

# **CleanSpray<sup>®</sup> Gun**

Customer Product Manual  
Part 108086G

Issued 5/03

# OBSOLETE

**For parts and technical support, call the Industrial Coating  
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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>.

Address all correspondence to:

Nordson Corporation  
 Attn: Customer Service  
 555 Jackson Street  
 Amherst, OH 44001

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# CleanSpray Gun

## 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 Material 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 injury, seek medical care immediately. If possible, provide a copy of the MSDS for the injected fluid to the health care provider.

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.

**Fire Safety** *(contd)*

- 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.

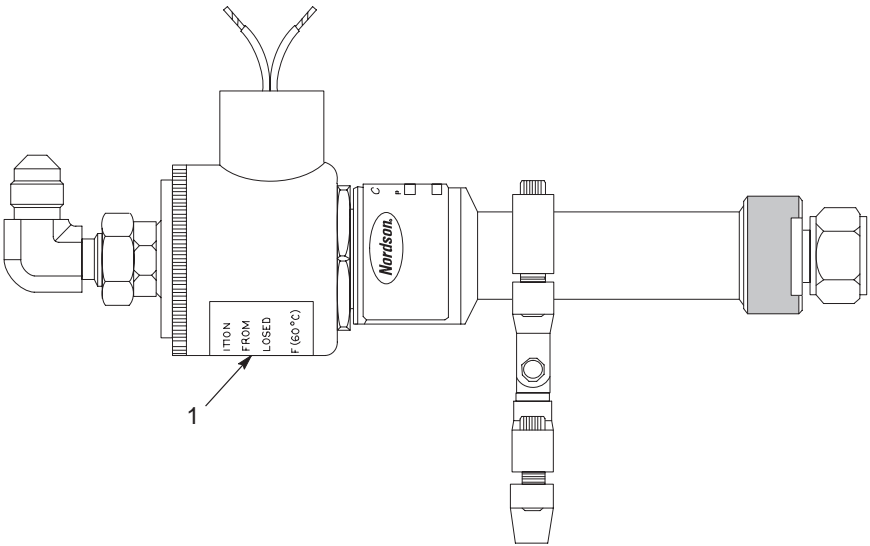
# Safety Labels

Table 1 contains the text of the safety label on this equipment. The safety label is provided to help you operate and maintain your equipment safely.

See Figure 1 for the location of the safety label.

Table 1 CleanSpray Guns Safety Label

Item	Part	Description
1.	-----	<div><div></div><div><b>CAUTION:</b> DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE IS PRESENT.  MAX. AMBIENT TEMP: 140 °F (60 °C)</div></div>



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Figure 1 CleanSpray Gun Safety Label

## Description

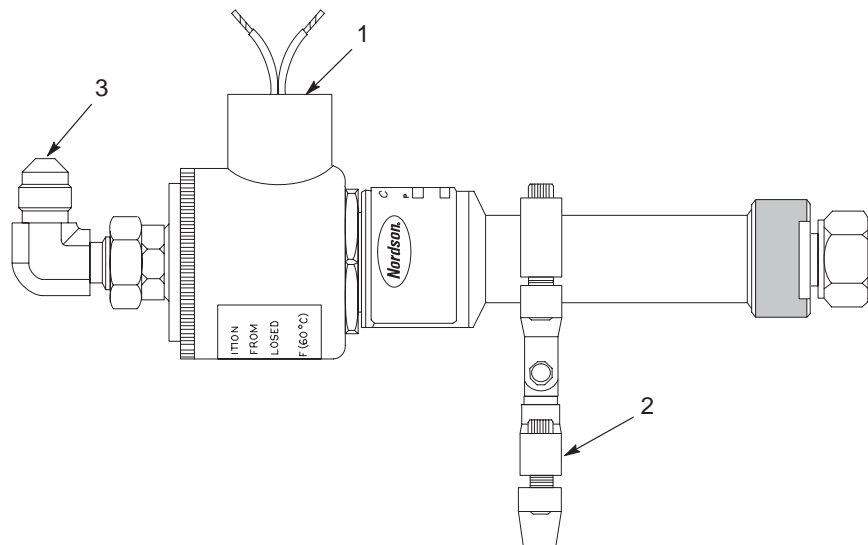
The CleanSpray gun cleans lacquer gun nozzles used in high-speed container coating applications by applying water to the nozzle tip.

See Figure 2. Table 2 describes the mounting brackets and the fluid and electrical connections for the spray gun.

**NOTE:** All mounting brackets must be ordered separately.

Table 2 CleanSpray Gun Mounting Brackets  
and Fluid and Electrical Connections

Item	Description	Specification
1	Electrical Connections	1/2-in. NPT female conduit fitting
2	Mounting Brackets	<ul style="list-style-type: none"> <li>Adjustable</li> <li>Adjustable for extension assembly</li> <li>Fixed</li> </ul>
3	Fluid Connections	1/2-20 37° JIC elbow fitting



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Figure 2 Standard CleanSpray Gun

1. 1/2-in. NPT female conduit fitting      2. Mounting bracket      3. 1/2-20 37° JIC elbow fitting



# Installation



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



**WARNING:** Before installing the CleanSpray gun, make sure all pressure is relieved and electrical power is removed from the system.

## General Procedure

Depending on the type of mounting bracket you are using, the mounting procedures may vary. The basic installation procedure for the CleanSpray gun is as follows.

**NOTE:** All mounting brackets must be ordered separately.

1. Mount the CleanSpray gun with the adjustable mounting bracket or with a remote mounting bracket and an extension.
2. Mount the lacquer spray gun.
3. Adjust the mounting bracket, if necessary.
4. Make the fluid connections.
5. Make the electrical connections.

## Using the Adjustable Mounting Bracket

See [Figure 3](#).

### Mounting the CleanSpray Gun

1. Remove the screws (1) securing the CleanSpray strap bracket (2) to the mounting bracket (3).
2. Insert the CleanSpray gun (4) into the mounting bracket . Use the CleanSpray strap bracket and screws to secure the CleanSpray gun to the mounting bracket.

## Mounting the Lacquer Spray Gun

See [Figure 3](#) and refer to Table 3.

**NOTE:** Purge the CleanSpray gun of air before installing a nozzle. Refer to the *CleanSpray System Operator's Card* for procedures.

Table 3 Lacquer Spray Gun Mounting Procedures

Lacquer Spray Gun Type	Mounting Procedure
A20A Extended	<ol style="list-style-type: none"> <li>1. Remove the screws (1) securing the A20A strap bracket (7) to the mounting bracket (3)</li> <li>2. Insert the A20A extended spray gun (11) into the mounting bracket. Use the A20A strap bracket and screws to secure the A20A extended spray gun to the mounting bracket.</li> </ol>
A7A, A10A, or A14A Extended	<ol style="list-style-type: none"> <li>1. Use the screws (5) to install the adapters (6) into the mounting and A20A strap brackets (3, 7).</li> <li>2. Insert the spray gun into the mounting bracket (3). Use the A20A strap bracket (7) and screws (1) to secure the spray gun to the mounting bracket.</li> </ol>

## Adjusting the Mounting Bracket

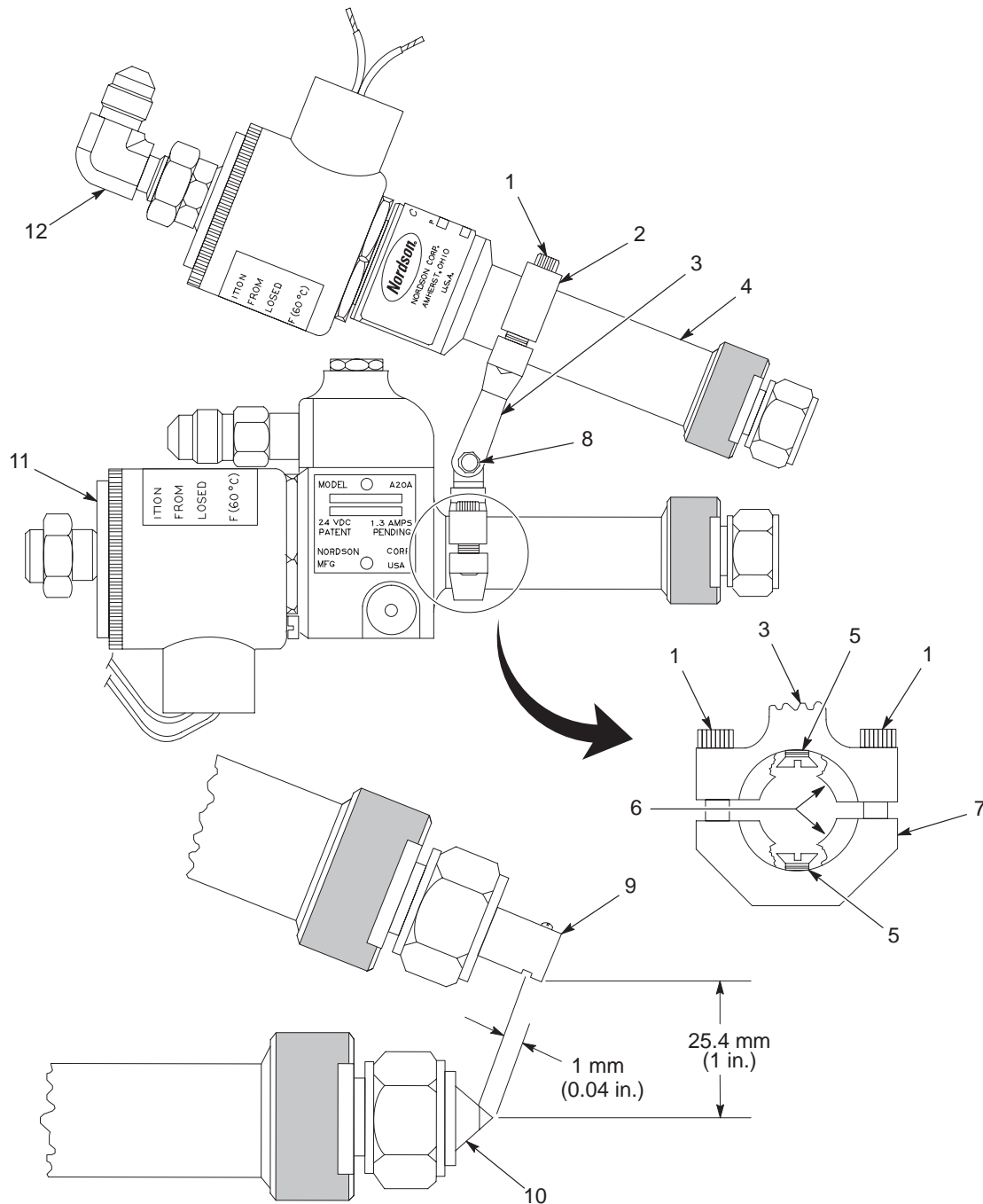
See [Figure 3](#).

1. Loosen the screw (8) securing the mounting bracket (3).
2. Adjust the mounting bracket until the CleanSpray gun nozzle (9) is approximately 25.4 mm (1 in.) away from the lacquer gun spray nozzle (10). The cleaning spray should hit approximately 1 mm (0.040 in.) back from the tip of the lacquer gun nozzle.
3. When the bracket is adjusted properly, tighten the screw to hold in place.

## Remotely Mounting the CleanSpray Gun

Different extension assemblies and mounting brackets are available to remotely mount the CleanSpray gun.

**NOTE:** Refer to the documentation you receive with your extension assembly and remote mounting bracket to mount the CleanSpray gun and lacquer spray gun.



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Figure 3 CleanSpray Gun Installation

- |                             |                           |                              |
|-----------------------------|---------------------------|------------------------------|
| 1. Screws                   | 5. Adapter screw          | 9. CleanSpray gun nozzle     |
| 2. CleanSpray strap bracket | 6. Adapter                | 10. Lacquer gun nozzle       |
| 3. Mounting bracket         | 7. A20A strap bracket     | 11. A20A extended gun        |
| 4. CleanSpray gun           | 8. Mounting bracket screw | 12. 1/2-20 JIC elbow fitting |

*Note:* Items 5 and 6 are only used when mounting an A7A, A10A, or A14A extended lacquer spray gun. These items are not included with a bracket assembly and must be ordered separately.

## Fluid Connections

**NOTE:** An approved pressure relief device set at 35 bar (500 psi) must be installed in the fluid line to this gun. The fluid supply hose used with this gun must have a minimum burst pressure of 35 bar (500 psi).

1. Connect a customer-supplied ball valve to the fluid supply line.
2. Install a fluid supply line from the ball valve to the fluid connection.

## Electrical Connections

Refer to the *CleanSpray Controller* manual for electrical connections.

## Operation

Refer to the *CleanSpray System Operator's Card* for operating procedures.

## Troubleshooting



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

This section contains troubleshooting procedures. 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 Corporation representative for help.

Problem	Possible Cause	Corrective Action
1. Gun fails to trigger	Poor electrical connection Ball and seat module installed incorrectly; dirt buildup inside spray gun Bad solenoid coil	Check all electrical connections. Remove and reinstall the ball and seat module.  Disconnect the solenoid wires and check the resistance with an ohmmeter. The reading should be approximately 18 ohms. Replace the solenoid if the resistance check fails.
2. Fluid is spitting or leaking from nozzle	Air trapped in spray gun  Dirty or worn ball and seat module	Purge air from the spray gun.  Clean or replace the ball and seat module.
3. Fluid is leaking around nozzle nut	Dirty or damaged metal sealing surfaces	Clean or replace the nozzle, nozzle nut, or ball and seat module.
4. Fluid leaks between gun body and solenoid housing and/or seat	Bad O-rings	Replace the O-rings.

## On-Line Ball and Seat Module Replacement



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



**WARNING:** To prevent serious injury to personnel or damage to equipment, ensure all pressure is relieved from the system.



**CAUTION:** If the ball and seat module is disassembled for inspection and cleaning, mark the ball tip shaft and seat housing with a marker pen to ensure correct placement when assembling. If the ball tip is installed out of phase with the seat, it will no longer mesh with the seat and a leak could result.

**NOTE:** The ball and seat module can be replaced without removing the gun from the mounting bracket.

See [Figure 4](#)

### Disassembly

1. Turn off the CleanSpray controller.
2. Remove the CleanSleeve cover (1).
3. Remove the nozzle nut (2) and nozzle (3).
4. Remove the retaining nut (4).
5. Unscrew the ball and seat module (5) from the armature shaft (7).
6. Remove the O-ring (6) from the gun body groove. Discard the O-ring.

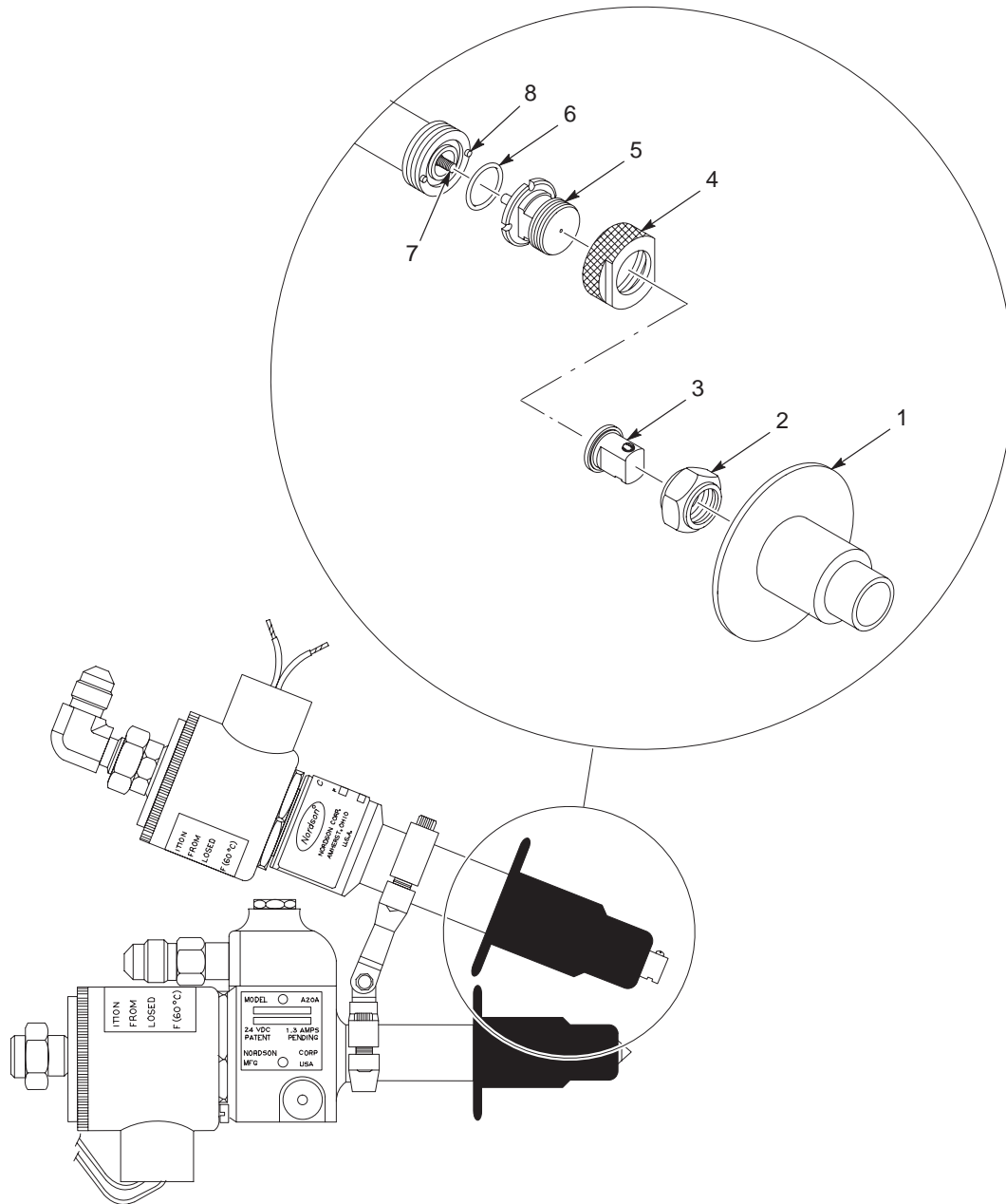
### Assembly

1. Install a new O-ring (6) in the gun body groove.
2. Carefully hand thread the ball and seat module (5) onto the armature shaft (7) until finger tight (5.75 cm·kg [5 in.-lb ] maximum).
3. Rotate the ball and seat module counterclockwise until the first set of slots in the seat housing engage with the gun body pins (8). Do not loosen the threaded connection to engage the slots with the gun body pins.
4. Place the retaining nut (4) over your finger. Using this finger to hold the ball and seat module tight against the gun body, install the retaining nut. Tighten the retaining nut 14-20 N•m (10-15 ft-lb) maximum.
5. Install the nozzle (3).

**NOTE:** Make sure the nozzle is oriented relative to the lacquer spray gun nozzle before tightening the nozzle nut.

6. Install the nozzle nut (2). Tighten the nozzle nut 34 N•m (25 ft-lb).
7. Install the CleanSleeve cover (1).
8. Turn on the CleanSpray controller.
9. Pressurize the system.

## On-Line Ball and Seat Module Replacement *(contd)*



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Figure 4 Ball and Seat Module Replacement

- |                      |                         |                   |
|----------------------|-------------------------|-------------------|
| 1. CleanSleeve cover | 4. Retaining nut        | 7. Armature shaft |
| 2. Nozzle nut        | 5. Ball and seat module | 8. Gun body pin   |
| 3. Nozzle            | 6. O-ring               |                   |

## Parts

To order parts, call the Nordson Customer Service Center or your local Nordson representative. Use this five-column parts list, and the accompanying illustration, to describe and locate parts correctly.

### *Using the Illustrated Parts List*

Numbers in the Item column correspond to numbers that identify parts in illustrations following each parts list. The code NS (not shown) indicates that a listed part is not illustrated. A dash (—) is used when the part number applies to all parts in the illustration.

The number in the Part column is the Nordson Corporation part number. A series of dashes in this column (-----) means the part cannot be ordered separately.

The Description column gives the part name, as well as its dimensions and other characteristics when appropriate. Indentions show the relationships between assemblies, subassemblies, and parts.

- If you order the assembly, items 1 and 2 will be included.
- If you order item 1, item 2 will be included.
- If you order item 2, you will receive item 2 only.

The number in the Quantity column is the quantity required per unit, assembly, or subassembly. The code AR (As Required) is used if the part number is a bulk item ordered in quantities or if the quantity per assembly depends on the product version or model.

Letters in the Note column refer to notes at the end of each parts list. Notes contain important information about usage and ordering. Special attention should be given to notes.

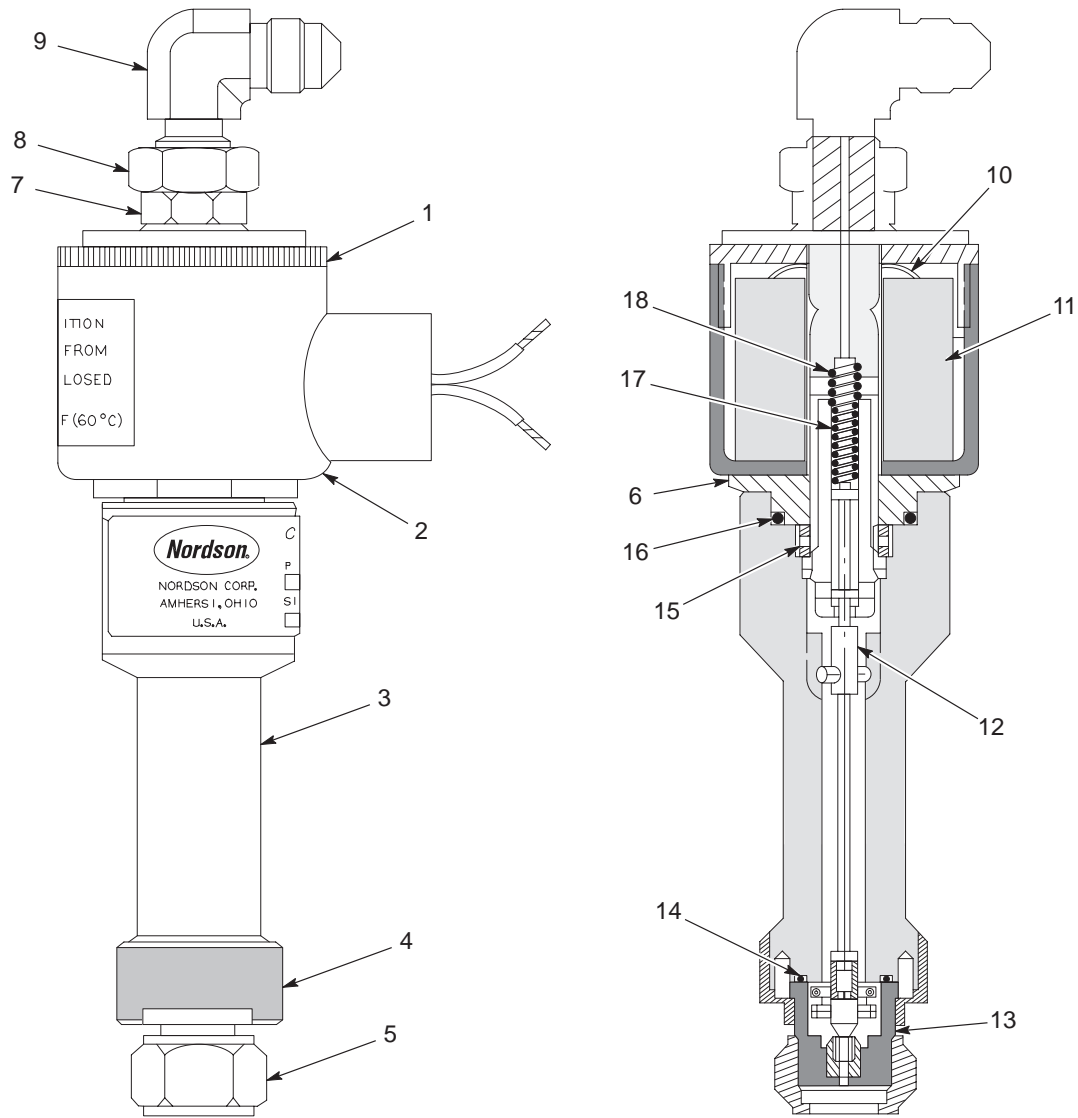
Item	Part	Description	Quantity	Note
—	0000000	Assembly	1	
1	000000	• Subassembly	2	A
2	000000	• • Part	1	

## Extended CleanSpray Gun

See [Figure 5](#).

Item	Part	Description	Quantity	Note
—	141448	GUN, CleanSpray, extended	1	
1	246067	• CAP, solenoid	1	A
2	-----	• HOUSING, solenoid	1	A
3	-----	• BODY, gun	1	
4	135571	• NUT, retaining	1	
5	123200	• NUT, nozzle, anti-foul, stainless steel	1	
6	141452	• SLEEVE, solenoid	1	
7	246066	• NUT, housing	1	A
8	984171	• NUT, hex, jam, 1/2-20, steel, zinc	1	A
9	972217	• ELBOW, male, 37°, 1/2- 20 x 1/8 in., stainless steel	1	
10	983604	• SPRING, washer, curved	1	A
11	901109	• COIL, solenoid	1	A
12	-----	• ARMATURE, extended	1	B
13	-----	• MODULE, ball and seat	1	C
14	940150	• O-RING, hot paint, 0.563 x 0.688 x 0.063 in.	1	B, C
15	135562	• GUIDE, fluid	1	
16	940190	• O-RING, hot paint, 0.813 x 0.938 x 0.063 in.	1	B
17	270905	• SPRING, compression, 0.990 x 0.157 x 0.022 in.	1	B
18	270863	• SPRING, compression, 0.415 x 0.247 x 0.015 in.	1	B
NOTE A: Part is available in <i>Coil Kit</i> , part 106300 located on page 20. B: Part is available in <i>Extended Armature Kit</i> , part 135559 located on page 20. C: Part is available in <i>Ball and Seat Kit</i> , part 149241 located on page 20.				





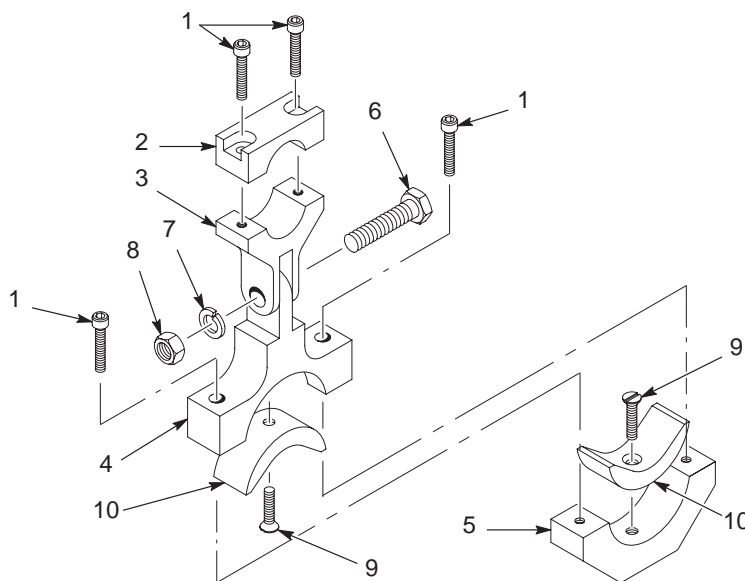
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Figure 5 Extended CleanSpray Gun

## Adjustable Bracket Assembly

See Figure 6.

Item	Part	Description	Quantity	Note
—	141457	BRACKET ASSEMBLY, adjustable, $\frac{1}{4}$ in.	1	
1	981129	• SCREW, socket head, #10-32 x 1 in.	4	
2	-----	• STRAP, bracket, CleanSpray	1	
3	-----	• ARM, mounting, CleanSpray gun	1	
4	-----	• ARM, mounting, lacquer gun	1	
5	-----	• STRAP, bracket, A20A gun	1	
6	981564	• SCREW, hex head, $\frac{1}{4}$ -20 x 0.075 in.	1	
7	983140	• WASHER, lock, $\frac{3}{8}$ in., steel	1	
8	984130	• NUT, hex, heavy, $\frac{1}{4}$ -20, steel	1	
9	981122	SCREW, flathead, #10-32, x 0.437 in.	2	A
10	141476	ADAPTER, A7A/A10A/A14A	2	A
NOTE A: Order these items if you are installing an A7A, A10A, or A14A extended spray gun. These items must be ordered separately.				



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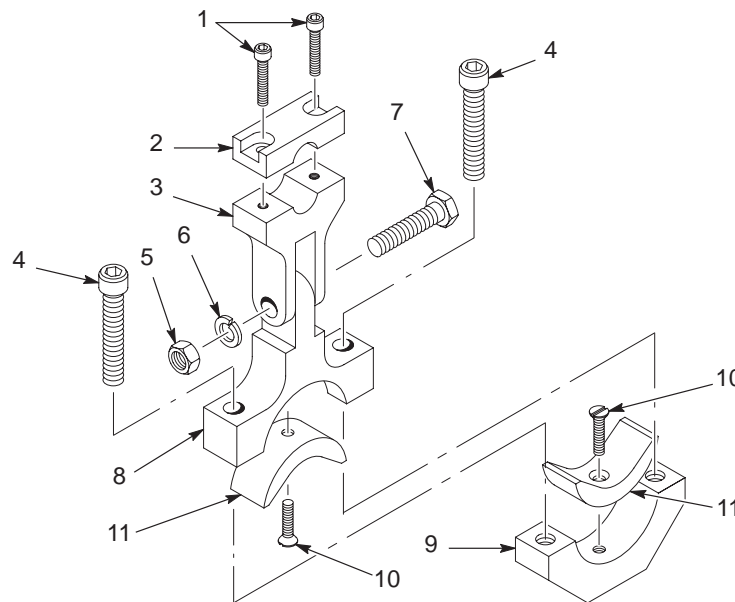
Figure 6 Adjustable Bracket Assembly

## Adjustable Bracket Assembly for Extension Assemblies

See Figure 7. Use this bracket with the *CleanSpray Extension Assembly* located on page 19.

Item	Part	Description	Quantity	Note
—	330243	BRACKET ASSEMBLY, adjustable	1	
1	982760	• CAP SCREW, socket head, #6-32 x 0.375 in.	2	
2	-----	• STRAP, bracket, CleanSpray II	1	
3	-----	• ARM, mounting, CleanSpray II	1	
4	981129	• SCREW, socket head, #10-32 x 1 in.	2	
5	984130	• NUT, hex, heavy, $\frac{1}{4}$ -20, steel	1	
6	983140	• WASHER, lock, E, split, $\frac{1}{4}$ in.	1	
7	981564	• SCREW, hex head, $\frac{1}{4}$ -20 x 0.875 in.	1	
8	-----	• ARM, mounting, A20A	1	
9	-----	• STRAP, bracket, A20A	1	
10	981122	SCREW, flathead, #10-32, x 0.437 in.	2	A
11	141476	ADAPTER, A7A/A10A/A14A	2	A

NOTE A: Order these items if you are installing an A7A, A10A, or A14A extended spray gun. These items must be ordered separately.



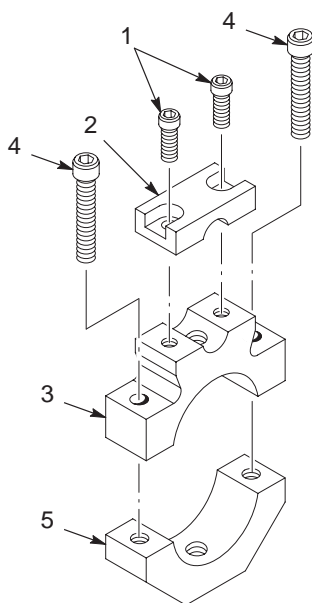
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Figure 7 Adjustable Bracket Assembly for Extension Assemblies

## Fixed Bracket Assembly

See Figure 8. Use this bracket with the *CleanSpray Extension Assembly* located on page 19.

Item	Part	Description	Quantity	Note
—	337752	BRACKET ASSEMBLY, fixed	1	
1	982760	• CAP SCREW, socket head, #6-32 x 0.375 in.	2	
2	-----	• STRAP, bracket, CleanSpray II	1	
3	-----	• MOUNTING ARM, CleanSpray II	1	
4	981129	• SCREW, socket head, #10-32 x 1 in.	2	
5	-----	• STRAP, bracket, A20A	1	



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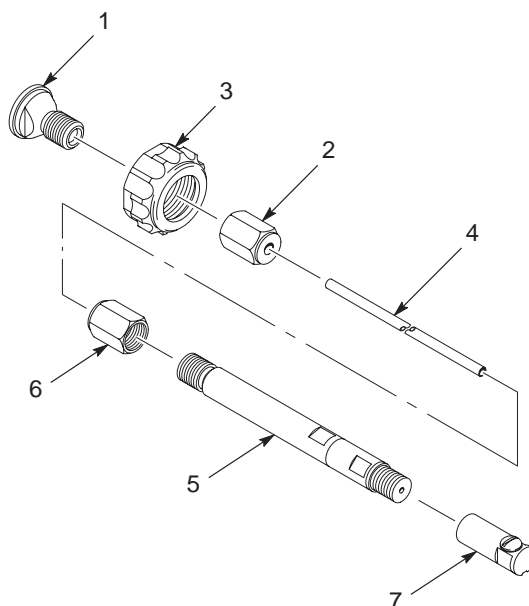
Figure 8 Fixed Bracket Assembly

## CleanSpray Extension Assembly

See Figure 9.

Item	Part	Description	Quantity	Note
—	323403	EXTENSION ASSEMBLY, CleanSpray II	1	
1	323429	• ADAPTER ASSEMBLY	1	
2	971752	• • NUT, tube, hydraulic, 1/8-in. tube	1	
3	237401	• NUT, nozzle	1	
4	323445	• TUBE, stainless steel, 1/8-in. OD x 18-in. long	1	
5	330239	• EXTENSION, check valve spray, CleanSpray	1	
6	971752	• • NUT, tube, hydraulic, 1/8-in. tube	1	
7	-----	NOZZLE, tube lining	1	A

NOTE A: Refer to the tube lining section of the nozzle catalog.



1200221A

Figure 9 CleanSpray Extension Assembly

## Kit Lists

### Coil Kit

Item	Part	Description	Quantity	Note
—	106300	SERVICE KIT, coil	1	
1	246067	• CAP, solenoid	1	
2	-----	• HOUSING, solenoid	1	
7	246066	• NUT, housing	1	
8	984171	• NUT, hex, jam, 1/2-20, steel	1	
10	983604	• SPRING, washer, curved	1	
11	901109	• COIL, solenoid	1	

### Ball and Seat Kit

See [Figure 5](#).

Item	Part	Description	Quantity	Note
—	149241	SERVICE KIT, ball and seat	1	
13	-----	• MODULE, ball & seat	1	
14	940150	• O-RING, hot paint, 0.563 x 0.688 x 0.063 in.	1	

### Extended Armature Kit

See [Figure 5](#).

Item	Part	Description	Quantity	Note
—	135559	SERVICE KIT, extended armature	1	
12	-----	• ARMATURE, extended	1	
14	940150	• O-RING, hot paint, 0.563 x 0.688 x 0.063 in.	1	
16	940190	• O-RING, hot paint, 0.813 x 0.938 x 0.063 in.	1	
17	270905	• SPRING, compression, 0.990 x 0.157 x 0.022 in.	1	
18	270863	• SPRING, compression, 0.415 x 0.247 x 0.015 in.	1	
NS	981022	• SCREW, fillister head, #6-32 x 0.375 in.	1	A
NOTE A: This screw is not used on the CleanSpray gun.				
NS: Not Shown				

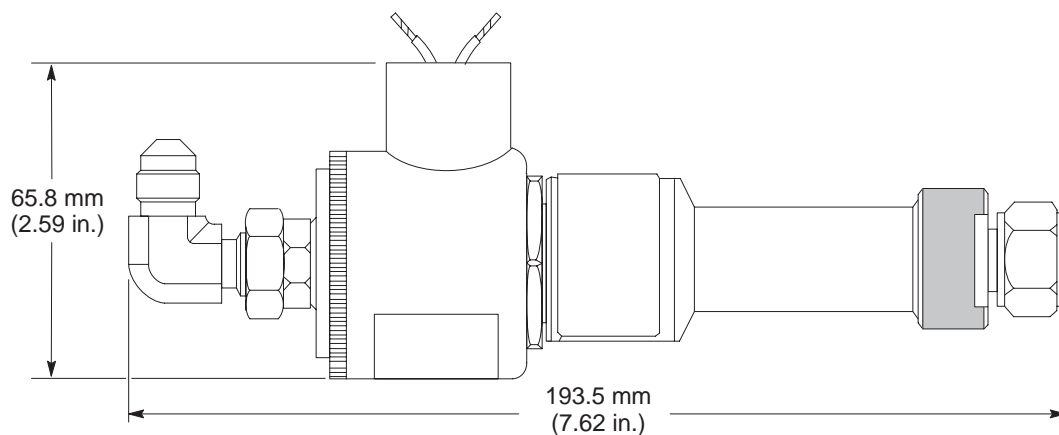
## NSEMA Card

This card is available free from Nordson Corporation:

Part	Description
247648	CARD, medical alert, injection

## Specifications

Fluid Pressure	35 bar (500 psi) maximum
Electrical	24 Vdc, 1.5 amperes
Ambient Temperature	60 °C (140 °F) maximum
Weight	0.82 kg (1.8 lb)
Dimensions	See Figure 10



1200223A

Figure 10 Extended CleanSpray Gun Dimensions





# DECLARATION of CONFORMITY

## Product: Clean Spray System

**Models:** Clean Spray, Clean Spray II, or Clean Spray XT Applicators used with Clean Spray Controller

**Description:** This system consists of a Clean Spray Controller (driver), a supplied timer signal and a Clean Spray Applicator. This system is used to spray water on the nozzle of a can lacquer applicator and unplug it or keep it from plugging by cleaning it.

## Applicable Directives:

2006/42/EC (Machinery Directive)

2006/95/EC (Low Voltage Directive)

2004/108/EEC (Electromagnetic Compatibility Directive)

## Standards Used for Compliance:

IEC60417 (2002)

EN55011 (2009)

EN12100-1 (2011)

EN61000-6-3 (2007)

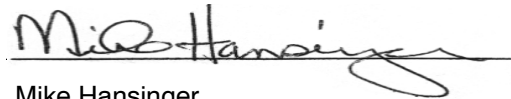
EN60204 (2006)

## Principles:

This product has been manufactured according to good engineering practice.  
The product specified conforms to the directive and standards described above.

## Certificates:

DNV – ISO9001:2008 (Houston, Texas, USA)



Date: 21 March 2011

Mike Hansinger  
Manager Engineering Development  
Industrial Coating Systems

## Nordson Authorized Representative in the EU

**Contact:** Operations Manager  
Industrial Coating Systems  
Nordson Deutschland GmbH  
Heinrich-Hertz-Straße 42-44  
D-40699 Erkrath

