

# MEG<sup>®</sup> Gun

Customer Product Manual  
Part 229775J02

Issued 10/06

**For parts and technical support, call the Industrial Coating  
Systems Customer Support Center at (800) 433-9319 or  
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# Table of Contents

<b>Safety</b> .....	<b>1</b>	<b>Repair</b> .....	<b>12</b>
Qualified Personnel .....	1	Ball and Seat Replacement .....	12
Intended Use .....	1	Gun Module Replacement .....	13
Regulations and Approvals .....	1	Upper Manifold O-Ring Replacement .....	15
Personal Safety .....	2	Upper Manifold Removal .....	15
High-Pressure Fluids .....	2	Upper Manifold Installation .....	15
Fire Safety .....	4	<b>Parts</b> .....	<b>17</b>
Halogenated Hydrocarbon Solvent Hazards .....	5	Using the Illustrated Parts List .....	17
Action in the Event of a Malfunction .....	5	Gun Parts .....	18
Disposal .....	5	PTFE Seat O-ring Kit .....	19
<b>Description</b> .....	<b>6</b>	Special Tools .....	19
<b>Installation</b> .....	<b>7</b>	Service Kits .....	20
Mounting .....	7	Service Kit Quick Reference List .....	20
Fluid Connections .....	7	Gun Module Service Kits .....	20
Electrical Connections .....	8	Ball and Seat Service Kits .....	21
Nozzle and CleanSleeve Cover .....	9	Body with Coil Service Kit .....	21
Pressure Transducers .....	9	Seat Retainer Service Kit .....	21
CO-Plate .....	9	Soft Goods Service Kit .....	21
<b>Operation</b> .....	<b>10</b>	Upper Manifold and Wire Harness .....	22
Spray Pattern Orientation Adjustment .....	10	Options .....	22
<b>Troubleshooting</b> .....	<b>11</b>	CleanSleeve Covers .....	22
		Nozzle Wrench .....	22
		Pressure Transducers .....	23
		CO-Plate Selection Chart .....	23
		<b>Specifications</b> .....	<b>24</b>

OBSOLETE

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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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# MEG 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.
- 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.

## Description

See Figure 1.

The Nordson MEG gun is a high-speed airless spray gun that applies waterborne coatings to the interior surface of metal cans.

There are two versions of the MEG gun; standard and 5.8. The 5.8 version is used with high-viscosity materials.

**NOTE:** These versions of the MEG gun are not approved for solvent-base coating applications. Please contact your Nordson Corporation representative for more information on solvent-base compatible MEG guns.

The MEG gun can be used with a CanWorks spray monitor system, which offers advanced spray monitoring and immediate identification of spray malfunctions.

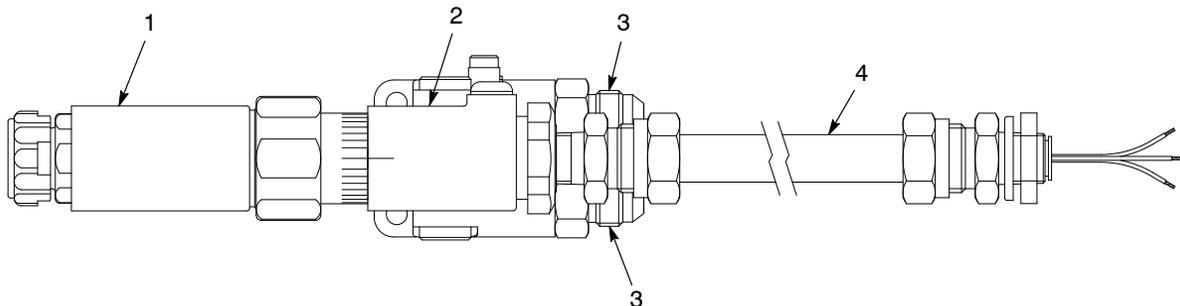
The MEG gun has these features:

- special coil and armature assembly for cooler gun operation
- online-replaceable gun module (1), consisting of ball, seat, and coil
- online-replaceable ball and seat
- online spray pattern orientation adjustment
- $\frac{1}{2}$ -20 37° JIC fittings (3) for fluid in and out connections
- $\frac{1}{4}$ -in. electrical conduit (4), 142 cm (56 in.) long

Two or three MEG guns can be positioned in a spray pocket for zone-spray applications. The MEG gun can be installed on existing spray machine mounting plates that use these Nordson guns:

- A20A
- A10A
- A14A

Refer to *Specifications* on page 24 for technical data and label information.



1200062A

Figure 1 MEG Gun

1. Gun module
2. Manifold

3.  $\frac{1}{2}$ -20 37° JIC fittings

4. Electrical conduit

## Installation



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

## Mounting

See Figure 2.

Mount the MEG gun on the mounting plate, using the two holes in the manifold base. Use the two 10-32 x 0.500 in. socket screws (1) provided with the gun.

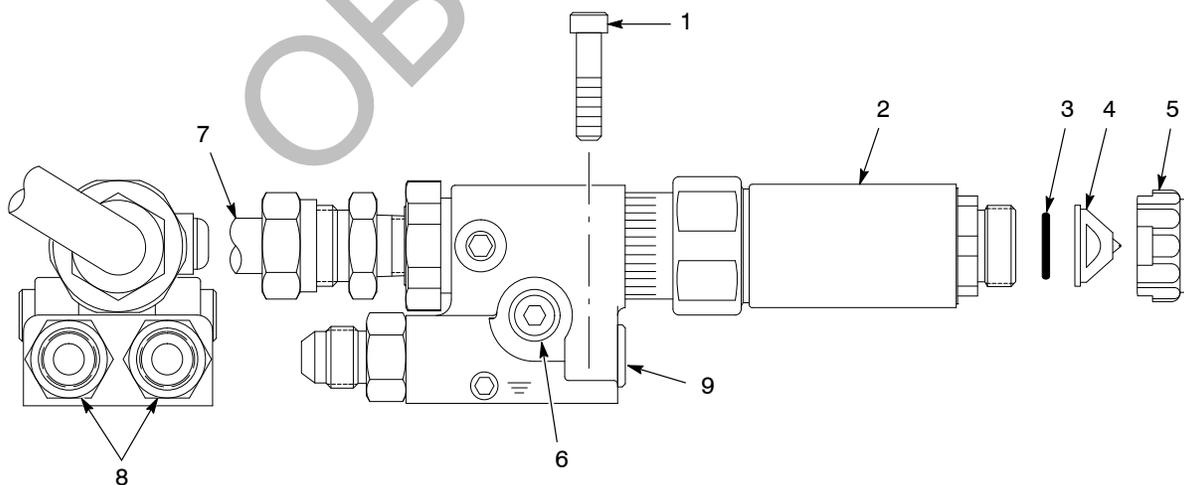
- If you are replacing an A10A, A14A, or A20A spray gun, remove it and install the MEG gun on the existing mounting plate.
- If your system does not use any of these spray guns, refer to *Specifications* in this manual for gun mounting hole dimensions.

## Fluid Connections

**NOTE:** An approved pressure relief device set at 90 bar (1300 psi) must be installed in the system fluid supply line. The fluid hoses must have a minimum burst pressure of 207 bar (3000 psi).

See Figure 2.

Connect the fluid inlet and outlet hoses to the fluid fittings (8). Either fitting may be used for the inlet. The fittings are 1/2-20 37° JIC.



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Figure 2 Installation

- |                       |   |                                    |
|-----------------------|---|------------------------------------|
| 1. Socket-head screws | 4. Nozzle   | 7. Electrical conduit              |
| 2. MEG gun            | 5. Nozzle nut   | 8. Fluid fittings                  |
| 3. Seat O-ring        | 6. Pressure transducer ports (plugs and O-rings both sides) | 9. CO-plate port (plug and O-ring) |

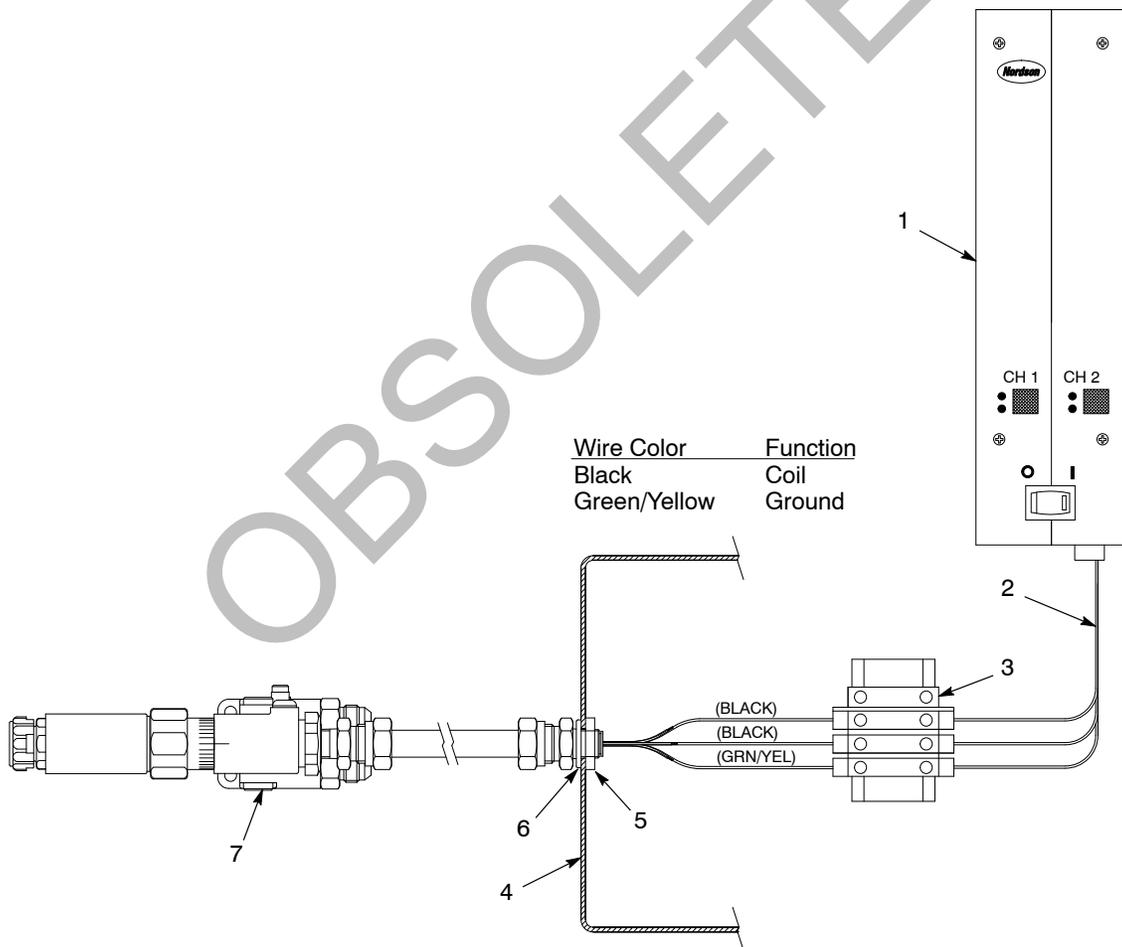
## Electrical Connections



**WARNING:** Use a driver/trigger device that meets the electrical requirements listed in *Specifications* on page 24. Using an improper driver/trigger device may result in damage to the gun and/or driver/trigger device. Contact your Nordson representative for more information.

See Figure 3.

1. Connect the gun's electrical conduit to a customer-supplied junction box (4) with the provided lock nut (5) and seal ring (6).
2. Connect the gun wires from the electrical conduit to a customer-supplied terminal block (3) as shown.
3. Connect customer supplied wiring (2) from the terminal block and fuse holder, if used, to the MEG driver or other driver/trigger device (1).



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Figure 3 Electrical Connections

- |   |                                   |              |
|---|-----------------------------------|--------------|
| 1. MEG driver or customer-supplied driver | 4. Customer-supplied junction box | 6. Seal ring |
| 2. Customer supplied wires                | 5. Lock nut                       | 7. MEG gun   |
| 3. Customer supplied terminal block       |                                   |              |

## **Nozzle and CleanSleeve Cover**

See Figure 2.

1. Remove the nozzle nut (5) from the spray gun (2).
2. Verify that the seat O-ring (3) is installed in the groove in the end of the seat.

**NOTE:** An alternate PTFE O-ring kit is included with the spray gun to replace the seat O-ring for certain applications.

3. Insert a nozzle (4) into the nozzle nut.
4. Install the nozzle nut onto the gun module and tighten it with the optional nozzle wrench. Do not overtighten the nut.
5. If desired, install a CleanSleeve cover on the gun module.

## **Pressure Transducers**

When the MEG gun is part of a CanWorks spray monitor system, a pressure transducer is installed in the gun manifold to monitor fluid pressure at the gun. Refer to *Pressure Transducers* on page 23 for transducer ordering information.

See Figure 2.

Remove a plug and O-ring (6) from one side of the manifold and replace it with a pressure transducer. Either side can be used.

## **CO-Plate**

When the MEG gun is part of a CanWorks spray monitor system, a CO-plate is installed in the gun manifold to produce a controlled pressure drop when the gun is spraying. Refer to the *CO-Plate Selection Chart* on page 23 for CO-plate ordering information.

See Figure 2.

Remove the plug and O-ring (9) from the front of the MEG gun and install a CO-plate. Tighten the CO-plate securely.

## Operation



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



**WARNING:** This equipment can be dangerous unless it is used in accordance with the rules laid down in the manual.

Operation of the MEG gun is dependent upon the timer it is used with. Refer to your timer manual for operation procedures.



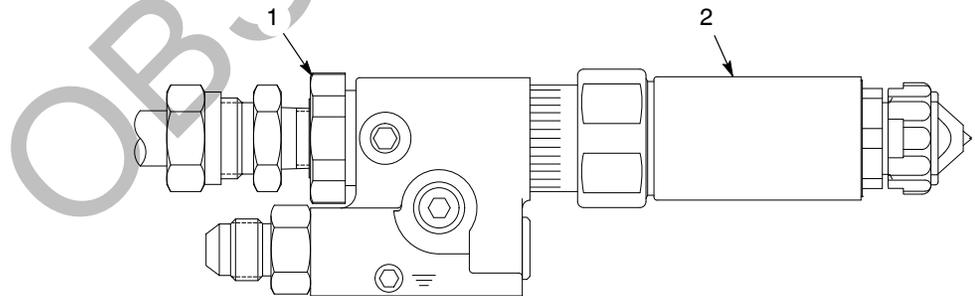
**CAUTION:** Damage to the coil may occur if the MEG gun is triggered ON for long periods of time.

The MEG gun is designed for high-cycle applications. When flushing the system, do not trigger ON the spray gun for more than 5 seconds.

### ***Spray Pattern Orientation Adjustment***

See Figure 4.

1. Loosen the manifold lock nut (1).
2. Rotate the gun module (2) to adjust the spray pattern orientation.
3. Tighten the manifold lock nut.



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Figure 4 Spray Pattern Orientation Adjustment

1. Manifold lock nut
2. Gun module

## 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 representative for help.

Problem	Possible Cause	Corrective Action
<b>1. Gun fails to trigger</b>	Poor electrical connections Seat retainer too tight  Bad solenoid coil  Bad gun module	Check the electrical connections. Loosen the seat retainer and tighten it to 7–14 N•m (5–10 ft-lb). Disconnect the coil wires at the terminal block (See Figure 3) and check the coil resistance with an ohmmeter. The resistance should be about 2 ohms. Replace the gun module if the resistance check fails. Replace the gun module.
<b>2. Fluid spits or leaks from nozzle</b>	Dirty or worn ball and seat	Clean or replace the ball and seat.
<b>3. Fluid leaks around nozzle nut</b>	Damaged or worn seat retainer O-ring	Remove the nozzle nut and nozzle. Replace the O-ring in the seat retainer face.
<b>4. Fluid leaks from lower manifold</b>	Damaged or worn upper manifold O-rings	Remove the upper manifold from the lower manifold. Replace the upper manifold O-rings.
<b>5. Spray weight increases</b>	Loose or broken diaphragm spring on armature assembly	Replace the armature assembly by installing a new ball and seat kit.
<b>6. Spitting</b>	Damaged or missing retainer seal	Replace the retainer seal.

## Repair



**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 and damage to equipment, relieve system fluid pressure and shut off system electrical power.

### ***Ball and Seat Replacement***

**NOTE:** The ball and seat can be replaced without removing the gun from the spray machine.

Have the following at hand:

- ball and seat service kit
- petroleum jelly

The ball and seat service kit is shipped assembled. It consists of the

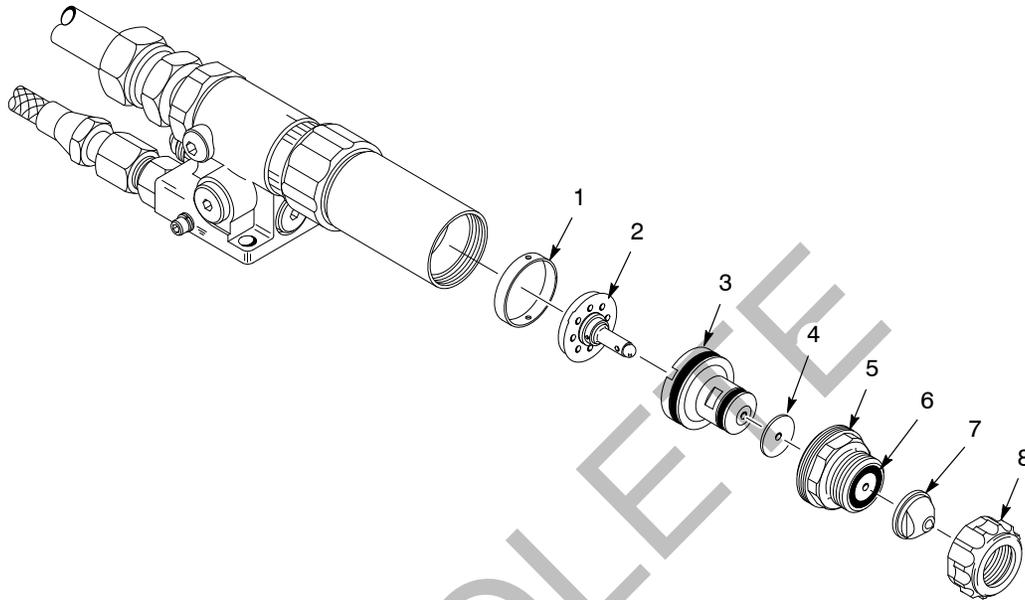
- seat
- seat O-rings
- spacer
- armature assembly
- retainer seal

**NOTE:** Inspect all O-rings and replace any that are damaged. Lubricate all O-rings with petroleum jelly before assembly. The *Soft Goods Service Kit* listed on page 21 includes all O-rings used in the MEG gun, or they can be ordered separately. An alternate PTFE O-ring can be used in the seat instead of the standard EPR O-ring.

See Figure 5.

1. If used, remove the CleanSleeve cover from the spray gun.
2. Unscrew the nozzle nut (8) and remove the nozzle (7).
3. Unscrew the seat retainer (5) and remove the retainer seal (4).
4. Remove the seat (3), spacer (1), and armature assembly (2) from the gun module.
5. Clean the seat retainer, nozzle, nozzle nut, and the seat O-ring sealing surface on the inside diameter of the spray gun.
6. Lubricate the new seat O-rings with petroleum jelly.
7. Install the new ball and seat assembly (1, 2, and 3) into the end of the spray gun.
8. Lubricate the new retainer seal with petroleum jelly and install it into the seat retainer.
9. Thread the seat retainer into the spray gun. Tighten the seat retainer to 7–14 N•m (5–10 ft-lb).

10. Lubricate the seat retainer O-ring (6) with petroleum jelly.
11. Insert the nozzle into the nozzle nut. Install the nozzle nut on the seat retainer and tighten it with the optional nozzle wrench. Do not overtighten the nut.
12. If used, install a CleanSleeve cover on the spray gun.



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Figure 5 Ball and Seat Replacement

- |                      |                  |               |
|----------------------|------------------|---------------|
| 1. Spacer            | 4. Retainer seal | 7. Nozzle     |
| 2. Armature assembly | 5. Seat retainer | 8. Nozzle nut |
| 3. Seat              | 6. O-ring        |               |

## Gun Module Replacement

**NOTE:** The gun module can be replaced without removing the gun from the spray machine.

Have the following at hand:

- module service kit
- petroleum jelly

The module service kit is shipped assembled. It consists of the

- |                     |                        |
|---------------------|------------------------|
| • gun module        | • seat O-rings         |
| • gun module O-ring | • retainer seal        |
| • spacer            | • seat retainer        |
| • armature assembly | • seat retainer O-ring |
| • seat              | • nozzle nut           |

## Gun Module Replacement *(contd)*

**NOTE:** Inspect all O-rings and replace any that are damaged. Lubricate all O-rings with petroleum jelly before assembly. The *Soft Goods Service Kit* listed on page 21 includes all O-rings used in the MEG gun, or they can be ordered separately.

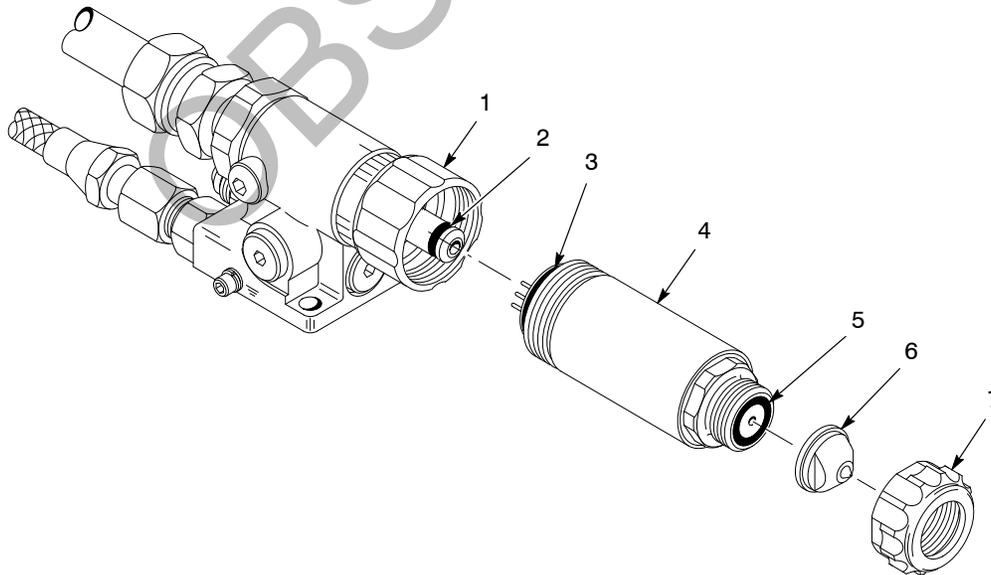
See Figure 6.

1. If used, remove the CleanSleeve cover from the spray gun.
2. Remove the nozzle nut (7) and nozzle (6).
3. Loosen the gun module nut (1). Carefully pull the gun module (4) out of the spray gun.
4. Lubricate the upper manifold and gun module O-rings (2, 3) with petroleum jelly.



**CAUTION:** Make sure you install the new gun module so that the two pins in the gun module fit into the pin sockets in the upper manifold. Failure to do so may damage the gun module.

5. Carefully install the new gun module, fitting the pins into the pin sockets in the upper manifold. Tighten the gun module nut (1) to 27–34 N•m (20–25 ft-lb).
6. Lubricate the O-ring (5) in the seat retainer face with petroleum jelly.
7. Insert the nozzle into the nozzle nut. Install the nozzle nut onto the gun module and tighten it with the optional nozzle wrench. Do not overtighten the nut.
8. If used, install a CleanSleeve cover on the spray gun.



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Figure 6 Gun Module Replacement

- |                          |                         |               |
|--------------------------|-------------------------|---------------|
| 1. Gun module nut        | 4. Gun module           | 6. Nozzle     |
| 2. Upper manifold O-ring | 5. Seat retainer O-ring | 7. Nozzle nut |
| 3. Gun module O-ring     |                         |               |

## Upper Manifold O-Ring Replacement



**WARNING:** Relieve system fluid pressure and shut off system electrical power before performing the following procedure. Failure to do so could result in personal injury.

Have the following at hand:

- replacement O-rings
- petroleum jelly

**NOTE:** Inspect all O-rings and replace any that are damaged. Lubricate all O-rings with petroleum jelly before assembly. The *Soft Goods Service Kit* listed on page 21 includes all O-rings used in the MEG gun, or they can be ordered separately.

## Upper Manifold Removal

See Figure 7.

1. Make sure all system pressure is relieved and electrical power is shut off.
2. Remove the MEG gun from the spray machine.
3. Loosen the gun module nut (11). Carefully pull the gun module (5) out of the spray gun.
4. Disconnect the gun wiring from the terminal block.
5. Unscrew the connector gland nut (7) from the connector body (8).
6. Unscrew the connector body and manifold lock nut (9) from the upper manifold (3).
7. Loosen the stop screw (12).
8. Press on the back of the upper manifold to push it out of the lower manifold (10).
9. Slide the gun module nut off the upper manifold.
10. Remove and discard the O-rings (1, 4).

## Upper Manifold Installation

See Figure 7.

**NOTE:** You can install the two larger O-rings (1) from the front or the back of the upper manifold. If you install them from the back, pull the manifold wires all the way out of the conduit (6) and through the manifold lock nut and lower manifold.

1. Lubricate the new O-rings (1, 4) with petroleum jelly and install them onto the upper manifold (3).
2. Slide the gun module nut (11) toward the front of the upper manifold until it hits the manifold shoulder.

## Upper Manifold Installation *(contd)*

**NOTE:** If you pulled the upper manifold wires out of the conduit and lower manifold, thread the wires through the lower manifold (10), the manifold lock nut (9), and the conduit (6) before you insert the upper manifold into the lower manifold.

3. Align the upper manifold groove (2) to the stop screw (12). Insert the upper manifold into the lower manifold.
4. Tighten the stop screw.
5. Thread the manifold lock nut onto the upper manifold and tighten it securely.
6. Thread the connector body (8) into the upper manifold and tighten it securely.
7. Thread the gland nut (7) onto the connector body and tighten it securely.
8. Carefully install the gun module (5), fitting the pins into the pin sockets in the upper manifold.
9. Thread the gun module nut onto the gun module. Tighten the nut to 27–34 N•m (20–25 ft-lb).
10. Connect the gun wiring to the terminal block.

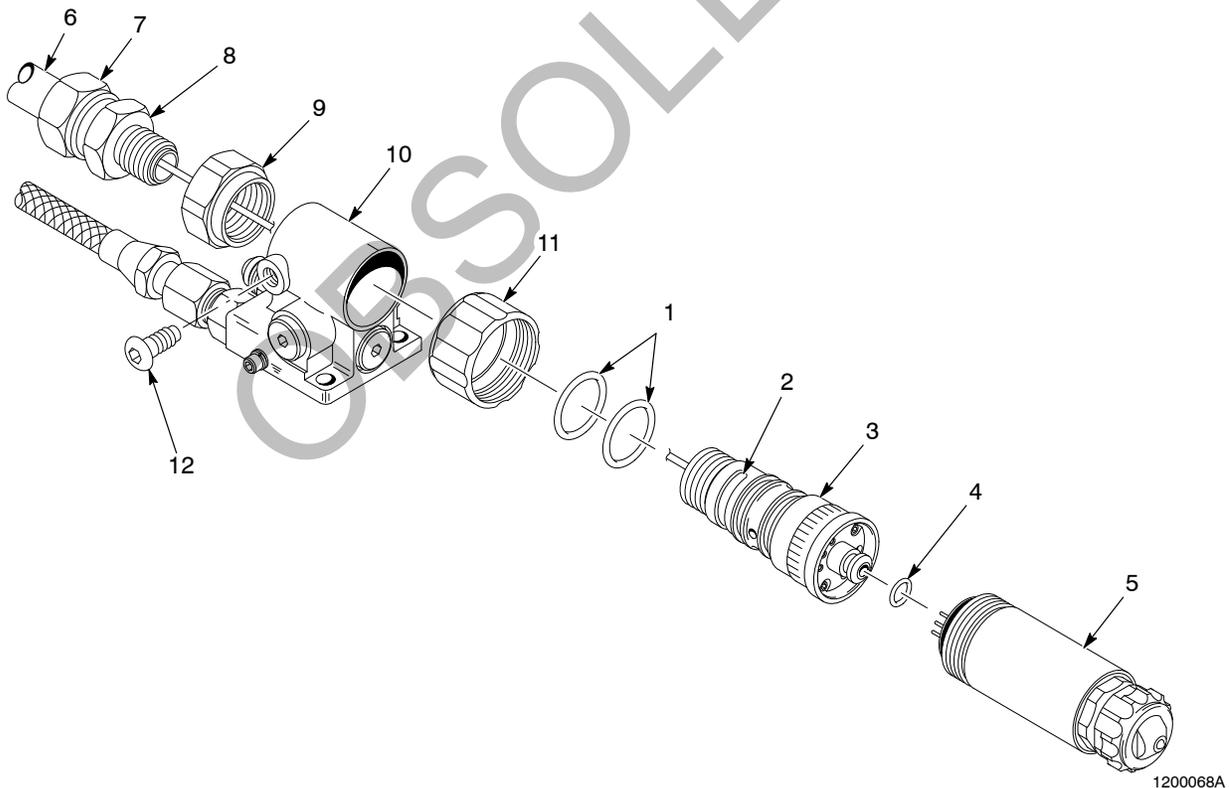


Figure 7 Upper Manifold O-ring Replacement

- |                          |                       |                      |
|--------------------------|-----------------------|----------------------|
| 1. O-rings               | 5. Gun module         | 9. Manifold lock nut |
| 2. Upper manifold groove | 6. Electrical conduit | 10. Lower manifold   |
| 3. Upper manifold        | 7. Gland nut          | 11. Gun module nut   |
| 4. O-ring                | 8. Connector body     | 12. Stop screw       |

## 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	

## Gun Parts

See Figure 8.

Item	Part	Description	Quantity	Note
—	237411	GUN ASSEMBLY, MEG	1	
—	272334	GUN ASSEMBLY, MEG, 0.0058 in.	1	
1	-----	• MODULE, MEG	1	A
2	237401	• • NUT, nozzle	1	A
3	940120	• • O-RING, hotpaint, 0.375 x 0.500 x 0.063 in.	2	A, F
4	-----	• • RETAINER, seat	1	A
5	176519	• • SEAL, retainer	1	A
6	-----	• • SEAT, MEG	1	A
7	940180	• • O-RING, hotpaint, 0.750 x 0.875 x 0.063 in.	1	A
8	-----	• • ARMATURE ASSEMBLY, MEG	1	A
9	237399	• • SPACER	1	A
10	-----	• • BODY, MEG	1	A
11	940170	• • O-RING, hotpaint, 0.688 x 0.813 x 0.063 in.	1	A
12	940080	• O-RING, hotpaint, 0.188 x 0.313 x 0.063 in.	1	A
13	-----	• MANIFOLD, upper, potted	1	A, B
14	982964	• • SCREW, socket, M2.5 x 6, stainless steel	2	A, B
15	-----	• • HARNESS, wire, MEG	1	A
16	940160	• O-RING, hotpaint, 0.625 x 0.750 x 0.063 in.	2	A
17	237409	• NUT, gun module	1	
18	324172	• PLUG, MEG	3	
19	945020	• O-RING, hotpaint, $\frac{3}{16}$ -in. tube	3	A
20	237407	• MANIFOLD, lower	1	
21	243632	• NUT, lock, manifold	1	C
22	237035	• SCREW, stop, M6	1	
23	945014	• O-RING, $\frac{5}{16}$ -in. tube	2	A
24	972013	• CONNECTOR, 37° hydraulic, $\frac{1}{2}$ -20, straight	2	
25	983047	• WASHER, flat, M, regular, M4, stainless steel	1	
26	983403	• WASHER, lock, M, split, M4, steel, zinc	1	
27	340264	• SCREW, socket, M4 x 5 mm, steel, zinc	1	
28	179416	• CONDUIT, liquid tight, $\frac{1}{4}$ x 56 in.	1	
29	972239	• CONNECTOR, $\frac{1}{4}$ -in. conduit x $\frac{1}{4}$ -in. NPT	2	
30	955063	• RING, sealing, $\frac{1}{4}$ -in.	1	
31	984200	• NUT, lock, $\frac{1}{4}$ -in.	1	
NS	981893	• SCREW, socket, 10-32 x 0.500 in., zinc	2	D
NS	247646	• CARD, medical alert, injection	1	
NS	940120	• O-RING, hotpaint, 0.375 x 0.500 x 0.063 in.	10	E

NOTE A: Noted parts are available in various service kits. Refer to *Service Kits* on page 20.

B: Early versions of MEG gun used unpotted manifold and wire harness. Refer to *Upper Manifold and Wire Harness* on page 22.

C: Manifold nut has been modified for mounting CleanSpray bracket and strap assembly.

D: Use these screws to mount the MEG gun to the spray machine.

E: These O-rings are spares for item 3.

F: Alternate PTFE O-ring included in part 1073596, Kit, O-ring PTFE, shipped with gun.

NS: Not Shown

## PTFE O-Ring Kit

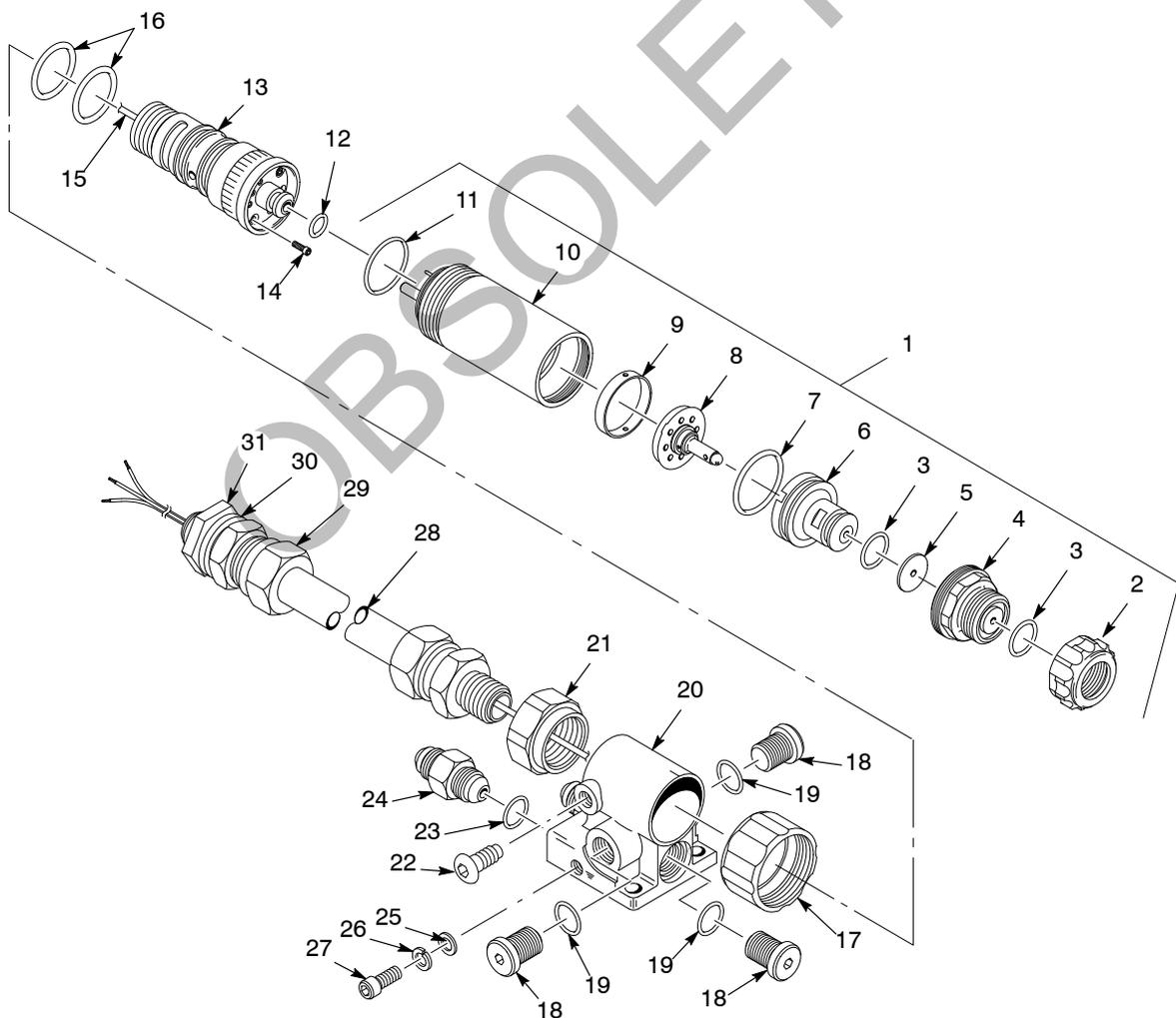
See Figure 8. This kit is shipped with the gun. The O-ring replaces the nozzle seat O-ring for certain applications.

Item	Part	Description	Quantity	Note
-	1073596	KIT, O-ring, PTFE, MEG gun	1	
3	940124	• O RING,PTFE, 0.375 X 0.50 X 0.06 in.	5	

## Special Tools

The following tools are included with the MEG gun.

Part	Description	Note
152999	WRENCH	
901911	WRENCH, adjusting, module	
901905	BRUSH	



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Figure 8 Gun Parts

## Service Kits

### Service Kit Quick Reference List

Part	Description	Refer to Page
<b>Standard (237411) MEG Gun</b>		
244652	MODULE service kit, MEG	20
237417	BALL AND SEAT service kit, MEG	21
<b>5.8 (272334) MEG Gun</b>		
272336	MODULE service kit, MEG, 0.0058	20
237417	BALL AND SEAT service kit, MEG, 0.0058	21
<b>Both Versions</b>		
244651	BODY WITH COIL service kit, MEG	21
244755	SEAT RETAINER, hotpaint	21
237419	SOFT GOODS service kit, MEG	21
<b>Early Versions with Unpotted Upper Manifolds (Refer to Note Below)</b>		
244749	WIRE HARNESS service kit, MEG	22
244791	UPPER MANIFOLD, hotpaint	22
<p><b>NOTE:</b> These kits can only be used on early versions of the guns where the wire harness was not potted into the manifold. In current models, the wire harness is potted into upper manifold and can not be replaced separately. To replace the wire harness, order a new upper manifold.</p>		

### Gun Module Service Kits

See Figure 8.

**NOTE:** Make sure you order the correct kit for your MEG gun.

Item	Part	Description	Quantity	Note
—	244652	SERVICE KIT, module, MEG	1	
—	272336	SERVICE KIT, module, MEG, 0.0058	1	
1	-----	• MODULE, MEG	1	
2	237 401	• • NUT, nozzle	1	
3	940120	• • O-RING, hotpaint, 0.375 x 0.500 x 0.063 in.	2	
4	-----	• • RETAINER, seat	1	
5	176519	• • SEAL, retainer	1	
6	-----	• • SEAT, MEG	1	
7	940180	• • O-RING, hotpaint, 0.750 x 0.875 x 0.063 in.	1	
8	-----	• • ARMATURE ASSEMBLY, MEG	1	
9	237399	• • SPACER	1	
10	-----	• • BODY, MEG	1	
11	940170	• • O-RING, hotpaint, 0.688 x 0.813 x 0.063 in.	1	
NS	940120	• O-RING, hotpaint, 0.375 x 0.500 x 0.063 in.	10	A
NOTE A: These O-rings are spares for item 3.				
NS: Not Shown				

## Ball and Seat Service Kits

See Figure 8.

**NOTE:** Make sure you order the correct kit for your MEG gun.

Item	Part	Description	Quantity	Note
—	237417	SERVICE KIT, ball and seat, MEG	1	
—	272335	SERVICE KIT, ball and seat, MEG, 0.0058	1	
3	940120	• O-RING, hotpaint, 0.375 x 0.500 x 0.063 in.	1	
5	176519	• SEAL, retainer	1	
6	-----	• SEAT, MEG	1	
7	940180	• O-RING, hotpaint, 0.750 x 0.875 x 0.063 in.	1	
8	-----	• ARMATURE ASSEMBLY, MEG	1	
9	237399	• SPACER	1	

## Body with Coil Service Kit

See Figure 8.

Item	Part	Description	Quantity	Note
—	244651	SERVICE KIT, body with coil, MEG	1	
3	940120	• O-RING, hotpaint, 0.375 x 0.500 x 0.063 in.	2	
7	940180	• O-RING, hotpaint, 0.750 x 0.875 x 0.063 in.	1	
10	-----	• BODY, MEG	1	A
11	940170	• O-RING, hotpaint, 0.688 x 0.813 x 0.063 in.	1	

## Seat Retainer Service Kit

See Figure 8.

Item	Part	Description	Quantity	Note
—	244755	RETAINER, seat, hotpaint	1	
3	940120	• O-RING, hotpaint, 0.375 x 0.500 x 0.063 in.	1	
4	-----	• RETAINER, seat	1	
5	176519	• SEAL, retainer	1	

## Soft Goods Service Kit

See Figure 8.

Item	Part	Description	Quantity	Note
—	237419	SERVICE KIT, soft goods, MEG	1	
3	940120	• O-RING, hotpaint, 0.375 x 0.500 x 0.063 in.	2	
5	176519	• SEAL, retainer	1	
7	940180	• O-RING, hotpaint, 0.750 x 0.875 x 0.063 in.	1	
11	940170	• O-RING, hotpaint, 0.688 x 0.813 x 0.063 in.	1	
12	940080	• O-RING, hotpaint, 0.188 x 0.313 x 0.063 in.	1	
16	940160	• O-RING, hotpaint, 0.625 x 0.750 x 0.063 in.	2	
19	945020	• O-RING, $\frac{3}{16}$ -in. tube	3	
23	945014	• O-RING, $\frac{5}{16}$ -in. tube	2	

## Upper Manifold and Wire Harness

See Figure 8.

**NOTE:** Only use these kits to replace the upper manifold and wire harness on early versions of the gun, where the wire harness was not potted into the manifold. In current models, the wire harness is potted into upper manifold and cannot be replaced separately. To replace the wire harness, order a new upper manifold.

### Upper Manifold Replacement

Item	Part	Description	Quantity	Note
—	244791	MANIFOLD, upper, hotpaint	1	
12	940080	• O-RING, hotpaint, 0.188 x 0.313 x 0.063 in.	1	
13	-----	• MANIFOLD, upper, potted	1	
16	940160	• O-RING, hotpaint, 0.625 x 0.750 x 0.063 in.	2	

### Wire Harness Replacement

Item	Part	Description	Quantity	Note
—	244749	SERVICE KIT, wire harness, MEG	1	
11	940170	• O-RING, hotpaint, 0.688 x 0.813 x 0.063 in.	1	
12	940080	• O-RING, hotpaint, 0.188 x 0.313 x 0.063 in.	1	
14	982964	• SCREW, socket, M2.5 x 6, stainless steel	2	
15	-----	• HARNESS, wire, MEG	1	

## Options

### CleanSleeve Covers

Each box of CleanSleeve covers contains 500 covers.

Part	Description	Note
141444	COVER, CleanSleeve, 500 pieces	
149237	COVER, CleanSleeve, mini, 500 pieces	

### Nozzle Wrench

Part	Description	Note
163945	WRENCH, nozzle	

## Pressure Transducers

Use pressure transducers with the Nordson CanWorks spray monitor system.

Part	Description	Note
771220	600 psi transducer and amplifier	
333055	1500 psi transducer and amplifier	

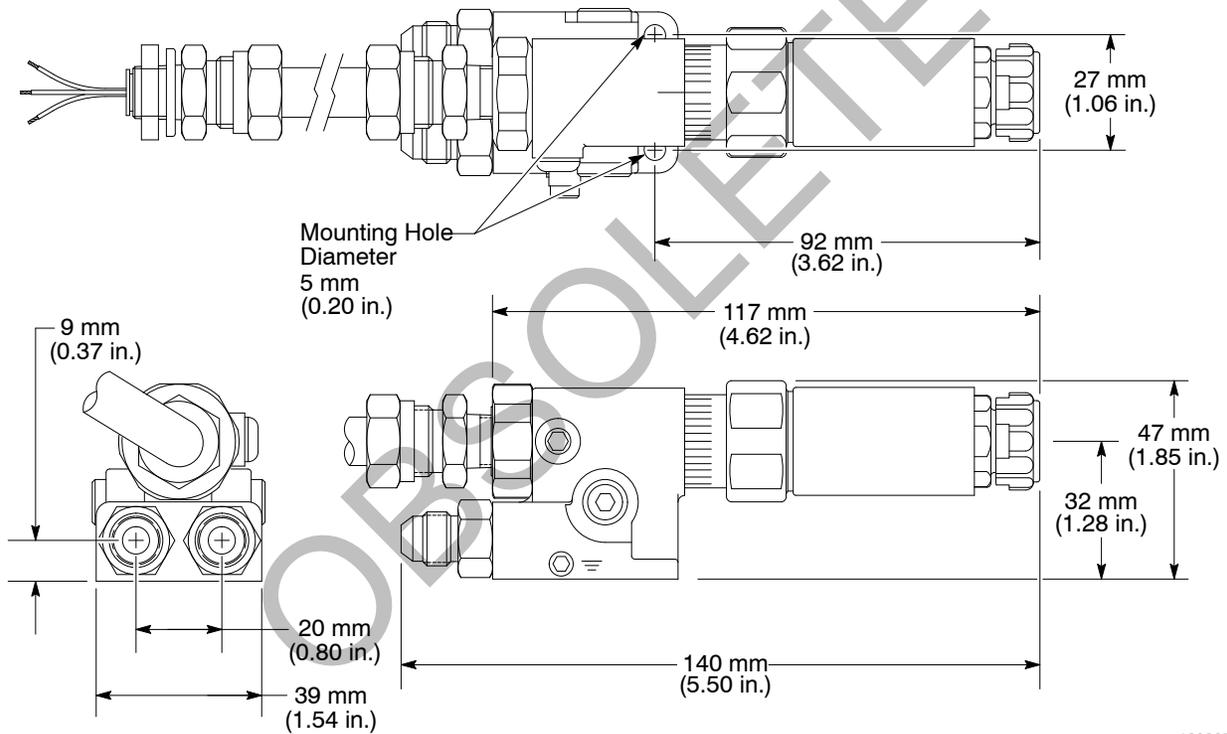
## CO-Plate Selection Chart

Use CO-plates with the Nordson CanWorks spray monitor system. Contact your Nordson representative for more information on CO-plates for your application.

Nozzle Size	Spray Pressure bar (psi) [Spring Range]								
	13.8 (200) [0-500]	20.7 (300) [0-500]	27 (400) [0-500]	34 (500) [0-800]	41 (600) [0-800]	48 (700) [0-800]	55 (800) [0-1500]	62 (900) [0-1500]	70 (1000) [0-1500]
0.015	337987 (015)	337987 (015)	337988 (020)	337989 (025)	337989 (025)	337990 (030)	337990 (030)	337991 (040)	337991 (040)
0.030	337988 (020)	337990 (030)	337991 (040)	337991 (040)	337992 (050)	337992 (050)	337993 (060)	337994 (075)	337994 (075)
0.040	337990 (030)	337991 (040)	337992 (050)	337993 (060)	337993 (060)	337993 (060)	337994 (075)	337995 (090)	337997 (120)
0.060	337991 (040)	337993 (060)	337994 (075)	337994 (075)	337995 (090)	337995 (090)	337997 (120)	337999 (160)	338000 (200)
0.075	337992 (050)	337994 (075)	337995 (090)	337996 (105)	337997 (120)	337997 (120)	337998 (140)	337999 (160)	338000 (200)
0.090	337993 (060)	337994 (075)	337995 (090)	337996 (105)	337998 (140)	337999 (160)	338000 (200)	338000 (200)	338000 (200)
0.120	337995 (090)	337996 (105)	337998 (140)	337999 (160)	338000 (200)	338000 (200)	338000 (200)	338000 (200)	338001 (250)
0.140	337996 (105)	337997 (120)	337998 (140)	338000 (200)	338001 (250)	338002 (300)	338002 (300)	338002 (300)	338002 (300)
CO-Plate Part Number → 337987 (015) ← CO-Plate Designation Number on front of CO-Plate									
<b>NOTE:</b> Spring range is pressure range of spring used in pressure control system regulator.									

# Specifications

Item	Specification
Dimensions	See Figure 9
Electrical Requirements	48 Vdc, 3 amps for 3 msec and 1 amp holding
Fluid Pressure	83 bar (1200 psi)
Fluid Temperature	57 °C (135 °F)
Nozzle Flow Rate	0.001–0.013 l/sec (0.015–0.2 gpm)
Coating Type	Waterborne can lacquers
pH	6.5–8.5
Viscosity	15–40 sec with Zahn 2 cup at 21 °C (70 °F)
Weight	0.75 kg (1.6 lb)



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Figure 9 Dimensions

# DECLARATION of CONFORMITY

**PRODUCT: MEG® Applicator and Driver**

(compact airless automatic spray applicator and driver for use with non-flammable materials)

**APPLICABLE DIRECTIVES:**

98/37/EEC

(Machinery)

2006/95/EC

(Low Voltage Directive)

2004/108/EEC

(Electromagnetic Compatibility Directive)

**STANDARDS USED FOR COMPLIANCE:**

IEC60417

EN55011

EN12100

EN61000-6-2

EN60204

EN61000-6-3

**PRINCIPLES:**

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

**CERTIFICATIONS:**

TUV-Tmark

TUV-EMV/EMC

DNV ISO 9001:2000



Joseph Schroeder  
Engineering Manager,  
Finishing Product Development Group

Date: 15 October 2007



Nordson Corporation • Westlake, Ohio