printer usage, ink type, and environmental conditions. As a general guideline, dampers should be replaced every 6 to 12 months, or sooner if you observe any of the following symptoms:

- Frequent nozzle dropouts or missing lines in print tests that are not resolved by routine cleaning cycles.
- Visible air bubbles consistently appearing in the ink lines leading to the printhead.
- Ink leakage around the damper connections.
- Significant discoloration or cloudiness of the damper body, indicating filter saturation.

Refer to your printer's official maintenance schedule for specific recommendations.



Figure 5.1: An alternative view of the Ving Mimaki JV150 / JV300 Damper in its protective packaging. This image provides another angle for visual reference of the product.

6. TROUBLESHOOTING

If you experience print quality issues, a faulty damper could be a contributing factor. Here are some common issues and potential solutions related to the damper:

Problem	Possible Cause	Solution
Frequent nozzle clogs / Missing lines	Clogged damper filter, air in damper, worn-out damper.	Perform printhead cleaning cycles. If issue persists, inspect damper for air bubbles or discoloration. Replace damper if necessary.
Ink leakage around damper	Loose connection, cracked damper body, worn O-rings.	Ensure ink tubes are securely connected. Inspect damper for cracks. Replace damper if damaged.
Inconsistent ink flow / Fading prints	Damper not maintaining proper pressure, air in system.	Check for air bubbles in ink lines. Perform ink charge/priming. Replace damper if pressure regulation is suspected to be faulty.

If troubleshooting steps do not resolve the issue, it is advisable to consult a qualified printer technician or refer to your printer's comprehensive service manual.

7. SPECIFICATIONS

Attribute	Detail
Product Name	Mimaki JV150 / JV300 Damper
Manufacturer Part Number	M022253
Brand	Ving
Compatible Printer Series	Mimaki JV150, JV300, CJV150, CJV300 Series
Color	White (typically translucent)
Specific Uses For Product	Ink filtration and pressure regulation for inkjet and solvent printers
Item Model Number	M022253
Date First Available	May 16, 2018

8. WARRANTY AND SUPPORT

For specific warranty information regarding the Ving Mimaki JV150 / JV300 Damper (M022253), please refer to the terms and conditions provided by your point of purchase or contact the seller directly. As this is a consumable part, warranty coverage may be limited.

For technical support or further assistance with installation and troubleshooting, please contact the vendor or a certified Mimaki service technician. Always provide the product model number (M022253) and your printer model when seeking support.