

MEG II Airless Spray Guns (Reduced Cavity and Extended Tip)

Customer Product Manual

Part 304069-15

Issued 12/10

**For parts and technical support, call the
Finishing Customer Support Center at (800) 433-9319.**

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OBSOLETE

MEG® II Airless Spray Guns

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 Safety Data Sheets (SDS) 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 SDS 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 SDS for guidance.
- Do not disconnect live electrical circuits when working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.

Fire Safety *(contd)*

- 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 SDS 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. This manual covers the MEG II spray guns, including the reduced cavity and the extended tip versions. The standard version was obsoleted in 2007. These guns are high-speed airless spray guns used to apply water- and solvent-based coatings to the interior surfaces of metal cans.

NOTE: The MEG II gun is approved for solvent-based materials when using approved drivers. To meet approvals, the fuse and fuse holder supplied with the MEG II gun must be installed.

The MEG II gun can be used with the iTrax spray system, which offers advanced spray system control and monitoring.

The MEG II gun features:

- special internal coil and armature assembly for cooler gun operation
- online-replaceable gun module (1), consisting of ball, seat, and coil
- online-replaceable ball and seat
- 1/2-20 37° JIC fittings (3) for fluid in and out connections
- 1/4-in. liquid-tight electrical conduit (4), 142 cm (56 in.) long

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

- A20A
- A10A
- A14A

Refer to *Specifications* on page 29 for technical data and label information.

Extended Tip version

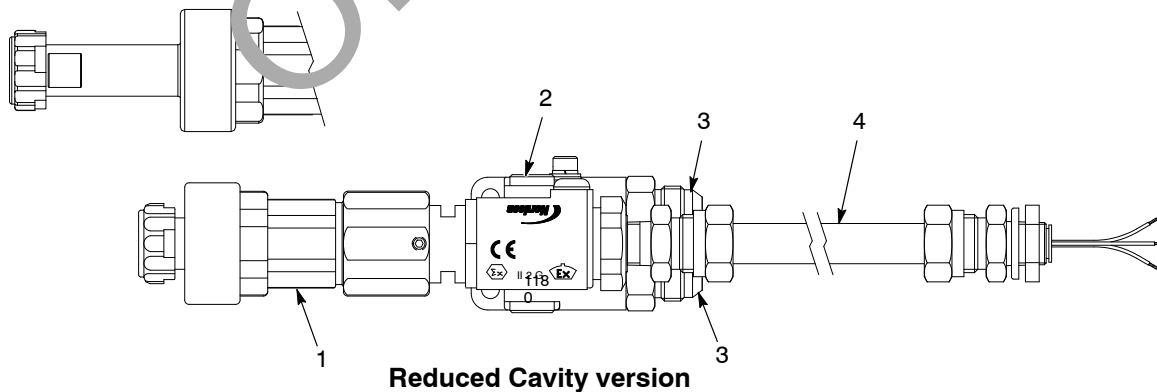


Figure 1 MEG II Gun Components (Top View)

- | | | |
|---------------|----------------------------|-----------------------|
| 1. Gun module | 3. 1/2-20 37° JIC fittings | 4. Electrical conduit |
| 2. Manifold | | |

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 II gun on the mounting plate, using the two holes in the manifold base.

- If you are replacing an A10A, A14A, or A20A spray gun, remove it and use the two socket-head screws (1) shipped with the MEG II gun to secure it to the existing mounting plate.
- If your system does not use any of these spray guns, refer to *Specifications* on page 29 for mounting 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 (7). Either fitting may be used for the inlet. The fittings are 1/2-20 37° JIC.

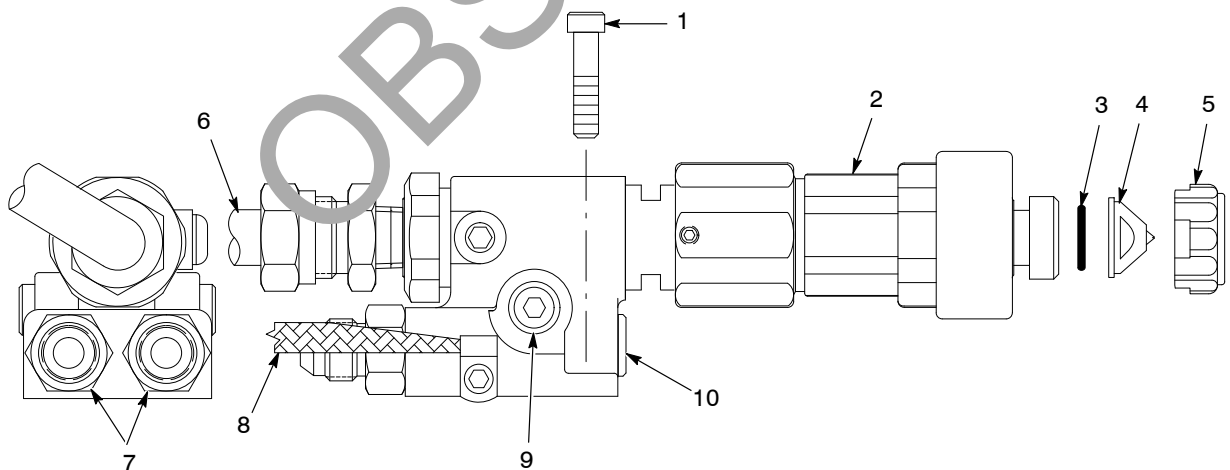


Figure 2 Installation

- | | | |
|-----------------------|-----------------------|--|
| 1. Socket-head screws | 5. Nozzle nut | 8. Ground cable and clamp |
| 2. Gun | 6. Electrical conduit | 9. Pressure transducer plugs and O-rings |
| 3. Seat O-ring | 7. Fluid fittings | 10. CO plate plug and O-ring |
| 4. Nozzle | | |

Electrical Connections



WARNING: Use a driver/trigger device which meets the electrical requirements listed in this manual. 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.

Special Conditions for Safe Use

SGS Baseefa

The electrical conduit wire leads must be suitably protected against mechanical damage and terminated within a terminal or junction box suitable for the conditions of use. The fuse block and 1 amp fuse must be used as shown below.

Connections

See Figure 3.

1. Connect the gun's electrical conduit to a customer-supplied junction box (5) with the lock nut (6) and seal ring (7).
2. Connect the gun wires from the electrical conduit to a customer-supplied terminal block (3) as shown.



WARNING: If using the MEG II gun with solvent-based coating materials, you must install the fuse and fuse holder to the gun coil circuit. Failure to observe this warning could result in personal injury or property damage.

3. If using the MEG II gun with solvent-based coating materials, install the fuse holder and 1 amp fuse shipped with the spray gun on the terminal block and connect one of the black coil wires to the fuse holder.
4. Connect customer-supplied wiring (2) from the terminal block and fuse holder, if used, to the MEG driver or other driver/trigger device (1).



WARNING: The MEG II gun must be connected to a true earth ground. Use the supplied ground cable and clamp and test the connection for continuity before putting the gun into service.

5. Connect the ground clamp on the end of the braided ground cable (9) to a true earth ground.

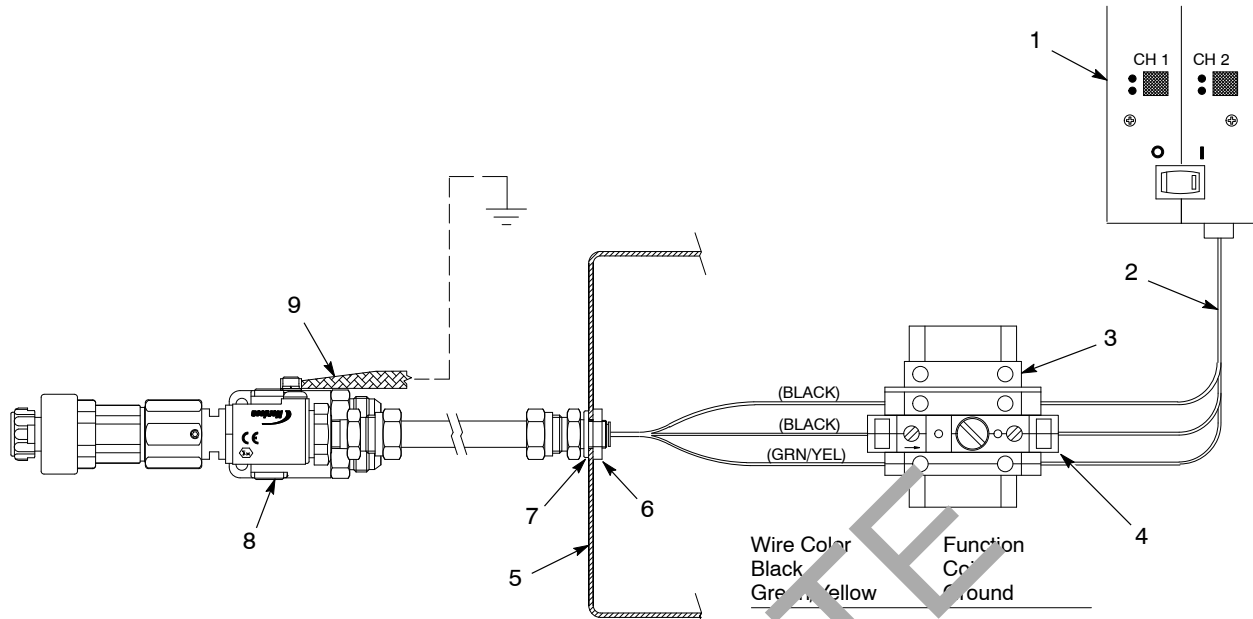


Figure 3 Electrical Connections

- | | | |
|---|---|-----------------|
| 1. MEG driver or customer-supplied driver | 4. Fuse holder and 1 amp fuse (optional, refer to Note below) | 7. Seal ring |
| 2. Customer-supplied wires | 5. Customer-supplied junction box | 8. MEG II gun |
| 3. Customer-supplied terminal block | 6. Lock nut | 9. Ground cable |

Note: Fuse holder and 1 amp fuse must be installed if using solvent-based materials. Refer to warning and step 3 on following page.

Nozzle and CleanSleeve Cover

See Figure 2. Remove the nozzle nut (5) from the spray gun (2).

Verify that the seat O-ring (3) is installed into 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. Thread the nozzle nut onto the spray gun and tighten it securely with the optional nozzle wrench to 20–27 N•m (15–20 ft-lb). Do not overtighten the nut.

5. If desired, install a CleanSleeve cover on the spray gun.

Pressure Transducers

When the MEG II gun is installed as part of a iTrax spray monitor system, install a pressure transducer in the gun manifold to monitor fluid pressure at the gun. Refer to *Pressure Transducers* on page 27 for transducer ordering information.

See Figure 2. Remove a plug and O-ring (9) from one side of the manifold and replace it with a pressure transducer. The port on either side of the manifold can be used. Tighten the transducer securely.

CO-Plate

When the MEG II gun is installed as part of a iTrax spray monitor system, install a CO-plate in the gun manifold to produce a controlled pressure drop when the gun is spraying. Refer to the *CO-Plate Selection Chart* on page 28 for CO-plate ordering information.

See Figure 2. Remove the plug and O-ring (10) from the front of the MEG gun and install a CO-plate in the manifold. 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 II gun is dependent upon the timer with which it is used. Refer to your timer manual for operation procedures.



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

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

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
1. Gun fails to trigger	Poor electrical connections	Check the electrical connections.
	Seat retainer nut too tight	Loosen the seat retainer nut and tighten it to 7–14 N•m (5–10 ft-lb).
	Bad solenoid coil	Disconnect the coil wires at the terminal block (see Figure 3) and check the coil resistance with an ohmmeter. Reading should be about 2 ohms. Replace the gun body if the resistance check fails. Use the <i>Body with Coil Service Kit</i> .
	Blown fuse	See Figure 3. Check the fuse (4). If the fuse is blown, a lamp on the fuse holder will flash as the gun is triggered. Remove the fuse from the fuse holder and check it with an ohmmeter. Replace the fuse if blown.
	Bad gun module	Replace the gun module.
2. Fluid spits or leaks from nozzle	Dirty or worn ball and seat	Loosen the seat retainer nut and remove the seat. Clean and inspect the seat and ball. Replace them if they are worn or damaged. Use the <i>Ball and Seat Service Kit</i> .
3. Fluid leaks around nozzle nut	Damaged or worn O-ring	Remove the nozzle nut and nozzle. Replace the O-ring in the seat face.
	Loose nozzle nut	Tighten nozzle nut to 20–27 N•m (15–20 ft-lb).
4. Fluid leaks from lower manifold	Damaged or worn O-rings	Remove the upper manifold from the lower manifold. Replace the upper manifold O-rings. Replacement O-rings are available separately or as part of the <i>Soft Goods Service Kit</i> .
5. Spray weight increases	Loose or broken diaphragm spring on armature assembly	Replace either the armature spring or the entire armature assembly. Use either the <i>Armature Spring Kit</i> or the <i>Ball and Seat Service Kit</i> .

Repair



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

Ball and Seat 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.

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 (do not use O-ring lubricant)

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

- seat
- seat O-rings
- spacer
- armature assembly

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 in Parts 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 4.

1. If used, remove the CleanSleeve cover from the gun module.
2. Unscrew the nozzle nut (6) and remove the nozzle (5).
3. Unscrew the seat retainer nut (1) and slide it forward till the ball (3) and seat (4) assembly snaps out.
4. Remove the seat (4), spacer (2), and armature assembly (3) from the the gun module.
5. Clean the O-ring sealing surface on the inside diameter of the gun module.

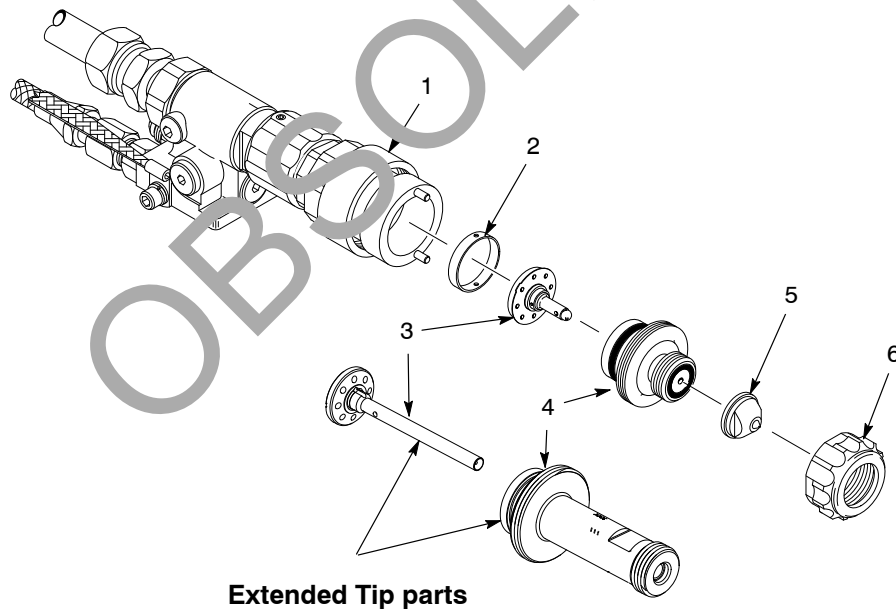
6. Lubricate the new seat O-rings with petroleum jelly.
7. Install the new spacer, armature, and seat (2, 3, and 4) into the end of the body.
 - a. Fit the body pins into the pin sockets in the seat.
 - b. Make sure the spring tab is engaged in slot of seat holder.
 - c. Use a wrench to twist along the flats on the seat and push in toward module body to install the ball and seat assembly.

NOTE: The pin sockets in the seat are arranged so you can rotate the seat in 45° increments. Each time you install the seat, rotate it one increment to even out wear on the face of the coil body.

8. Slide the seat retainer nut forward and thread it onto the seat. Tighten the seat retainer nut to 6.8–13.5 N•m (5–10 ft-lb).
9. Insert the nozzle into the nozzle nut. Thread the nozzle nut onto the seat and tighten it securely with the optional nozzle wrench to 20–27 N•m (15–20 ft-lb). Do not overtighten the nut.

Extended Tip Gun: Make sure you use the flats on the extended seat to tighten the nozzle nut with the wrench. Do not overtighten the nut.

10. If used, install a CleanSleeve cover onto the spray gun.



Extended Tip parts

Figure 4 Ball and Seat Replacement

- | | | |
|----------------------|----------------------|---------------|
| 1. Seat retainer nut | 3. Armature assembly | 5. Nozzle |
| 2. Spacer | 4. Seat | 6. Nozzle nut |

Gun Module 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.

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 (do not use O-ring lube)

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

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

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 in *Parts* includes all O-rings used in the MEG gun, or they can be ordered separately.

1. See Figure 5. If used, remove the CleanSleeve cover from the spray gun.
2. Remove the nozzle nut (7) and nozzle (6).
3. Loosen the set screw (1) on the gun module nut (2).
4. Unscrew the gun module nut. Carefully pull the gun module (4) out of the gun.
5. Lubricate the gun module O-ring (3) with petroleum jelly.



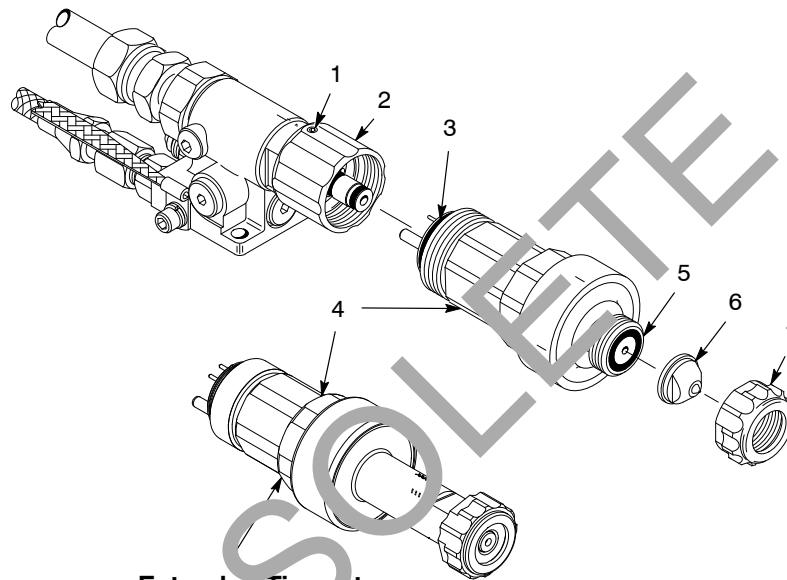
CAUTION: Make sure you install the new gun module so that the two pins in the gun module fit into the pin sockets in the upper manifold. Failure to do so may damage the gun module.

6. Carefully install the new gun module, fitting the pins into the pin sockets in the upper manifold. Tighten the gun module nut to 27–34 N•m (20–25 ft-lb).
7. Tighten the set screw on the gun module nut.

8. Lubricate the O-ring (5) in the seat face with petroleum jelly.
9. Insert the nozzle into the nozzle nut. Thread the nozzle nut onto the spray gun and tighten it securely with the optional nozzle wrench to 20–27 N•m (15–20 ft-lb). Do not overtighten the nut.

Extended Tip Gun: Make sure you use the flats on the extended seat to tighten the nozzle nut with the wrench. Do not overtighten the nut.

10. If used, install a CleanSleeve cover.



Extended Tip part

Figure 5 Gun Module Replacement

- | | | |
|-------------------|---------------|---------------|
| 1. Set screw | 4. Gun module | 6. Nozzle |
| 2. Gun module nut | 5. O-ring | 7. Nozzle nut |
| 3. 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 (do not use O-ring lube)

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 in *Parts* includes all O-rings used in the MEG gun, or they can be ordered separately.

Removal

See Figure 6.

1. Make sure all pressure is relieved and electrical power is removed from the system.
2. Remove the MEG II gun from the spray machine.
3. Loosen the set screw (13) and the gun module nut (12). Carefully pull the gun module (6) out of the gun.
4. Disconnect the gun wiring from the terminal block and fuse holder, if used.
5. Unscrew the connector gland nut (8) from the connector body (9).
6. Unscrew the connector body and manifold lock nut (10) from the upper manifold (3).
7. Loosen the stop screw (14).
8. Press on the back of the upper manifold to push it out of the lower manifold (11).

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, you will have to pull the manifold wires all the way out of the conduit and through the manifold lock nut and lower manifold.

9. Slide the gun module nut off the upper manifold.
10. Remove and discard the O-rings (1, 4, 5).

Installation

1. See Figure 6. Lubricate the new O-rings (1, 4, 5) with petroleum jelly and install them onto the upper manifold (3).
2. Slide the gun module nut (12) toward the front of the upper manifold until it hits the manifold shoulder.

NOTE: If you pulled the upper manifold wires out of the conduit and lower manifold, thread the wires through the lower manifold (11), the manifold lock nut (10), and the conduit (7) before you insert the upper manifold into the lower manifold.

3. Align the upper manifold so the stop screw (14) will go into the hole (2) when tightened. Insert the upper manifold into the lower manifold. Make sure that the wrench flats on the upper manifold are positioned as shown.
4. Tighten the stop screw.
5. Thread the manifold lock nut onto the upper manifold and tighten it securely.
6. Thread the connector body (9) into the upper manifold and tighten it securely.
7. Thread the gland nut (8) onto the connector body and tighten it securely.
8. Carefully install the gun module (6), 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. Tighten the set screw (13).
11. Connect the wiring to the terminal block and fuse holder, if used.

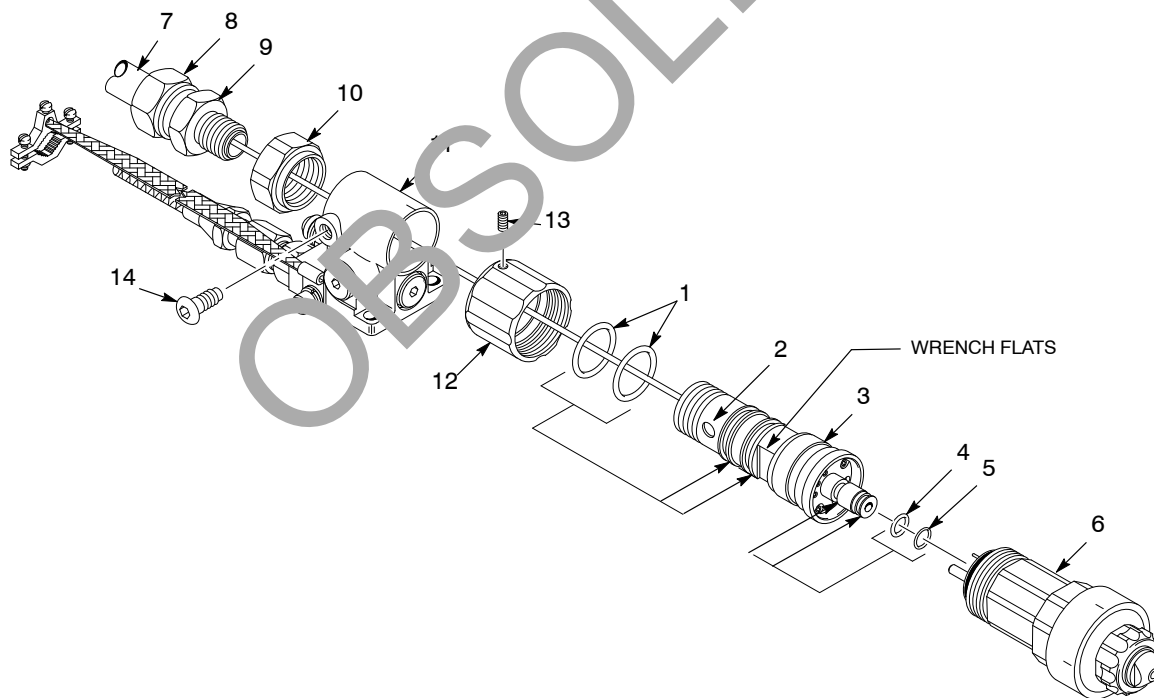


Figure 6 Upper Manifold O-ring Replacement

- | | | |
|--------------------------|-----------------------|--------------------|
| 1. O-rings | 6. Gun module | 11. Lower manifold |
| 2. Upper manifold groove | 7. Electrical conduit | 12. Gun module nut |
| 3. Upper manifold | 8. Gland nut | 13. Set screw |
| 4. O-ring | 9. Connector body | 14. Stop screw |
| 5. O-ring | 10. Manifold lock nut | |

Parts

To order parts, call the Nordson Finishing Customer Support Center at (800) 433-9319 or contact your local Nordson representative. Use the parts lists and illustrations to locate and order parts.

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. Indentations 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.

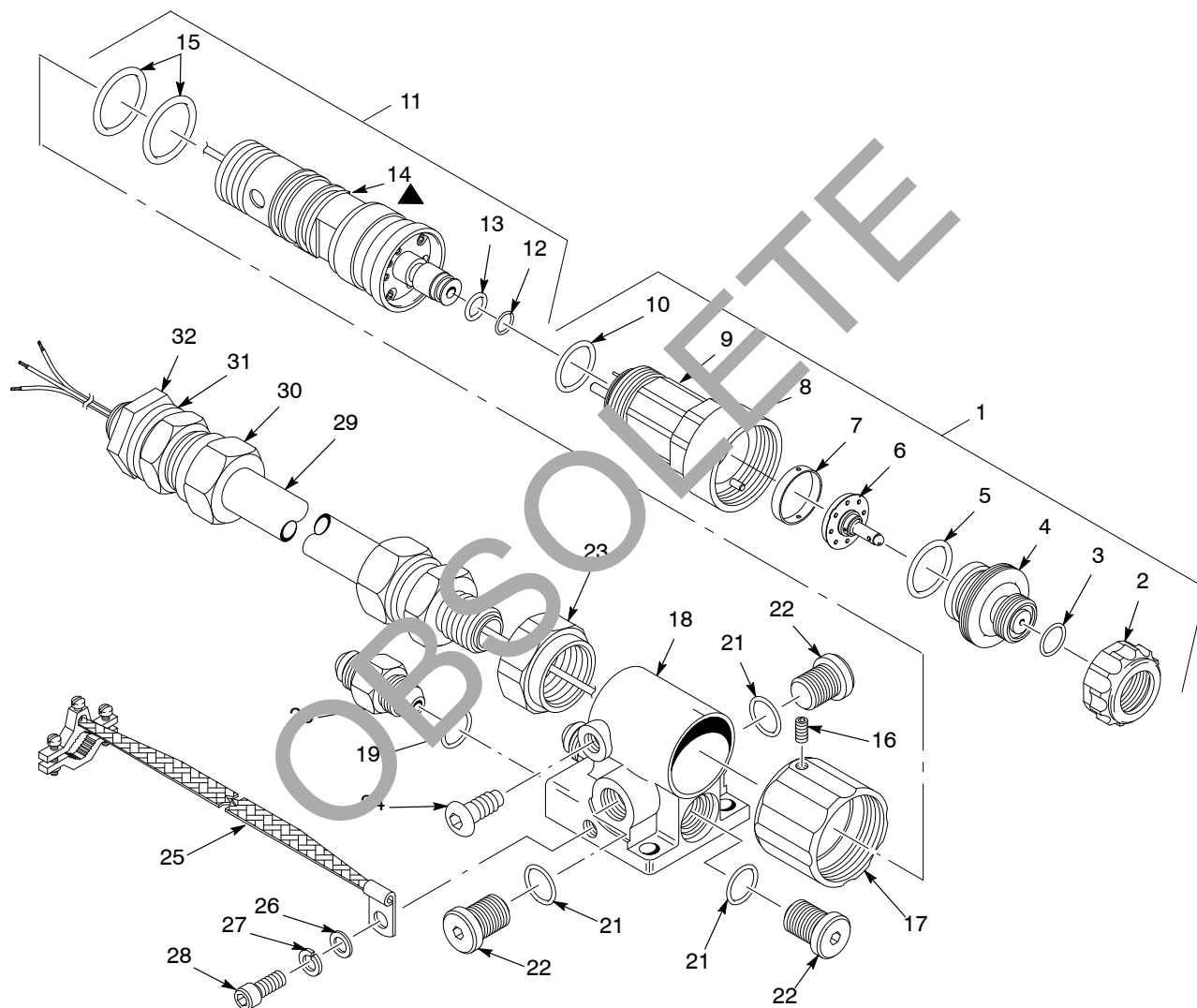
Letters in the Note column refer to notes at the end of each parts list. Notes contain important information about usage and ordering. Special attention should be given to notes.

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

Standard Gun Parts

Standard gun 344003 is obsolete and no longer sold. Use this parts list to order available service parts. To replace an entire gun, order a reduced cavity MEG II gun.

See Figure 7 and the following parts list.



▲ MEG II REDUCED CAVITY GUN UPPER MANIFOLD SHOWN.

Figure 7 Standard and Reduced Cavity MEG II Spray Gun Parts

Item	Part	Description	Quantity	Note
—	344003	GUN ASSEMBLY, MEG II, (OBSOLETE)	1	
1	-----	• MODULE, MEG II	1	A
2	237401	• • NUT, nozzle	1	A
3	945067	• • O-RING, EPR, 0.375 x 0.50 x 0.063 in.	1	A, B, C, D, E
4	-----	• • SEAT, MEG	1	A, B
5	339047	• • O-RING, EPR, 0.375 x 0.875 x 0.063 in.	1	A, B, C, D
6	-----	• • ARMATURE ASSEMBLY, MEG II	1	A, B
7	237399	• • SPACER	1	A, B
8	1014709	• • NUT, seat retainer	1	A
9	-----	• • BODY, MEG II	1	A, C
10	940176	• • O-RING, EPR, 0.688 x 0.813 x 0.063 in.	1	A, C, D
11	343995	• MANIFOLD, upper, MEG II	1	
12	940077	• • O-RING, EPR, 0.156 x 0.281 x 0.063 in.	1	D
13	340263	• • O-RING, EPR, 0.188 x 0.312 x 0.063 in.	1	D
14	-----	• • MANIFOLD, upper, potted	1	
15	941163	• • O-RING, EPR, 0.625 x 0.75 x 0.063 in.	2	D
16	982290	• SCREW, set, cup, M4 x 4, stainless steel	1	
17	343999	• NUT, gun module, MEG II	1	
18	1060502	• MANIFOLD assembly, lower	1	
19	945064	• • O-RING, EPR, $\frac{5}{16}$ -in. tube	2	D
20	972013	• • CONNECTOR, 37 hyd, $\frac{1}{2}$ in. 20, straight thread	2	
21	945087	• • O-RING, EPR, $\frac{3}{16}$ -in. tube	3	D
22	324172	• • PLUG, MEG	3	
23	243632	• NUT, lock, manifold	1	
24	237035	• SCREW, stop, M6	1	
25	343991	• CLAMP, ground, with wire	1	
26	983047	• WASHER, flat, M4, stainless steel	1	
27	983403	• WASHER, lock, 1, split, M4, steel, zinc	1	
28	340264	• SCREW, socket, M4 x 5, steel, zinc	1	
29	179416	• CONNECT, liquid tight, $\frac{1}{4}$ x 56 in.	1	
30	972239	• CONNECTOR, $\frac{1}{4}$ -in. conduit x $\frac{1}{4}$ -in. NPT	2	
31	955063	• RING, sealing, $\frac{1}{4}$ in.	1	
32	984201	• NUT, lock, $\frac{1}{4}$ in.	1	
NS	247646	• CARD, medical alert, injection	1	A
NS	981893	• SCREW, socket, 10–32 x 0.50 in., zinc	2	
NS	945067	• O-RING, EPR, 0.375 x 0.50 x 0.063 in.	10	A
NS	1008326	• FUSE HOLDER, 5 x 20, screw cap, DIN 35	1	
NS	239213	• FUSE, 1A, slo-blo, 250V, 5 x 20 mm	2	

NOTE A: These parts are included in part 1062094 Service Kit, Module, MEG II, Reduced Cavity.

B: These parts are included in part 1062095 Service Kit, Ball and Seat, MEG II, Reduced Cavity.

C: These parts are included in part 343993 Service Kit, Body with Coil, MEG II.

D: These parts are included in part 343989 Service Kit, Soft Goods, EPR, MEG.

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

NS: Not Shown

Reduced Cavity Gun Parts

See Figure 7. Check your gun part number and use the correct parts list for your spray gun.

Item	Part	Description	Quantity	Note
—	1602877	GUN ASSEMBLY, MEG II, reduced cavity	1	
1	-----	• MODULE, MEG II, reduced cavity	1	A
2	237401	• • NUT, nozzle	1	A
3	945067	• • O-RING, EPR, 0.375 x 0.50 x 0.063 in.	1	A, B, C, D, E
4	-----	• • SEAT, reduced cavity	1	A, B
5	339047	• • O-RING, EPR, 0.375 x 0.875 x 0.063 in.	1	A, B, C, D
6	-----	• • ARMATURE ASSEMBLY, MEG II	1	A, B
7	237399	• • SPACER	1	A, B
8	1014709	• • NUT, seat retainer	1	A
9	-----	• • BODY, MEG II	1	A, C
10	940176	• • O-RING, EPR, 0.688 x 0.813 x 0.063 in.	1	A, C, D
11	343995	• MANIFOLD, upper, MEG II	1	
12	940077	• • O-RING, EPR, 0.156 x 0.281 x 0.063 in.	1	D
13	340263	• • O-RING, EPR, 0.188 x 0.312 x 0.063 in.	1	D
14	-----	• • MANIFOLD, upper, potted	1	
15	941163	• • O-RING, EPR, 0.625 x 0.75 x 0.063 in.	2	D
16	982290	• SCREW, set, cup, M4 x 4, stainless steel	1	
17	343999	• NUT, gun module, MEG II	1	
18	1060502	• MANIFOLD assembly, lower	1	
19	945064	• • O-RING, EPR, 5/16-in. tube	2	D
20	972013	• • CONNECTOR, 3/7-in. 1/2-20, straight thread	2	
21	945087	• • O-RING, EPR, 3/4-in. tube	3	D
22	324172	• • PLUG, MEG II	3	
23	243632	• NUT, lock, manifold	1	
24	237035	• SCREW, set, M6	1	
25	343991	• CLAMP, ground, with wire	1	
26	983047	• WASHER, flat, M4, stainless steel	1	
27	983403	• WASHER, lock, M, split, M4, steel, zinc	1	
28	340264	• SCREW, socket, M4 x 5, steel, zinc	1	
29	179416	• CONDUIT, liquid tight, 1/4 x 56 in.	1	
30	972239	• CONNECTOR, 1/4-in. conduit x 1/4-in. NPT	2	
31	955063	• RING, sealing, 1/4 in.	1	
32	984200	• NUT, lock, 1/4 in.	1	
NS	247646	• CARD, medical alert, injection	1	A
NS	981893	• SCREW, socket, 10-32 x 0.50 in., zinc	2	
NS	945067	• O-RING, EPR, 0.375 x 0.50 x 0.063 in.	10	A
NS	1008326	• FUSE HOLDER, 5 x 20, screw cap, DIN 35	1	
NS	239213	• FUSE, 1A, slo-blo, 250V, 5 x 20 mm	2	

NOTE A: These parts are included in part 1062094 Service Kit, Module, MEG II, Reduced Cavity.

B: These parts are included in part 1062095 Service Kit, Ball and Seat, MEG II, Reduced Cavity.

C: These parts are included in part 343993 Service Kit, Body with Coil, MEG II.

D: These parts are included in part 343989 Service Kit, Soft Goods, EPR, MEG.

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

NS: Not Shown

Extended Tip Gun Parts

Figure 8. Check your gun part number and use the correct parts list for your spray gun.

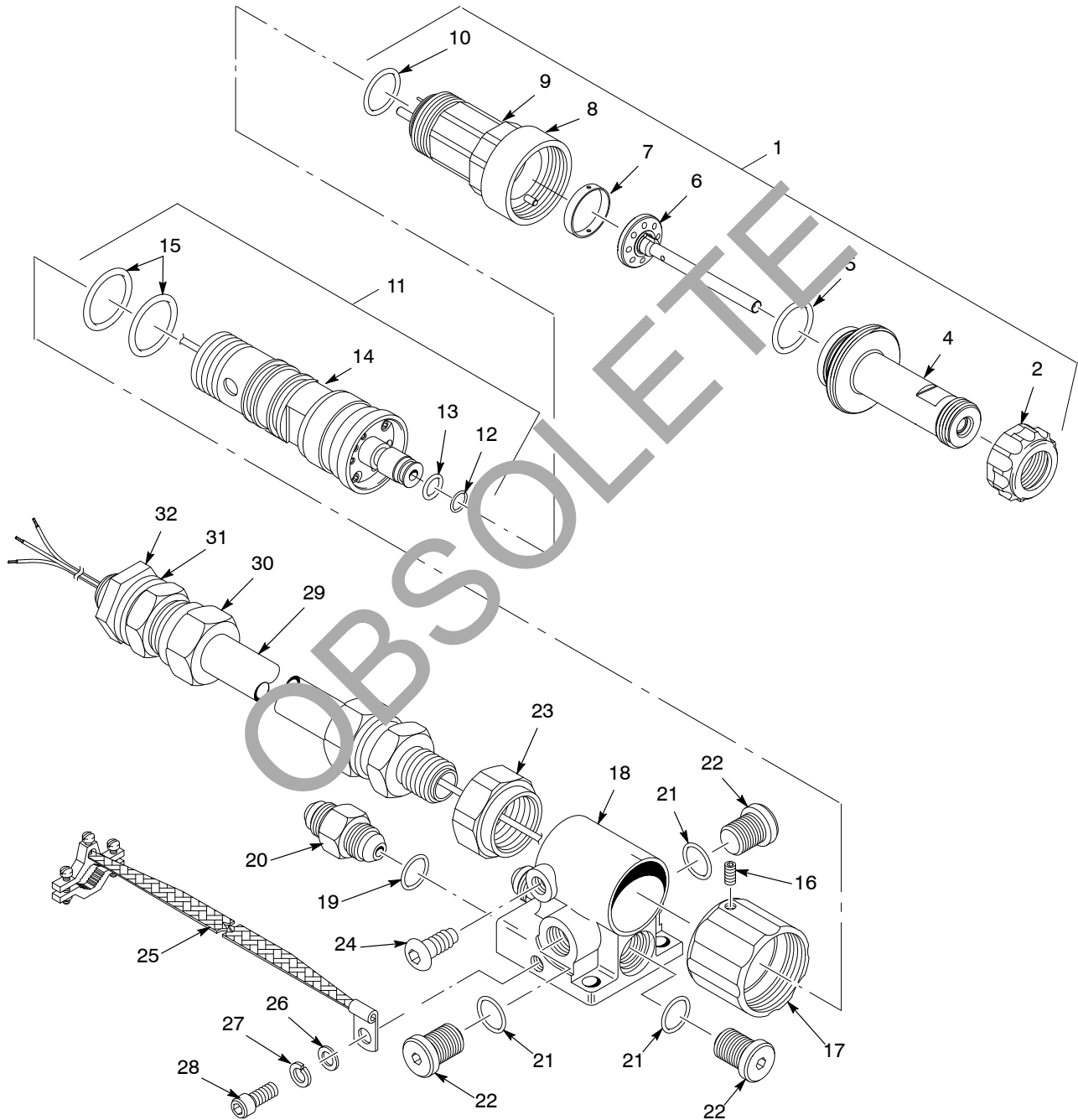


Figure 8 Extended Tip MEG II Spray Gun Parts

Item	Part	Description	Quantity	Note
—	1076017	GUN ASSEMBLY, MEG II, extended tip	1	
1	-----	• MODULE, MEG II, extended	1	A
2	237401	• • NUT, nozzle	1	A,F
4	-----	• • SEAT,	1	A, B, F
5	339047	• • O-RING, EPR, 0.375 x 0.875 x 0.063 in.	1	A, B, C, D
6	-----	• • ARMATURE ASSEMBLY, MEG II	1	A, B
7	237399	• • SPACER	1	A, B
8	1014709	• • NUT, seat retainer	1	A
9	-----	• • BODY, MEG II	1	A, C
10	940176	• • O-RING, EPR, 0.688 x 0.813 x 0.063 in.	1	A, C, D
11	343995	• MANIFOLD, upper, MEG II	1	
12	940077	• • O-RING, EPR, 0.156 x 0.281 x 0.063 in.	1	D
13	340263	• • O-RING, EPR, 0.188 x 0.312 x 0.063 in.	1	D
14	-----	• • MANIFOLD, upper, potted	1	
15	941163	• • O-RING, EPR, 0.625 x 0.75 x 0.063 in.	2	D
16	982290	• SCREW, set, cup, M4 x 4, stainless steel	1	
17	343999	• NUT, gun module, MEG II	1	
18	1060502	• MANIFOLD assembly, lower	1	
19	945064	• • O-RING, EPR, $\frac{5}{16}$ -in. tube	2	D
20	972013	• • CONNECTOR, 37 hyd, $\frac{1}{2}$ -2", straight thread	2	
21	945087	• • O-RING, EPR, $\frac{3}{16}$ -in. tube	3	D
22	324172	• • PLUG, MEG	3	
23	243632	• NUT, lock, manifold	1	
24	237035	• SCREW, stop, M6	1	
25	343991	• CLAMP, ground, with wire	1	
26	983047	• WASHER, flat, M4, stainless steel	1	
27	983403	• WASHER, lock, M, split, M4, steel, zinc	1	
28	340264	• SCREW, socket, M4 x 5, steel, zinc	1	
29	179416	• COUPLER, DUIT, liquid tight, $\frac{1}{4}$ x 56 in.	1	
30	972239	• CONNECTOR, $\frac{1}{4}$ -in. conduit x $\frac{1}{4}$ -in. NPT	2	
31	955063	• O-RING, sealing, $\frac{1}{4}$ in.	1	
32	984200	• NUT, lock, $\frac{1}{4}$ in.	1	
NS	247640	• CARD, medical alert, injection	1	A
NS	981893	• SCREW, socket, 10-32 x 0.50 in., zinc	2	
NS	945067	• O-RING, EPR, 0.375 x 0.50 x 0.063 in.	10	A
NS	1008326	• FUSE HOLDER, 5 x 20, screw cap, DIN 35	1	
NS	239213	• FUSE, 1A, slo-blo, 250V, 5 x 20 mm	2	

NOTE A: These parts are included in part 1075291 Service Kit, Module, MEG II, Extended Tip.

B: These parts are included in part 1076115 Service Kit, Ball and Seat, MEG II, Extended Tip.

C: These parts are included in part 343993 Service Kit, Body with Coil, MEG II.

D: These parts are included in part 343989 Service Kit, Soft Goods, EPR, MEG.

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

F: When installing the nozzle nut on the spray gun, make sure you use the flats on the extended seat to tighten the nozzle nut with the wrench. Do not overtighten the nut.

NS: Not Shown

Special Tools

Not Included with the MEG II Guns

Part	Description	Note
1046818	TOOL, armature assembly, spring replacement	A
152999	WRENCH	
901911	WRENCH, adjusting, module	
901905	BRUSH	
NOTE A: This tool is used with the armature spring kit.		

Service Kits

The following service kits are available for the MEG II gun. Keep these kits on hand to reduce downtime.

Module Service Kits

Item	Part	Description	Quantity	Note
	1062094	SERVICE KIT, module, MEG II, reduced cavity	1	A
	1075291	SERVICE KIT, module, MEG II, extended tip	1	B
1	-----	• MODULE, MEG II	1	
2	237401	• • NUT, nozzle	1	
3	945067	• • O-RING, EPR, 0.375 x 0.500 x 0.063 in.	1	C
4	-----	• • SEAT, MEG II	1	
5	339047	• • O-RING, EPR, 0.375 x 0.875 x 0.063 in.	1	
6	-----	• • ARMATURE ASSEMBLY, MEG II	1	
7	237399	• SPRINGER	1	
8	1014709	• • NUT, seat retainer	1	
9	-----	• • BODY, MEG II	1	
10	940170	• • O-RING, EPR, 0.688 x 0.813 x 0.063 in.	1	
NS	247646	• CARD, medical alert, injection	1	
NOTE A: See Figure 7.				
B: See Figure 8.				
C: This O-ring is not included with the Extended Tip Module Service kit, part 1075291.				
NS: Not Shown				

Ball and Seat Service Kits

See Figures 7 and 8.

Item	Part	Description	Quantity	Note
	1062095	SERVICE KIT, ball and seat, MEG II, reduced cavity	1	A
	1076115	SERVICE KIT, ball and seat, MEG II, extended tip	1	B
3	945067	• O-RING, EPR, 0.375 x 0.500 x 0.063 in.	1	C
4	-----	• SEAT, MEG	1	
5	339047	• O-RING, EPR, 0.375 x 0.875 x 0.063 in.	1	
6	-----	• ARMATURE ASSEMBLY, MEG II	1	
7	237399	• SPACER	1	
NOTE A: See Figure 7. B: See Figure 8. C: This O-ring is not used with the MEG II Extended Tip spray gun, part 1076017.				

Body with Coil Service Kit

See Figures 7 and 8.

Item	Part	Description	Quantity	Note
—	343993	SERVICE KIT, body with coil, MEG II	1	
3	945067	• O-RING, EPR, 0.375 x 0.500 x 0.063 in.	1	A
5	339047	• O-RING, EPR, 0.375 x 0.875 x 0.063 in.	1	
9	-----	• BODY, MEG II	1	
10	940176	• O-RING, EPR, 0.688 x 0.813 x 0.063 in.	1	
NOTE A: This O-ring is not used with the MEG II Extended Tip spray gun, part 1076017.				

Soft Goods Service Kit

See Figures 7 and 8.

Item	Part	Description	Quantity	Note
—	343989	SERVICE KIT, soft goods, EPR, MEG	1	
3	945067	• O-RING, EPR, 0.375 x 0.500 x 0.063 in.	1	A
5	339047	• O-RING, EPR, 0.375 x 0.875 x 0.063 in.	1	
10	940176	• O-RING, EPR, 0.688 x 0.813 x 0.063 in.	1	
12	940077	• O-RING, EPR, 0.156 x 0.281 x 0.063 in.	1	
13	340263	• O-RING, EPR, 0.188 x 0.312 x 0.063 in.	1	
15	941163	• O-RING, EPR, 0.625 x 0.750 x 0.063 in.	2	
19	945064	• O-RING, EPR, 5/16-in. tube	2	
21	945087	• O-RING, EPR, 3/16-in. tube	3	
NOTE A: This O-ring is not used with the MEG II Extended Tip spray gun, part 1076017.				

PTFE O-Ring Kit

See Figure 7. This kit is shipped with the reduced cavity version of the spray gun. The O-ring replaces the nozzle seat O-ring for certain applications.

NOTE: This kit is not used with the MEG II Extended Tip spray gun, part 1076017.

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	

Armature Spring Kit

See Figure 9. This kit is used with all three versions of the MEG II spray gun.

Item	Part	Description	Quantity	Note
—	1606337	KIT, spring, MEG II	1	
1	340263	• O-RING, EPR, 0.188 x 0.312 x 0.063 in.	1	
2	940077	• O-RING, EPR, 0.156 x 0.281 x 0.063 in.	1	
3	940176	• O-RING, EPR, 0.688 x 0.813 x 0.063 in.	1	
4	339047	• O-RING, EPR, 0.750 x 0.875 x 0.063 in.	1	
5	945067	• O-RING, EPR, 0.375 x 0.500 x 0.063 in.	1	A
6	-----	• SPRING, flat, 0.0058	1	
7	-----	• WASHER, Del'n, 0.254 x 0.344 x 0.028 in.	1	
8	-----	• BUSHING, armature, 1/8-28 thread	1	
9	-----	• SPACER	1	
NS	900200	• ADHESIVE, threadlocking	1	
NS	1046818	TOOL, armature assembly	1	B
NOTE A: This O-ring is not used with the MEG II Extended Tip spray gun, part 1076017.				
B: The armature assembly tool must be ordered separately.				
NS: Not Shown				

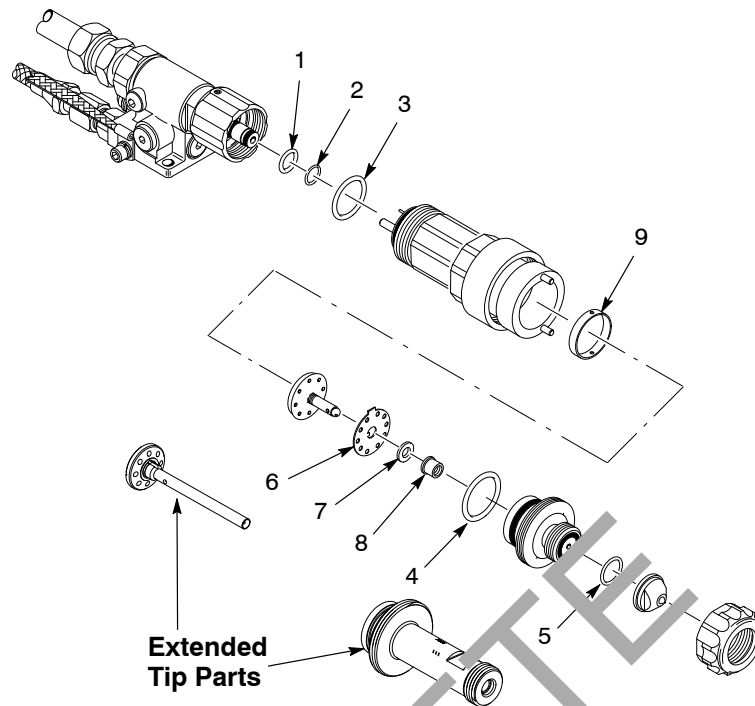


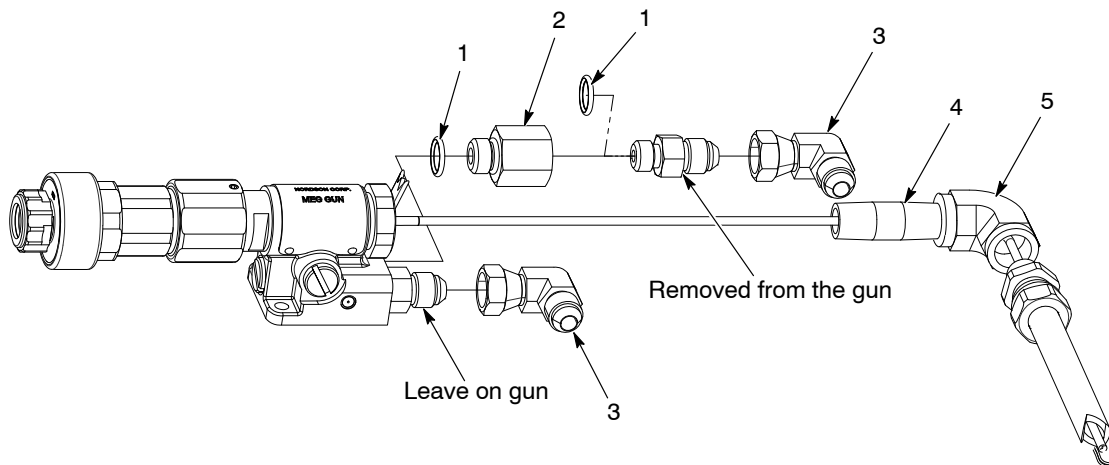
Figure 9 Armature Spring Kit

Optional Equipment

90 Degree Cable Routing Fitting Kit

The 90 degree fitting kits are used as a mechanism to route gun hoses and cables to the appropriate location.

Item	Part	Description	Quantity	Note
—	1609137	Kit, fittings, 90 degree routing, MEG II gun	1	
1	945064	• O-RING, EPDM, 5/16-in. tube	2	
2	-----	• FITTING, strain, 1/2-20 M x 1/2-20 F	1	
3	972367	• ELBOW, swivel, 37, 1/2-20 M, 5/16 in., SSTL	2	
4	-----	• RIPPLE, 1/4 NPT x 1.5 in., stainless steel	1	
5	973141	• ELBOW, male, pipe, hydraulic, 1/4 in., SSTL	1	



10015057

Figure 10 90 Degree Cable Routing Fitting Kit

CleanSleeve Covers

Part	Description	Note
149237	COVER, CleanSleeve, mini, 500 pieces	A, C, D
1618384	KIT, cover, CleanSleeve, MEG® gun, slip fit, 12 pieces	B, D
NOTE A: Single-use cover. B: Reusable cover. C: Includes a total of 500 CleanSleeve covers, in 20 packs of 25. D: Works on MEG II reduced cavity spray guns		

Nozzle Wrench

Part	Description	Note
163945	WRENCH, nozzle	A
1618632	KIT, wrench, nozzle, multipurpose	B
NOTE A: Used specifically for tapered container nozzles and CleanSpray nozzles. B: Used for the following nozzles: tapered, cross-cut, minimum cavity, CleanSpray, and short press-in. Additional features include 16 mm (5/8-in) width and 19 mm (3/4-in) width for checking nozzle to can cut edge distance. Ruler markings included in mm scale to help with additional cut dimension setup.		

Nozzle Wrench



Multipurpose Nozzle Wrench

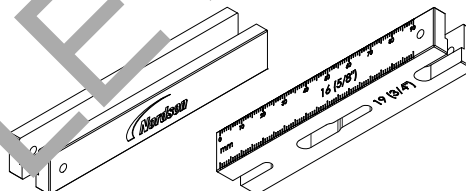


Figure 11 Nozzle Wrenches

Pressure Transducers

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

Table 1 CO-Plate Selection Chart

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									
NOTE: Spring range is pressure range of spring used in pressure control system regulator.									

Specifications

Item	Specification
Dimensions	See Figure 12
Electrical Requirements	48 Vdc, 3 amps for 3 msec and 1 amp holding
Fluid Pressure	83 bar (1200 psi)
Fluid Temperature	79 °C (175 °F)
Nozzle Flow Rate	0.001–0.013 l/sec (0.015–0.2 gpm)
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)

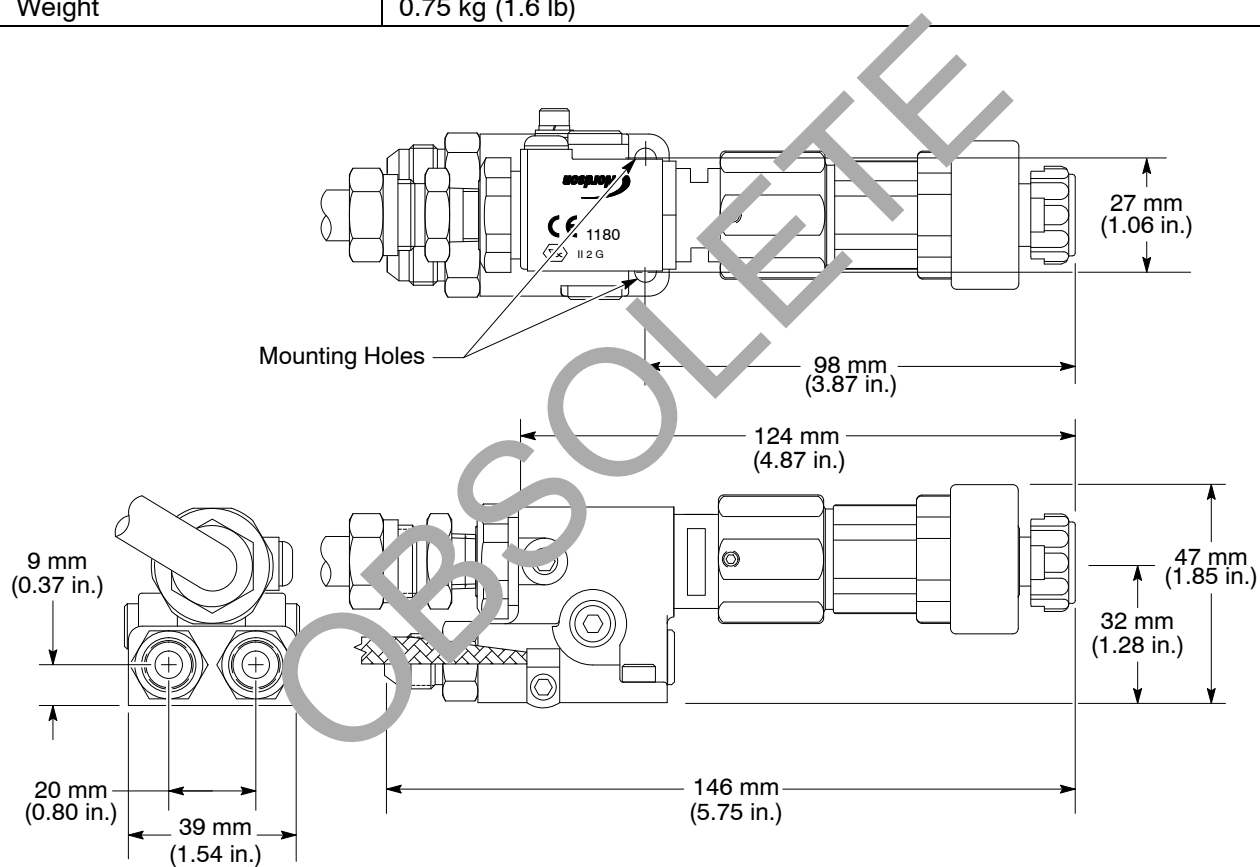


Figure 12 Gun Dimensions for Standard and Reduced Cavity Spray Guns

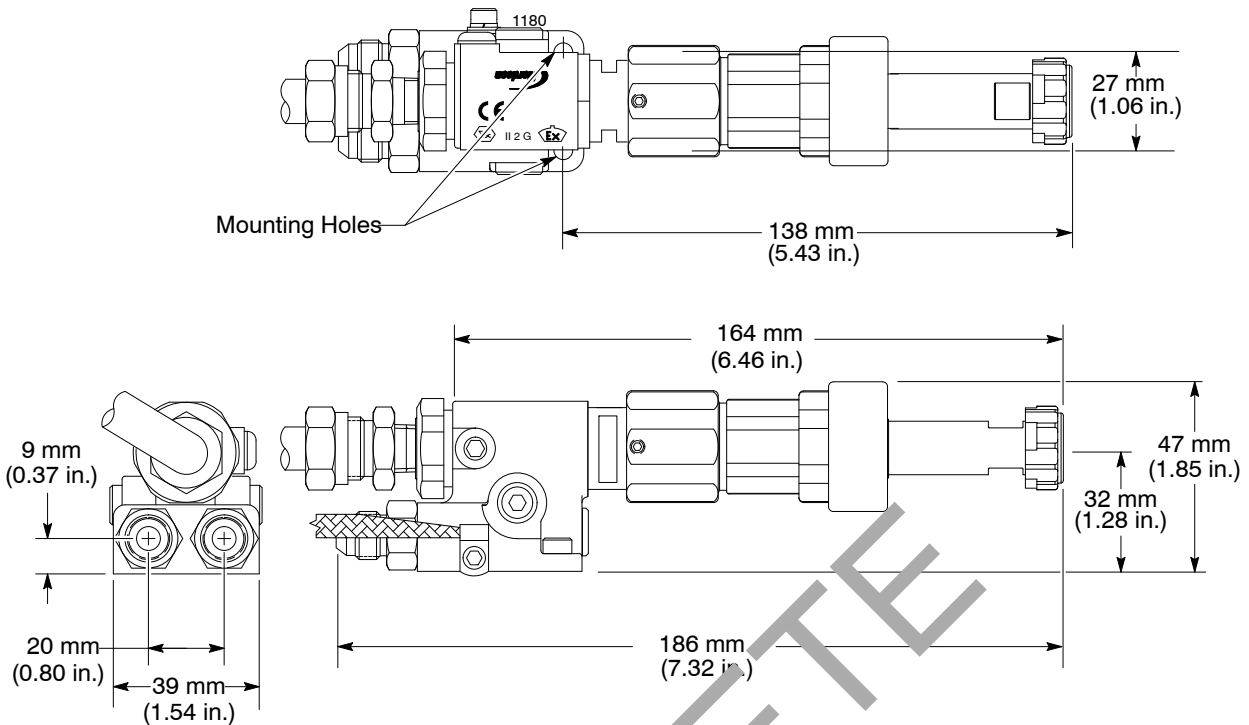


Figure 13 Gun Dimensions for the Extended Tip Spray Gun

Ratings and Label Information

See Figure 14.

NORDSON CORP.

AMHERST, OHIO USA

MEG® GUN

48 vdc MAX, 1.0 amp MAX

1200 psi (8300kPa) MAX PRESS

175°F (79°C) MAX TEMP

U.S. PATENT: 5,791,531

AND 5,941,463

CLASS I, ZONE 1,
AEx de IIB T3



APPROVED

CE 1180



II 2 G

BAS00ATEX2061X

Ex db eb IIB T3 Gb

Ta = -20 °C to + 60 °C

DO NOT SEPARATE WHEN ENERGIZED

Figure 14 MEG II Gun Label (1610768)