

# Mastic Handheld Applicator

Customer Product Manual  
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**For parts and technical support, call the Industrial Coating  
Solutions Customer Support Center at (800) 433-9319 or  
contact your local Nordson representative.**

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# Table of Contents

<b>Safety</b> .....	<b>1</b>
Qualified Personnel.....	1
Intended Use.....	1
Regulations and Approvals.....	1
Personal Safety.....	1
High-Pressure Fluids.....	2
Fire Safety.....	3
Halogenated Hydrocarbon Solvent Hazards.....	4
Action in the Event of a Malfunction.....	4
Disposal.....	4
<b>Specifications</b> .....	<b>5</b>
<b>Installation</b> .....	<b>6</b>
<b>Operation</b> .....	<b>6</b>
Clearing a Blocked Nozzle.....	6
Valve Stem Adjustment.....	7
Spring Tension Adjustment.....	8
<b>Troubleshooting</b> .....	<b>9</b>
<b>Repair</b> .....	<b>9</b>
Remove the Valve Stem and Seal.....	9
Install the Valve Stem and Seal.....	10
<b>Parts</b> .....	<b>11</b>

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## Contact Us

Nordson Corporation welcomes requests for information, comments, and inquiries about its products. General information about Nordson can be found on the Internet using the following address:

<http://www.nordson.com>

<http://www.nordson.com/en/global-directory>

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## Safety

Read and follow these safety instructions. Task-and equipment-specific warnings, cautions, and instructions are included in equipment documentation where appropriate.

Make sure all equipment documentation, including these instructions, is accessible to persons operating or servicing equipment.

## Qualified Personnel

Equipment owners are responsible for making sure that Nordson equipment is installed, operated, and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

## Intended Use

Use of Nordson equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property.

Some examples of unintended use of equipment include

- using incompatible materials
- making unauthorized modifications
- removing or bypassing safety guards or interlocks
- using incompatible or damaged parts
- using unapproved auxiliary equipment
- operating equipment in excess of maximum ratings

## Regulations and Approvals

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Nordson equipment will be voided if instructions for installation, operation, and service are not followed.

## Personal Safety

To prevent injury follow these instructions.

- Do not operate or service equipment unless you are qualified.
- Do not operate equipment unless safety guards, doors, or covers are intact and automatic interlocks are operating properly. Do not bypass or disarm any safety devices.

- Keep clear of moving equipment. Before adjusting or servicing moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.
- Relieve (bleed off) hydraulic and pneumatic pressure before adjusting or servicing pressurized systems or components. Disconnect, lock out, and tag switches before servicing electrical equipment.
- While operating manual spray guns, make sure you are grounded. Wear electrically conductive gloves or a grounding strap connected to the gun handle or other true earth ground. Do not wear or carry metallic objects such as jewelry or tools.
- If you receive even a slight electrical shock, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected.
- Obtain and read Manual Safety Data Sheets (MSDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection devices.
- Make sure the spray area is adequately ventilated.
- To prevent injury, be aware of less-obvious dangers in the workplace that often cannot be completely eliminated, such as hot surfaces, sharp edges, energized electrical circuits, and moving parts that cannot be enclosed or otherwise guarded for practical reasons.

### **High-Pressure Fluids**

High-pressure fluids, unless they are safely contained, are extremely hazardous. Always relieve fluid pressure before adjusting or servicing high pressure equipment. A jet of high-pressure fluid can cut like a knife and cause serious bodily injury, amputation, or death. Fluids penetrating the skin can also cause toxic poisoning.

If you suffer a fluid injection, seek medical care immediately. If possible, provide a copy of the MSDS for the injected fluid to the health care provided.

The National Spray Equipment Manufacturers Association has created a wallet card that you should carry when you are operating high-pressure spray equipment. These cards are supplied with your equipment. The following is the text of this card:



**WARNING:** Any injury caused by high pressure liquid can be serious. If you are injured or even suspect an injury:

- Go to an emergency room immediately.
- Tell the doctor that you suspect an injection injury.
- Show him this card.
- Tell him what kind of material you were spraying.

#### MEDICAL ALERT—AIRLESS SPRAY WOUNDS: NOTE TO PHYSICIAN

Injection in the skin is a serious traumatic injury. It is important to treat the injury surgically as soon as possible. Do not delay treatment to research toxicity. Toxicity is a concern with some exotic coatings injected directly into the bloodstream.

Consultation with a plastic surgeon or a reconstructive hand surgeon may be advisable.

The seriousness of the wound depends on where the injury is on the body, whether the substance hit something on its way in and deflected causing more damage, and many other variables including skin microflora residing in the paint or gun which are blasted into the wound. If the injected paint contains acrylic latex and titanium dioxide that damage the tissue's resistance to infection, bacterial growth will flourish. The treatment that doctors recommend for an injection injury to the hand includes immediate decompression of the closed vascular compartments of the hand to release the underlying tissue distended by the injected paint, judicious wound debridement, and immediate antibiotic treatment.

## Fire Safety

To avoid a fire or explosion, follow these instructions.

- Ground all conductive equipment. Use only grounded air and fluid hoses. Check equipment and workpiece grounding devices regularly. Resistance to ground must not exceed one megohm.
- Shut down all equipment immediately if you notice static sparking or arcing. Do not restart the equipment until the cause has been identified and corrected.
- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored.
- Do not heat materials to temperatures above those recommended by the manufacturer. Make sure heat monitoring and limiting devices are working properly.

- Provide adequate ventilation to prevent dangerous concentrations of volatile particles or vapors. Refer to local codes or your material MSDS for guidance.
- Do not disconnect live electrical circuits when working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.
- Know where emergency stop buttons, shutoff valves, and fire extinguishers are located. If a fire starts in a spray booth, immediately shut off the spray system and exhaust fans.
- Shut off electrostatic power and ground the charging system before adjusting, cleaning, or repairing electrostatic equipment.
- Clean, maintain, test, and repair equipment according to the instructions in your equipment documentation.
- Use only replacement parts that are designed for use with original equipment. Contact your Nordson representative for parts information and advice.

### Halogenated Hydrocarbon Solvent Hazards

Do not use halogenated hydrocarbon solvents in a pressurized system that contains aluminum components. Under pressure, these solvents can react with aluminum and explode, causing injury, death, or property damage. Halogenated hydrocarbon solvents contain one or more of the following elements:

<u>Element</u>	<u>Symbol</u>	<u>Prefix</u>
Fluorine	F	“Fluoro-”
Chlorine	Cl	“Chloro-”
Bromine	Br	“Bromo-”
Iodine	I	“Iodo-”

Check your material MSDS or contact your material supplier for more information. If you must use halogenated hydrocarbon solvents, contact your Nordson representative for information about compatible Nordson components.

### Action in the Event of a Malfunction

If a system or any equipment in a system malfunctions, shut off the system immediately and perform the following steps:

- Disconnect and lock out system electrical power. Close hydraulic and pneumatic shutoff valves and relieve pressures.
- Identify the reason for the malfunction and correct it before restarting the system.

### Disposal

Dispose of equipment and materials used in operation and servicing according to local codes.

# Specifications

See Figure 1.

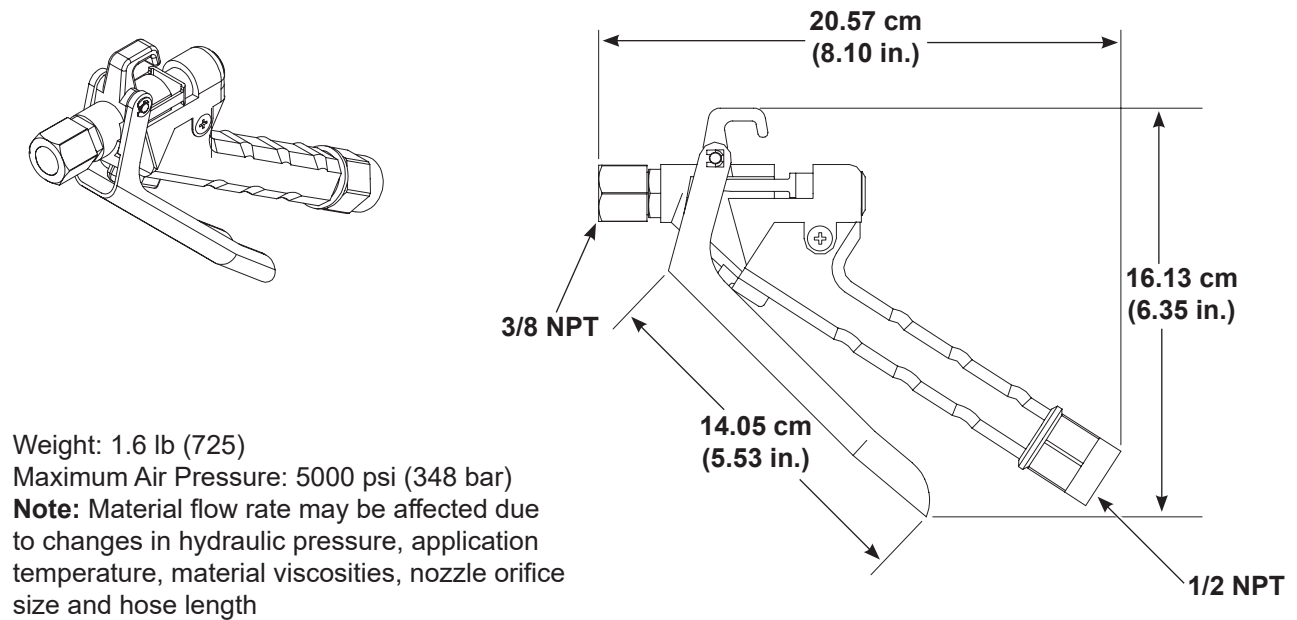


Figure 1 Specifications



**WARNING:** Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

- To prevent serious injury, relieve system and material pressure before disconnecting the material hose.
- Lock the trigger safety when the gun is not in use.

## Installation

See Figure 2.



**CAUTION:** To prevent loosening the fluid tube, use a wrench on the fluid tube hex when installing the material hose.

Installation consists of connecting the material supply hose to the gun and installing a nozzle.

## Operation

See Figure 2.

1. Adjust the pump pressure to obtain the desired results. Refer to your pump manual for operating procedures.
2. Unlock the trigger safety and squeeze the trigger to dispense material.
3. Release the trigger to stop dispensing material. Lock the trigger safely.
4. If material continues to flow after releasing the trigger, adjust the valve stem. Refer to the *Valve Stem Adjustment* procedure.
5. If the nozzle becomes blocked during operation, refer to the *Clearing a Blocked Nozzle* procedure in the *Troubleshooting* section.

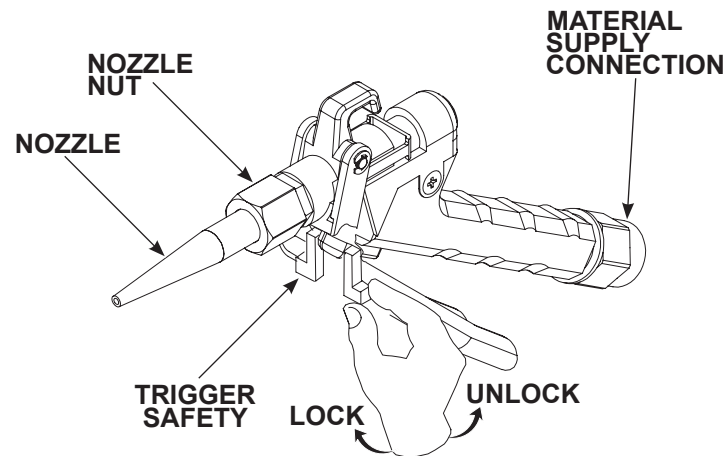
## Clearing a Blocked Nozzle

See Figure 2.

1. Trigger the gun to purge residual material.

**NOTE:** Perform step 2 if you think that the gun nozzle or fluid hose is completely clogged or that pressure is not fully relieved.

2. Very slowly loosen the hose end coupling and gradually relieve pressure, then loosen the coupling completely.
3. Remove the nozzle nut and nozzle. Clean the nozzle thoroughly with an appropriate solvent.
4. Install the nozzle and the nozzle nut. Tighten the nozzle nut securely.



**Note:** Portion of trigger not shown for clarity

Figure 2 Mastic Gun

## Valve Stem Adjustment

See Figure 3.

Use the following procedure to adjust the valve stem:

1. Relieve system and material pressures. Trigger the gun to purge residual material.
2. Loosen the stem nut and spring housing.
3. Insert a 3 mm hex wrench into the hole in the spring retainer screw and into the spring housing.
4. Turn the spring housing and stem nut to change the trigger travel and the size of the valve opening. Tighten the stem nut to the torque specification listed on Figure 4.
5. Using a screwdriver, turn the spring retainer screw as needed to close the valve stem.
6. If material continues to flow after releasing the trigger, replace the valve stem and seal. Refer to the Repair section for the procedure.

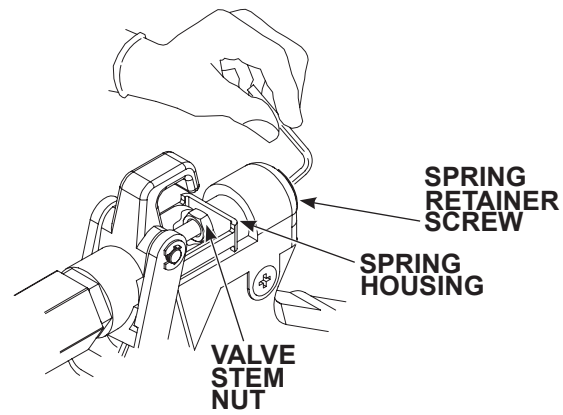


Figure 3 Valve Stem Adjustment

## Spring Tension Adjustment

1. Relieve system and material pressures. Trigger the gun to purge residual material. Disconnect the material hose from the gun.

See Figure 3.

2. Using a screwdriver, turn the spring retainer screw as needed to close the valve stem.

## Troubleshooting

These procedures cover only the most common problems that you may encounter. If you cannot solve the problem with the information given here, contact your local Nordson representative for help.

Problem	Possible Cause	Corrective Action
1. Material leaks around nozzle or nozzle nut	Dirty or damaged metal sealing surfaces Valve or spring tension needs to be adjusted	Clean nozzle, valve seat, and stem. Replace parts if necessary. Adjust the valve or spring tension.
2. Gun responds slowly	Valve or spring tension needs to be adjusted	Adjust the valve or spring tension.

## Repair

Repair consists of replacing the valve stem and seal.

**NOTE:** Lubrication requirements and torque specifications for the parts are listed on Figure 4.

### Remove the Valve Stem and Seal

See Figure 4.

1. Relieve system and material pressures.



**CAUTION:** To prevent loosening the fluid tube, use a wrench on the fluid tube hex when removing the material hose.

2. Trigger the gun to purge residual material. Using a wrench on the fluid tube hex, disconnect the material hose from the gun.
3. Remove the valve stem (4) and seal (11):
  - a. Remove the spring retainer screw (5) securing the spring (6).
  - b. Using a 3 mm hex key, remove the spring housing (7).
  - c. Remove the valve seat (3) from the gun body (13). Check the washer (14) for any damage and replace if necessary.
  - d. Remove the bracket (8) and nut (9) from the valve stem.

4. Remove the valve stem from the gun body. Inspect the valve stem for wear or damage and replace if necessary.
5. Remove the seal retainer (10) from the gun body and replace the seal.

## Install the Valve Stem and Seal

1. Lubricate the new seal (11) and install it into the gun body (13) with the seal lips facing toward the gun body.
2. Lubricate the threads of the seal retainer (10) and install it into the gun body. Tighten the seal retainer.



**CAUTION:** Do not push the valve stem through the seal. Turn the valve stem clockwise when installing it to prevent damage to the seal.

3. Install the valve stem (4):
  - a. Lubricate the valve stem and carefully install it into the gun body and through the seal. Thread the nut (9) onto the valve stem.
  - b. Install the bracket (8) and spring housing (7) onto the valve stem.
  - c. Lubricate the threads of the valve seat (3) and the washer (14). Install the washer and valve seat onto the gun body and tighten.
  - d. Lubricate the spring (6) and install it into the spring housing.
  - e. Lubricate the threads of the spring retainer screw (5). Install the spring retainer onto the gun body and tighten securely.
4. Remove the valve stem from the gun body. Inspect the valve stem for wear or damage and replace if necessary.
5. Remove the seal retainer (10) from the gun body and replace the seal.



## 12 Mastic Handheld Applicator

Item	Part	Description	Quantity	Note
—	1040796	Gun, mastic, 5000 psi	1	
1	1041129	• Nut, nozzle	1	
2	-----	• Washer	1	
3	-----	• Adapter, valve seat	1	
4	-----	• Needle, stem	1	
5	-----	• Screw, spring adjust	1	
6	-----	• Spring compression	1	
7	-----	• Housing, spring	1	
8	-----	• Bracket, trigger	1	
9	-----	• Nut, hex, #5-40	1	
10	-----	• Screw, seal retainer	1	
11	-----	• Seal, U-cup	1	
12	-----	• Machine screw, flat	1	
13	-----	• Gun, body	1	
14	-----	• Washer, copper	1	
15	-----	• Retaining ring	2	
16	-----	• Pin, trigger	1	
17	-----	• Trigger, hand	1	
18	-----	• Lock, trigger	1	
19	-----	• Handle	1	
20	-----	• Washer	1	
21	-----	• Tube, fluid	1	
22	-----	• Spring, compression	1	
23	-----	• Ball, 0.156, 10	1	

UA: Unavailable for purchase through Nordson. Contact local distributor or local source.

### Service Kit

7250 PSI Mastic Gun Service Kit: 1041006—Includes items 3, 4, 8, 9, 11, 14, and 20.